

THE PRIVATE STATE OF AGRIBUSINESS:  
BRAZILIAN SOY ON THE FRONTIER OF A NEW FOOD REGIME

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This dissertation investigates the construction of the soybean industry in Mato Grosso, Brazil, and the relations between farmers, agribusiness, and the state that have given rise to a model of agricultural production that is suggestive of a new, third food regime. Soybean cultivation began in earnest in Mato Grosso in the 1980, but it was not until the mid-1990s that the state became a significant competitor with the US for soybean export markets. This dissertation argues that the soybean industry in Mato Grosso is structured by a “private international soy regime” consisting of government, corporate, and farmer interests that work to integrate production into global markets, albeit through a contested and contradictory process. The concept of ‘food regimes’ helps to clarify those contradictions as well as the ways in which this mode of production differs from earlier historical periods.

Chapter 2 explores the place of Brazil and Mato Grosso in the global soybean commodity system both historically and analytically. This chapter located Brazil within a chronology of food regime development and decline and argues that the emergence of the Mato Grosso soy sector signals a departure from previous modes of political-economic organization of production. This chapter uses the concept of the “corporate food regime” to highlight the contradictions inherent in this historical moment.

Chapter 3 looks in detail at the experience of the food regime on the ground in Mato Grosso through qualitative research with farmers, agribusiness employees, and community members in 5 towns throughout the state. This chapter argues that the

category of “agribusiness” must be disaggregated and the experiences of soy farmers themselves taken seriously in order to understand how power is accomplished in a global commodity network governed by a private regime, such as soy.

Chapter 4 examines private governance at the global level by investigating Brazil’s role in the World Trade Organization and the constitutionalization of market rule. I argue here that various WTO mechanisms allow for and enable the exercise of private authority in ways that are often obscured by the political language of trade negotiations.

## BIOGRAPHICAL SKETCH

Emelie K. Peine grew up in the east Tennessee hills, just outside the Great Smoky Mountains National Park. After graduating from Sevier Country High School in Sevierville, Tennessee, she attended The Evergreen State College in Olympia, Washington, earning a Bachelor of Arts degree with emphasis in international political economy and development. After leaving behind a failed career as a trombone player in ska band Engine 54, Emelie began her graduate studies in the Department of Rural Sociology at Cornell University in 1999. In 2001 she conducted fieldwork in east Tennessee for her master's thesis entitled *Moonshine-Made Appalachia: Illegal Liquor and the Construction of an American Region*. After finishing coursework in the renamed Department of Development Sociology, she conducted 12 months of fieldwork for her Ph.D. dissertation in Mato Grosso, São Paulo, and Brasília, Brazil.

Emelie is currently preparing to leave yet another musical career behind for academia. After performing in Ithaca, New York, for the last 10 years with such bands as The MacGillicuddies, The El Caminos, The Wayward Girls, The Chicken Tractor Delux, and On The Fence playing guitar, washboard, drums, trombone, and singing, she will begin an assistant professorship in the Department of International Political Economy at the University of Puget Sound in Tacoma, Washington, in the fall of 2009. She is in the process of relocating to the west coast and seeking out new musical collaborators.

*I dedicate this dissertation to the Ithaca community and all of the farmers, musicians, activists, scholars, cooks, gardeners, canners, hunters, carpenters, artists, athletes, and friends who inspire me, this work, one another, and the world.*

*Thank you for what you create.*

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## CHAPTER 1

### INTRODUCTION: BRAZILIAN SOY AND THE PRIVATE INTERNATIONAL AGRO-FOOD REGIME

Since the 1930s, when soybeans were first traded on international markets, the US has been the undisputed leader in global soy production. In the last twenty years, its closest competitors have been Brazil and Argentina, but only since the mid-1990s has Brazil begun to seriously challenge the US's status as the world's top exporter of soybeans.

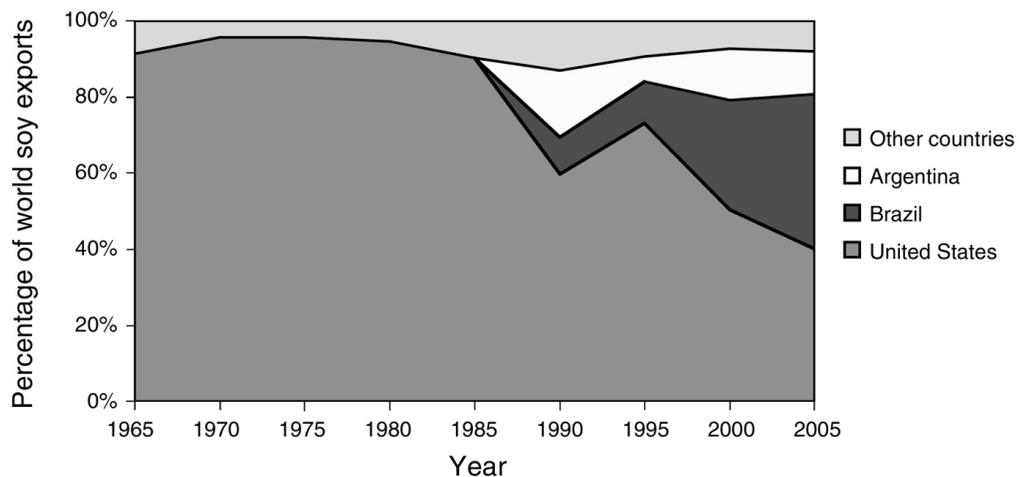


Figure 1. Percentage of world soy exports by country. Source: data from FAS PS&D (2008).

Most of the growth in Brazilian soy production has taken place in the central-west region of the country, and specifically in a state called Mato Grosso whose capital is the geodesic center of the South American continent. The explosion in soy production here has significantly contributed to Brazil's overall economic growth over the last decade, and, as I argue in this dissertation, its geo-political rise to power in the global trade arena as well.

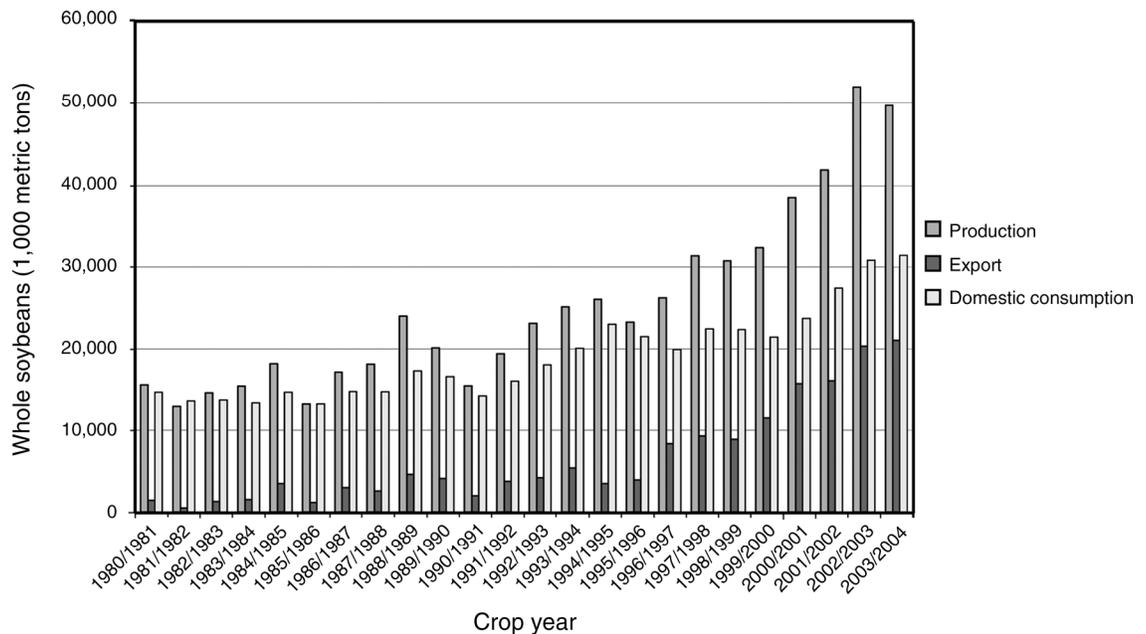


Figure 2. Brazilian soy production, consumption, and exports. Source: data from IBGE (2007).

In many ways, the significance of the soybean industry in Mato Grosso extends far beyond the remote towns at the epicenter of the boom. The meteoric rise in Brazil’s soybean production has taken place concurrently with other important global trends in agricultural production, trade, and governance. The convergence of global credit, food, and energy crises is bringing agriculture to the center of mainstream political, economic, and environmental debates. Since World War II our global food system has been defined on the one hand by the production of vast agricultural surpluses and also the dual and ironic rise of both hunger and obesity. Industrial agricultural production is responsible for 30 percent of greenhouse gas emissions, hypoxia in the Gulf of Mexico, and food deserts that threaten the food security of billions of poor people around the world.

But despite the global reach of these problems, what brought me to this research was a very personal experience. When I first began living and working on an

organic small grains farm in Newfield, New York, buckwheat was one of our best crops. Well suited to the rocky and acidic soil south of Ithaca, buckwheat was also attractive because Birkett Mills, the largest organic buckwheat mill east of the Mississippi, was located in Penn Yan, just 50 miles away. In 2003, however, Birkett Mills began buying organic buckwheat from China cheaper than we could grow it less than an hour's drive away. Incidentally, it was during this time that Brazil was emerging on the scene as a major soy exporter. US farmers, including those of us in Newfield, were getting nervous about all of this new competition from abroad. Finally, the fiery collapse of WTO negotiations in Seattle just a couple of years before had refocused attention on the intractability of a new Agreement on Agriculture. In the course of some idle Internet investigation, I noticed on Cargill's website that they were at that time listed as the largest exporter of soy from both the US and Brazil. Further investigation revealed that soy trading, processing, and exports are dominated by the same 4 companies in nearly every country in the world with a significant import *or* export market for soy. Why, then, all of the political wrangling over agriculture in the WTO? Why the fierce nationalism among farm constituencies in the US and Brazil when all farmers are selling to (and therefore also being squeezed by) the same 4 corporations?

The problematic that this dissertation addresses begins with this: what is obscured about the role of agribusiness in governing global commodity markets when 'national' farmer constituencies are politically deployed against one another in the international trade arena? My own experiences as a farmer "competing" in international markets directly conflicted with the rhetoric that comparative advantages are 'natural' and that markets are politically neutral. It seemed to me that the scare being put into US farmers about new "competition" from the emerging Brazilian soy sector, in particular, was directly in service to agribusiness, sending farmers

scrambling to cut costs and lower farm gate prices. This all on the premise that *countries*, and by extension their agrarian citizenries, are responsible for maximizing their comparative advantages in a battle for global market share.

But when I realized that Cargill was the largest exporter of soybeans in the US *and* the largest exporter of soybeans in Brazil, the neat separation of productive markets by national boundaries began to break down. I wondered then, why farmers in Brazil are any more or less my competitors than my neighbor down the road. After years of research and writing on the subject I now see these early questions for their simplicity, but the initial impulse to understand the relationship between the political and economic construction of markets continued to animate this project. My initial curiosity led me to the broader question of how, why, and to what effect the political and economic construction of international agricultural markets are rhetorically separated, and how that fictitious separation both reflects and reinforces neo-liberal ideology. Upon peeling back the utopian vision of the self-regulating market juxtaposed with a separate and oppositional ‘state’ or political sphere, then, what is revealed about the role of the private sector in governance?

The case of soy in Mato Grosso, Brazil seemed an ideal location to examine this problematic because the development of the sector was a relatively recent historical phenomenon, and it happened as the result of a unique convergence of ‘nationalist’ government policy, transnational corporate investment, technological advancement, and the creation of a new agrarian entrepreneurial class. Historically speaking, the rise of Mato Grosso soy coincided with 1) the crisis of global trade governance that began with the Seattle protests at the WTO ministerial meetings; 2) Brazil’s rise to power in that arena as leader of the G-20; 3) shifting global patterns of agricultural production and consumption around the world—from traditional

production and consumption centers in the global north to more south-south trade; and 4) the historical dénouement of the industrial food regime.

It was not until after I returned from the field that I chose the ‘food regime’ concept as a way to make sense of my research findings (which I discuss in more detail below), but I did enter the field armed with Claire Cutler’s concept of ‘private international regimes’ as a way to understand the dynamics of private governance. Because I was interested in understanding the relations of soy production and the political dynamics between soy farmers, firms, governments, and other public and private actors, I pursued a research strategy of interviewing key informants, collecting and analyzing textual materials (from archives, libraries, and the private offices of corporations and industry groups), and some participant observation (riding around in combines and tractors with farmers and laborers). From the beginning of this project I knew that I wanted to understand the dynamics of the private soy regime at the local, national, and international level. My fieldwork, therefore, took me to industry and university offices in São Paulo and Rio, the soy towns of Mato Grosso, and the halls of government in Brasília.

To understand how the private soy regime is accomplished on the ground in local contexts, I decided to spend a month in each of 5 communities in the state of Mato Grosso in order to get an understanding of the commonalities and differences in the experiences of soy farmers and the ways that TNCs operate. After my preliminary field visit in the summer of 2004, I selected 5 communities that I felt represented different chapters of the Mato Grosso story. Cuiabá, the state capital, is the political heart of the central-west soy regime, while Rondonópolis represents its industrial center. Sorriso was one of the first soy towns to be established and leads the state in municipal soy production. Sapezal, on the other hand, sits right on the edge of the soy frontier. One of the newer, more remote, and least diversified soy towns, Sapezal

typifies the extreme economic dependence on soy that is much more intensive on the ‘periphery’ than in the older and more economically robust towns of the state’s ‘core’. Finally, Campo Novo dos Parecís occupies the middle ground between Sorriso and Sapezal, boasting a thriving producer cooperative and rural union, but still far enough from the industrial and commercial centers surrounding the capital to be heavily dependent on primary soy production with little investment in industrialization.

In each of these towns I sought out soy farmers, rural producers’ unions, cooperatives, local agricultural service providers, equipment dealers, employees of transnational agribusiness corporations (brokers and traders, mainly), farm workers, highway associations, and anyone otherwise involved in the soy industry. I also talked to video store clerks, Internet café owners, cab drivers, waitresses, secretaries, and anyone who had something to say about how the soy regime affected their lives and livelihoods. These informal conversations contributed to my overall understanding of the texture of life on the soy frontier, which then helped me to further refine the questions I asked in my formal interviews.

In São Paulo, Rio de Janeiro, and Brasília, I interviewed representatives from industry groups, research institutes, agribusiness firms, the national development bank (BNDES), congresspeople, agricultural economists, sociologists, trade lawyers, and representatives from government ministries. In short, I pursued interviews with the actors I judged to be part of or have insight into the private soy regime, its functioning and the dynamics between its public and private constituents. From these interviews I began to piece together some of the particular animating dynamics of the Mato Grosso soy regime—such as credit relations and infrastructure at the local level, ministerial policy at the national level, and Brazil’s leadership in the G-20 at the international level—that suggested a distinctiveness that begged theorizing. The logic of my inquiry, then, was to investigate the dynamics of production and the dynamics of

governance to see both how they shaped one another as well as what larger whole they interacted to produce. In order to understand that larger whole, I turned to concept of ‘food regimes’.

***Mato Grosso Soy and the Corporate Food Regime: A new take on the concept***

In a 1989 article, Harriet Friedmann and Philip McMichael developed the concept of a ‘food regime’ to describe specific historical periods when hegemonic political-economic powers strategically configured food systems to support geopolitical ends. They identified 2 particular food regimes: 1) the first or colonial food regime, and 2) the second or surplus/industrial/US food regime. This concept remains one of the most persistent theoretical tools that political economists employ to explain the world-historical configuration of global food systems (Le Heron, 1993; Moran, Blunden et al., 1996; Pritchard, 1998; Friedmann, 2005; McMichael, 2005). However, there is a lack of consensus among scholars about what the third/corporate food regime looks like, whether it has arrived, or whether it is still emerging.

Table 1. Food regimes.

<b>Name</b>	<b>Historical Period</b>	<b>Political Organization</b>	<b>Economic Organization</b>
British/Colonial FR	1870-1914	<ul style="list-style-type: none"> <li>• British-led colonial system</li> <li>• Consolidating colonial power</li> </ul>	<ul style="list-style-type: none"> <li>• Supplied cheap food to industrializing Britain</li> <li>• Free trade imperialism</li> </ul>
US Industrial/Surplus FR	1945-1980s	<ul style="list-style-type: none"> <li>• US-led state support of surplus production</li> <li>• Containing Soviet empire</li> </ul>	<ul style="list-style-type: none"> <li>• Fordist response to Great Depression</li> <li>• Food aid imperialism</li> </ul>
Corporate/Corporate-Environmental FR	????-????	<ul style="list-style-type: none"> <li>• Private agribusiness regime</li> <li>• Facilitated by WTO</li> </ul>	<ul style="list-style-type: none"> <li>• Integrating national agricultures into global markets</li> <li>• Uneven liberalization</li> </ul>

The first 2 food regimes describe historical periods wherein food production and distribution was organized to serve the geopolitical ends of the reigning hegemon.

In the first, the productive channels ran between the colonies and the British Empire as the peripheral production of foodstuffs was developed to feed an industrializing and hungry United Kingdom. McMichael describes this food regime as being driven by ‘free trade imperialism’ characterized by the “deployment of a policy of economic liberalism to gain access to the economies and colonial empires of rival European states” (McMichael, 2005). The first fractures in this food regime came with the overlapping crises of the 1970s that prompted embargoes of exports from the US and the cultivation of new agricultural markets in places like Brazil (Friedmann, 1989).

The second food regime was based on state support of surplus production in the US and the strategic deployment of food aid through Public Law 480. It grew out of the post-depression era where supporting the domestic farm sector was seen as key to economic recovery and was concretized in the drive to contain the soviet empire by creating dependency on US food exports. This regime has shaped agricultural markets all over the world for decades, and despite the fact that those markets are shifting in significant ways (cf. John Wilkinson’s forthcoming work on Brazil and China) it is clear that elements of this system—namely state support for overproduction, a focus on highly industrialized production methods and monocultures, etc.—still characterize the current historical moment. However, the failure of the WTO to provide a coherent legal superstructure for global agricultural governance points to a destabilization of this regime and suggests the emergence of a new regime.

There is a distinct lack of consensus on what characterizes the third food regime, whether it is here, or whether it is still emerging. One of Friedmann’s most recent contributions specifies a *corporate-environmental food regime* wherein global food supply chains are organized to cater to transnational classes of rich and poor consumers and the private sector ‘governs’ itself by coordinating standards across national borders (Friedmann, 2005). Alternatively, McMichael sees the corporate

food regime as an expression of the neo-liberal moment, codified in the Agreement on Agriculture as a “distinctive form of economic liberalism geared to deepening market relations via the privatization of states” (McMichael, 2005). Finally, Pritchard argues that the 2008 collapse of the Doha Round demonstrates the failure of the WTO to resolve the conflicts of the second food regime and therefore that the contours of a third food regime have yet to emerge (Pritchard forthcoming).

All of these recent interventions note the increasing importance of non-state actors (social movements, corporations, etc.) and the interactions between them in shaping the global agro-food sector. While all the authors point at least obliquely to the increasing influence of private actors and “privatization” of public functions and institutions in the dynamics of the emerging food regime, Friedmann comes the closest to positing a particular private governance regime in her discussion of quality and environmental standards imposed by private firms on themselves in response to high-end consumer demand (2005: 253). This is an example of a historical understanding of a private regime—one that has been conditioned by the social relations of production and regulation that came before it. The food regime concept, therefore, provides a historical dimension to the conceptual category that “private regimes” represent in the international relations literature.

***Specifying the ‘Private International Soy Regime’: Bringing IR regime theory to an understanding of food systems***

Just as food regime analysis has yet to incorporate a robust theory of private governance, traditional regime theory in the international relations tradition has been squarely state-centric. In Haufler’s words, “...the prevailing focus in International Relations [is that] private sector actors only provide the background against which the actions of states are show-cased” (Haufler, 1993). However, many political

economists are now turning their attention to the private sector in order to understand the dynamics of governance in the neoliberal era (Cutler, Haufler et al., 1999; Sell, 1999; Cutler, 2002; Hall and Biersteker, 2002; Sassen, 2002).

Much has been made about the fate of the state *vis a vis* transnational capital in the era of globalization. Some argue that the state is being eclipsed while others argue that the capital is becoming even more dependent on the state as agent, negotiator, and setter-of-terms in trade agreements. I argue, as Sassen (2000) does, that power is not zero-sum between the public and private sectors. On the contrary, the interaction between the state and private firms in the global trade arena marks a reformulation of each via the other, and suggests a qualitatively different relationship than simply one as agent of the other. Instead of the state being the principle agent of nationally competitive economies (Polanyi, 1944), the state has become the purveyor of the social lynchpin of global neo-liberalism: political legitimacy.

As many argue, legitimacy is a crucial element of any hegemonic order (Gill, 2000; Jacobson, 1998; Ruggie, 2002). By political legitimacy I mean the sanctioning by the state of the self-regulating market as a system of rule. Politics are not irrelevant to the market. Rather, the political realm creates and houses the social regulation (the legal system) upon which the market depends for protection of property rights as well as the reproduction of the “market mentality”. The legitimacy of the neo-liberal regime has not arisen out of the ether. Regardless of the political program, be it protectionist or liberal, the political legitimacy of the “self-regulating market” must be continually reproduced through a symbiotic relationship between capital and the state.

Those developing the concept of private international regimes are working to specify the form of this relationship in the neo-liberal historical moment. They begin by specifying the distinction between power and authority in order to point out that in order for private regimes to function as agents of governance, their *power* must be

legitimized as *authority*. They then go on to specify several different forms of private authority, including informal industry norms, cartels, and private regimes, among others. What sets private regimes apart is that they exercise governance over a much broader area than other types of private cooperation, and most importantly, that they include organizations other than firms in their scope (Cutler et al., 1999). This conceptualization helps to specify the broader political-economic trend that scholars like Sassen and Gill describe by pinpointing the particular forms of institutionalized authority wielded by particular actors in the global economy. In this dissertation, I use Cutler’s concept of “private international regimes” to specify private authority—particularly that wielded by the private regime that dominates the global soy industry—within a particular historical moment characterized by the formulation of a third, corporate, food regime.

By weaving together the private international regime concept with the food regime concept, I bring Cutler and her colleagues’ contributions to IR regime theory to the food regime debate. In this dissertation, I make 3 interventions in this debate. First, rather than taking the food regime as a given—as a stable, historically specific rule-governed structure of production and consumption of food on a world scale (Friedmann, 1993)—I use the concept as an analytic to examine the contradictions present within the current global agro-food system. In his forthcoming article, Pritchard points to the “hangover” from the second food regime that has caused the WTO to languish for its inability to resolve the internal contradictions of northern agricultural subsidies. He argues that the WTO, rather than a first step toward an agricultural free-market and new corporate food regime, is actually an expression of the politics of crisis in the second food regime.<sup>1</sup> In an earlier article, Pritchard argues

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<sup>1</sup> Pritchard’s article is scheduled to appear in an upcoming special issue of *Agriculture and Human Values* dedicated to the food regime debate.

that the supposedly neutral Dispute Settlement Body of the WTO is actually a political mechanism for extending market liberalization (Pritchard, 2005). I extend Pritchard's argument by adding to this somewhat state-centric analysis of legalism in the WTO the concept of the 'private international regime' as a way to explicitly bring the private sector into the processes of governing.

I argue that it is in an examination of the role of private actors in dispute settlement at the WTO, policy making at the federal level, and the construction of markets in the soy towns of Mato Grosso that the contradictions of the current global food system begin to point towards corporate food regime. Much food regime scholarship centers on the strategic political deployment of food and agriculture by states without explicit analysis of the role of the private sector in constructing the food regime. I marry Claire Cutler's concept of a 'private international regime' with a 'food regime' analysis to emphasize the increasing importance of agribusiness in determining the contours of food systems. Friedmann, McMichael, and others certainly point to private actors as important determinants of food regimes, but my research looks pointedly at particular corporations—primarily Cargill, ADM, Bunge, Louis-Dreyfus, and the Brazilian conglomerate Grupo Maggi—and their actions at all political levels in order to specify the concept of 'private governance' in the context of the food system in the neo-liberal era.

Finally, by looking at the specific actions of these corporations 'on the ground', I also advance an understanding of how farmers *experience* of the corporate food regime. As I argue in Chapter 3, this experience is contradictory, as farmers at once profit from and are exploited by corporate monopsony. Moran et al. (1996) emphasize the importance of the historical specificity of food regimes, but also argue that analysis must be multi-layered, encompassing more detail than a purely institutional perspective would provide. They write:

If the forces influencing the uneven transformation of food and agricultural production in different nations and regions are to be understood we also need to know much more about the organization and control of their agro-commodity chains at different periods. Some components of the agro-commodity chain, notably the processing and marketing of products and supply of inputs, are especially influential. In the debates of the last decade over the subsumption of agriculture, regardless of the protagonists' conclusions, one of the most important forces influencing the organization of farm production is the relationship of the forms of production to the rest of the capitalist system. We suggest that by more clearly specifying the various elements of the agro-commodity chain at different periods and in different nations and regions the forces influencing uneven development and the expression of different food regimes will be clarified.

Rather than limiting my analysis to the institutional, market, or state level, my qualitative fieldwork with farmers, local businesspeople, and civic associations allows for a more textured understanding of the complexity and tensions within the food regime. The discrepancies I discovered in my fieldwork between the 'official' version of the relationship between farmers and agribusiness and the lived one—informal discounts to the CBOT spot price for soy, lax enforcement of environmental regulations, loosely negotiated buying contracts, etc.—far from being merely anecdotal, reveal a picture of a food regime much more complex than the official, top-down, institutionally defined version. These three extensions of food regime

scholarship correspond (roughly, with significant overlap) to the three substantive chapters of my dissertation.

### ***Outline of the Dissertation***

The remainder of the dissertation is organized into 3 substantive chapters. The thread that runs through all three is the “regime theme”—weaving together the ‘food’ and ‘private international’ regime concepts to both conceptualize the rise of soy in Mato Grosso and elaborate the regime that arises from this process. Throughout the dissertation I examine this process at different levels of governance and real-world experience, from the soy fields to the halls of federal government and many locations in between. Beyond differences in scale and location, however, each chapter also asks a unique analytical question that stems from the broader issue of private governance.

Chapter 2 looks at the history of the Mato Grosso soy sector and asks whether it represents a prototype of the ‘third corporate food regime’. In this chapter I introduce the idea of using the food regime concept as an analytic rather than a thing in order to understand the contradictions present in the emerging relations of global food production and consumption and to show how Mato Grosso is, in many ways, an exemplar of those new relations. I argue that soy came to Mato Grosso as the result of a convergence of state and corporate interests that encompass the Brazilian ‘national project’ to colonize the interior of the country and raise foreign exchange earnings, as well as the international soy regime’s ‘project’ to cultivate new sources of soy for the world market and construct a productive zone that is tailor-made to the needs of industrial food production. The result, I argue, is a productive system that anticipates the relations (contradictory as well as complimentary) of a corporate food regime within which national agricultures are integrated into global markets via the mediation of the transnational corporations that dominate them. I argue that the state as well as

other private constituents are active participants in this process, and that in fact the regime *needs* the state to support, legitimize, and institutionalize its functioning.

In Chapter 3 I look at how these processes are institutionalized at the local level in the soy towns of Mato Grosso. As a starting point, I argue that in order to understand how the regime is accomplished on the ground, we must take a critical look at the essentialized categories of ‘peasant’ or ‘family farmer’ and of ‘agribusiness’. I argue that this reductionism has 2 primary purposes. First, the juxtaposition of these two categories serves the neo-liberal project by deeming only the latter relevant to ‘economic development’ and therefore justifying the political marginalization of the interests and productive practices of the former group. Second, by lumping large *latifúndio* farmers in with corporations in the category of ‘agribusiness’, the exploitation of these farmers receives little attention, and is even explicitly denied. To disaggregate the category of ‘agribusiness’, then, reveals the interdependence of farms and firms in the private soy regime and the entrenchment of exploitative relationships between foreign companies and supposedly independent soy producers. This forces us to take a closer look at the choices that soy farmers make and acknowledge the complex economic situation that they face, characterized primarily by the pressing need for ever-increasing production and cost-cutting while at the same time operating under the magnifying glass of the international environmental movement that has vilified soy farmers as rapists of the Amazon.

In this investigation of how the relations between farmers and agribusiness advance the soy regime project, the following themes emerged: 1) the importance of the credit relation as a tool of control; 2) private involvement in infrastructure and other public works projects that maximize agribusiness efficiency (and therefore profit); 3) the particularity of the contract relation in Mato Grosso that both sustains soy farmers and at the same time engages them in progressively more exploitative

relationships with TNCs. Most interestingly, this all takes place against the backdrop of the widespread belief in Mato Grosso's 'natural' comparative advantage in soy production that quickly breaks down as soon as markets, weather, or macroeconomic conditions begin to falter. The experience of the soy regime on the ground, therefore, reveals the true restriction of market freedom for individual producers despite an ideology of liberalization. It also reveals the diversity of experience among soy farmers and the tyranny of informality that allows TNCs greater power by *subverting* rather than establishing, 'a stable set of rules governing the production and consumption of food'.

In a different but related argument, Chapter 4 analyzes the creative use of the 'rules based system' of international trade governance by states and firms to further the private agribusiness regime's agenda. This chapter examines the involvement of the private sector in setting trade agendas, negotiating agreements, and litigating disputes in the WTO system. I specifically focus on dispute settlement in the WTO as a location where private interests are being institutionalized through litigious means that, through legal precedent, configure state policy. This is where I make most direct use of Cutler's private regime concept as a way to highlight the network or constellation of actors and interests that participate in configuring a particular "economic issue area" at the international level. This allows us to look beyond a state-centric conceptualization of 'food regimes' that centers on the *state's* interest in strategic deployment of agriculture to the cooperation and conflict between states, firms, NGOs, and others. I do not argue that the power of the state is being eclipsed by capital. Rather, I argue that instead of national agricultures being integrated into a global system through the harmonization of trade rules, we see national agricultures being integrated into global markets through the extensification and intensification of global commodity networks. With the failure of WTO negotiations, the private

agribusiness regime turns to dispute settlement to advance its agenda through an iterative process of litigation, one commodity or policy at a time.

CHAPTER 2  
MAGIC BEANS: BRAZIL'S SOY MIRACLE AND THE  
CORPORATE FOOD REGIME

***Introduction***

As laid out in the introduction to this dissertation, the 'food regime' concept is languishing in the stalemate of the WTO and the failure of an institutionalized system of rules governing the current global agro-food system to emerge. There appears to be a governance vacuum when it comes to agriculture, and since the 'food regime' concept was developed to explain systems of rules and regulations governing the global agro-food sector that are geographically and historically specific as well as—most importantly—stable and enduring (Friedmann, McMichael, Pechlaner and Otero), it appears to some that we are still awaiting the arrival of the 3<sup>rd</sup> food regime (Friedmann). This is only true, however, if we require the food regime to be an historically specific and stable set of rules, or a static *a priori* system that persists over time. Alternatively, the current historical conjuncture suggests that points of tension between competing food regimes are what animate and drive changes in the global governance system. If we use the food regime concept to *elaborate* those points of tension and look at ways in which each food regime contains within it vestiges of the former and seeds of the next, the concept becomes more dynamic, and more useful in the current era.

In many ways, the Brazilian soybean complex highlights these points of tension in the 3<sup>rd</sup>, or corporate, food regime. As this dissertation elaborates, from small Brazilian soy towns and all the way to the WTO, the Brazilian case demonstrates how the corporate food regime absorbs certain elements of the US-led surplus regime while at the same time using those relationships to reconfigure the role

of transnational agribusiness, allowing the private sector unprecedented participation in global governance. This chapter examines the emergence of the Brazilian soy complex in world-historical perspective in order to illustrate the ways in which Brazil exemplifies the corporate food regime *including* its contradictory relations and the ways in which it is conditioned by and incorporates residual effects of the second industrial/surplus regime. In this way, then, the case of the Brazilian soy complex can allow us to reformulate the food regime concept in such a way as to make it more useful and relevant as a tool for making sense of what appears at first glance to be a fractured and incoherent system of agro-food governance.

The aim here is not to fetishize the food regime concept or fix it in a particular static moment or form. Rather, the ways in which the concept has been elaborated by various scholars has the potential to be useful as a way of highlighting contradictory relations within global agro-food complexes that both reveal the nature of corporate market rule in agriculture and indicate points of weakness where social movements have found *entrée* into the debate over the future of food. Insofar as the Brazilian soy complex exemplifies the “new” food regime in both its structures of governance and relations of production and consumption, it represents an opportunity to put this concept to use in new ways.

While the following chapters of this dissertation show the machinations of the corporate food regime through farmers’ experiences of the Brazilian soy complex on the ground (Chapter 3) and at the level of the WTO (Chapter 4), this chapter traces the development of the complex in world-historical perspective, with particular focus on the aspects of the industrial/surplus regime that do and do not prove relevant in the current era. In other words, aspects of the industrial food regime—such as state support for overproduction—persist in the corporate regime, but in a different

historical moment and therefore for different political ends. This will be explained below.

This chapter situates the Brazilian soy complex at the very frontier of the corporate food regime, both temporally and spatially, as well as politically and technologically. The case of Brazil, however, far from providing a neat example of a wholly new and stable institutionalization of the new rules of the game, rather allows us to see how principles and interests that have dictated relations of agro-food production for decades are not eclipsed but reformulated to serve a regime that is no longer predicated on state-centered political aims, but rather on corporate-centered integration of national agricultures into global markets. National agricultures, therefore, are oriented outwards, toward export markets, while transnational corporations shape those markets to take advantage of natural and politically-constructed efficiencies that allow them to continually lower costs and increase profits.

This is not to say that agriculture does not still play an important geopolitical role; to the contrary, agriculture is still deployed (very effectively) to assert political power on the global stage. This is easily seen in both the ability of Brazil to effectively skewer the US/EU agenda for the WTO's Agreement on Agriculture<sup>2</sup>, and the ability of the US and EU to effectively evade the liberalization prescribed by that very institution (and vehemently at the behest of countries like Brazil). Still, in contrast to the surplus regime in which we see agricultural development, protection, and overproduction deployed by the US as a tool to guarantee that country's hegemony, what we see today is an agro-food system configured to serve the interests of capital—particularly the large agribusiness companies that have created effective

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<sup>2</sup> This is most clearly seen in Brazil's leadership of the G-20 that brought the Seattle negotiations to a halt in 1999, and also in Brazil's successful cases against US cotton and EU sugar subsidies via WTO dispute settlement.

oligopolies in nearly every single sector pertaining to agricultural production in nearly every single country in the world. Some of the old surplus regime policies remain in place insofar as they serve that end, while others have been rendered obsolete. The point is that analysis of the corporate food regime allows us to draw attention to the tensions—between states, policies, markets, farmers, ideologies, firms—that draw the very contours of the modern neo-liberal agro-food system. I use the corporate food regime as an historically specific, multi-dimensional, and complex analytic to show how the Brazilian soy complex represents a distinct shift in the terms upon which the global agro-food system is organized, exploited, and contested.

***The Brazilian Soy Complex: The making of a corporate food regime***

In 2005, the soybean complex was the third largest exporting sector in the Brazilian economy<sup>3</sup>, responsible for more revenue than the oil and gas sector. In 1985, Brazil's soybean exports were only about 10% of what they are today. Many soy farmers, government officials, and others will argue that Brazil's 'natural' comparative advantage in producing soy is responsible for the rapid and dramatic growth in soy production and exports in the last 20 years. The central-west region of the country is at the heart of this comparative advantage, boasting unimaginable tracts of unexploited land with predictable rains and fertile soil. But if this advantage is as 'natural' as we are to believe, why has soy taken off here only so recently? This chapter will show how the development of a soy complex in the central-west region of Brazil is a key moment in the world-history of the global agro-food system because it exemplifies the emergent factors of the corporate food regime while still engaging the residual effects of the previous US-centered regime.

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<sup>3</sup> Transport materials and metallurgic products were #s 1 and 2, respectively. Source: Itamaraty.

This chapter situates the Brazilian soy explosion within the context of the historical trajectory of changing food regimes as elaborated by Harriet Friedmann (1993) and Philip McMichael. Their food regime analysis shows how relations of food production and consumption are forged within particular political projects (i.e., colonialism, the development project, neoliberalism), and that the configuration of a “rule-governed structure of production and consumption of food on a world scale (Friedmann, 1993)” is both reflective of and embedded within an historically specific political-economic paradigm. In order to understand the arrival of soy in Mato Grosso, therefore, it is necessary to trace Brazilian agriculture through the shift from the post-war food regime to the corporate food regime (of which the Mato Grosso soy sector is a clear embodiment).

I depart somewhat from their analysis, however, in that, rather than representing a mechanistic ideal of a food regime characterized by stable sets of rules, I use the concept to understand the ways in which the increasingly private/corporate orientation of agro-food restructuring does not entirely eclipse but rather grows out of and continues to employ many of the principles and strategies of the US-based industrial regime of the mid-late twentieth century. This chapter specifically seeks to “denaturalize” the arrival of soy to the *cerrado*, uncovering the political processes by which this particular world market has been historically constructed. Relationships between key actors such as the Brazilian state, transnational agribusinesses, foreign governments, agricultural researchers, and Brazilian seed companies take center stage in a relational understanding of the arrival of the soy export market in Mato Grosso.

In tracing this historical development, I specifically look at the convergence of state policies (sometimes extending well beyond the agricultural sector), transnational capital investment, and privately funded research in the creation of the Mato Grosso soy economy. To McMichael and Friedmann’s concept of the food regime, I add

Claire Cutler's concept of the "private international regime", which, while adding an overtone of more traditional International Relations regime theory to my analysis, helps to concretize the specific roles of public and private actors in crafting the dynamic relationships that govern soy production, trade, and consumption in this particular place and time.

Cutler has defined private international regimes as, "an integrated complex of formal and informal institutions that is a source of governance for an economic issue area as a whole" (2002: 29). Here, governance of the soy industry, its economic and political configuration, cannot be reduced to a corporate issue *or* a political issue. In traditional economic or political science literature, *either* the economic development of a particular market *or* its regulation through the interaction of domestic and international policy is taken as a given. My argument, however, is that the respective roles of economics and politics—corporations and states—are mutually dependent in the accomplishment of a private agribusiness regime. Neither can corporations be seen as subject to the constraints of international trade rules insofar as they help to shape them, nor can states be seen as held hostage by the power of private capital since the state is, at the end of the day, the sole arbiter of the political legitimacy upon which the credibility of the international trade governance system rests. As Susan Sell writes, "To explain the nature and exercise of private authority, one needs to examine the fluid relationships between private authority and state policy" (1999: 172). While the food regime concept allows historicization of this political-economic process, the concept of private international regimes historicized the state and capital *forms* that characterize governance in each period.

The arrival of soy in Mato Grosso happened in the context of a number of important historical trends in the global agro-food system that mirror trends in the larger global development trajectory. First, it coincided with an international

movement from inward-facing, import-substitution development strategies that emphasized state-building, to outward-facing, export-oriented strategies that emphasized liberalization and removal of barriers to the free flow of goods, capital, and investment. Second, in the 1970s, US grain deals with the Soviet Union in concert with El Niño weather patterns and other factors out pressure on US grain stocks and prompted embargoes on US soybean exports, which in turn caused acute destabilization of global grain markets and fears of global grain shortages. This led large soybean importers to develop new sources of soy. Third, the biotechnological advances of the Green Revolution prompted a sharp increase in funding for the kind of research that was eventually able to overcome climatic and ecological barriers to tropical soybean cultivation. Each of these global trends was definitive of the second food regime and found corresponding political-economic shifts within Brazil that led to the establishment of a soybean-based economy in the country's remote interior. While the *foundation* of Brazilian soy economy, therefore, laid in the political economy of the second food regime, its development and maturation show how those residual effects are being selectively dismantled by or incorporated into its successor. These linkages are the subject of this chapter.

The story of the arrival of the soybean in Brazil has been told numerous times (da Sousa and Busch, Welch, Hasse, Zancopé, Warnken). This chapter will specifically focus on what the emergence of Brazilian soy as a global agro-industrial product reveals about the contours of the corporate food regime, with specific emphasis on the strategic importance of Mato Grosso and the central-west region.

### ***East to West: The emergence of soy as an export commodity***

Until the early 21<sup>st</sup> century, the United States was the undisputed dominant player in the international soybean trade. The first beans are rumored to have arrived

in the US in 1804 aboard the Yankee Clipper, a ship looking for emergency food stocks on the Chinese shores to fortify supplies for the long journey home. One hundred years later, 9,000 tons of soybeans were shipped from China to England to be processed for use in industrial soaps (oil) and high-protein animal feed (meal). Europe quickly became the most important consumer of Asian soy while most of US production was consumed domestically, either as seed stock or—in very small amounts—as industrial oils and livestock feed. In the early 20<sup>th</sup> century, the US imported most of its soybeans and soy products from Manchuria (Windish, 1981).

It was not until the late 1930s that soy became widely cultivated in the US. Up to this point, farmers were not confident enough in sustained demand for the product to plant significant acres, and therefore the crushing industry was not confident enough in sustained supply of the product to invest in processing capacity. This cycle was broken by the agricultural crisis of the Dust Bowl and was the direct result of distribution of soy seed by government and agricultural extension agencies as an emergency forage crop that was not vulnerable to the diseases that afflicted corn and could replace pasture destroyed by drought. Planting soy ensured the survival of livestock during the intense Dust Bowl drought (Windish, 2).

This coincided with what Friedmann describes as the *surplus regime* and McMichael as the *US-centered regime* (and which both alternatively refer to as the post-war regime). Coming out of the New Deal era and coinciding with the international post-war priority on state-building, national regulation led to both import controls and export subsidies. As Friedmann writes, “These national programmes...generated chronic *surpluses*. As these played out, they structured a specific set of international relations in which power—to restructure international trade and production in one state’s favour—was wielded in the unusual form of

subsidized exports of surplus commodities” (1993: 31). No individual commodity benefited from these programs more than soy.

While the second world war increased the demand for Manchurian soy in both the US and Western Europe due to a shortage in fats and oils and a climbing demand for protein-rich foods (Windish, 15), it was really after WWII that soybeans—like all major US agricultural commodities—got a big boost with the adoption of Public Law 480 (PL 480). Also known as the Food Aid bill, PL 480 marked the beginning of the US’s shift from net importer to net exporter of not just soy but all fats and oils (Houk et al., 1972). Often criticized as a strategy for the dumping of US agricultural surplus disguised as a humanitarian mission, PL 480 flooded world markets with cheap agricultural products from the US offered under “special terms of sale” to developing nations with the expressed mission of providing much-needed food supplies to poor countries, but with the effect of subsidizing American production, creating demand for and eventual dependence on American exports, and making it impossible for farmers in those developing countries to compete with prices set below the cost of production. These subsidized exports shaped patterns of both production *and* consumption in the receiving countries by introducing unfamiliar foodstuffs into local diets. In the case of soy, as reported by Houck et al. writing in the early 1970s, “These concessional [soybean] oil exports...dwarf commercial export sales and play a key role in the expansion of demand for soybeans” (1972: 7).

It wasn’t until after the 1954 passage of PL 480 that soybeans became a significantly traded international commodity. Throughout the next 4 decades, the US dominated world soybean exports. For much of that time, too, Western Europe and Japan were the primary soy importers, though by the mid-1970s analysts were already forecasting the rise of China and India as major importers with explosions in both

population and income just over the horizon. (The impact of this era on Brazil's soy industry is discussed in the next section.)

Fulfilling this prevision, what had been a relatively consistent market structure began to change in the mid-1980s with the sudden expansion of South American soy production, most dramatically in the central-west region of Brazil—an area that had long been considered non-arable. For numerous macroeconomic and political reasons to be discussed below, *exports* of whole soybeans, however, did not really surge until the mid-1990s. This agricultural and economic transformation of Brazil's vast western frontier that began in the 1970s was the result of specific development, monetary, and agricultural policies that complimented world market conditions, perpetuating increasing global supplies of soy through both expansion of planted area and technologies that increased yields per acre in producing regions throughout the globe. The long-anticipated growth in Asian demand for soybeans, meal, and oil had begun in earnest, and international prices—combined with specific government credit and land programs—created the right incentives to encourage soy cultivation in new areas of the country.

Today, Brazilian production has caught up with (and may soon surpass) the volume grown and sold by the US in international markets. But what is the nature of this growth in Brazilian production, and what does it say about the changing configuration of global agricultural systems? How are these changes both reflected in and shaped by policy and patterns of investment—by both governments and by transnational agribusiness—in the production, movement, and industrialization of soy? Before tackling these questions, it is important to understand the complicated and very intentional process by which soy came to be such an important agricultural commodity in such an unlikely place.

### ***Birth of the Brazilian Bean***

Although rumored to have first been cultivated in the country around the beginning of the 20<sup>th</sup> century, the soybean remained a peripheral crop in Brazil's agricultural system until the 1970s (Hasse, 1996). Coffee had long dominated as Brazil's main export crop with sugar and cotton coming in a close second and third, respectively. Other major crops like corn, rice, and beans were grown almost entirely for domestic consumption, and it was in the context of import substitution and the political push to increase animal protein in the Brazilian diet that soy first became an important crop in the country.

Many authors point to the post-war era as a significant period in Brazil's agricultural history, as the productive profile shifted from tropical export crops to a focus on domestic industry and consumption (Munhoz, 1982; da Nobrega, 1985; Delgado, 1985; Manoel, 1986; Welch, 2006). Although systems of rural credit had existed since the colonial era (beginning with funds made available by the Portuguese Companhia das Índias Ocidentais for the purchase of slaves and equipment in the Pernambuco sugar industry in 1808 (da Nobrega, 1985), it wasn't until 1937 and the creation of the Carteira de Crédito Agrícola e Industrial (CREAI) that a comprehensive package of federal assistance to rural producers was implemented that included loans for production and storage, price protection, special lines of credit for perennial products, all the way to construction of schools and improvements to rural properties (Munhoz, 1982). The CREAI was modeled after the Farmers Home Administration and the Farm Credit System in the US in the wake of the global financial crisis of the 1930s.

This shift coincided with the period of transition from the first (colonial) food regime to the second (industrial) food regime that Friedmann describes (1993). The mobilization of farm credit grew out of the dual financial and ecological crises of the

1930s that coincided with the collapse of settler-colonial agro-economic relations. The legacy of the first food regime left a class of European diasporic farms whose non-capitalist structure prevented them from responding predictably to the collapse of world wheat prices. As prices fell, farmers scrambled to produce *more* instead of *less* as the law of supply and demand would suggest. New agrarian political movements and the rise of US hegemony after the Great Depression set the conditions for the rise of the industrial food regime (Friedmann, 2005). These new credit systems—along with huge subsidy packages in both the US and Europe—constituted state support of surplus production by independent small commodity producers (Friedmann, 1978). This was in contrast to the organization of production along colonial-settler lines where both the economic and political function of agriculture was in service to the colonial power in terms of materially supporting industrialization of the European ‘core’ and consolidating the political power of the state via diasporic resettlement and dissemination of European (agri)culture. These political and economic functions were refocused by and on the settler states themselves after World War I.

This period from the end of the 1930s through the post-war era saw Canada, Australia, and countries throughout Europe put in place similar federal subsidy and credit programs designed to prop up struggling rural producers and provide safety nets in the face of unstable world prices (da Nobrega, 1985). This began the era of what Friedmann calls the *surplus regime*, where these programs led to massive agricultural surpluses, especially in the US (1993).

While many post-colonial countries like Brazil focused on import substitution and producing agricultural products to feed their burgeoning internal urban populations the US dumped its surpluses on the world market (as described above) as part of a geo-political strategy to create both food dependency and markets for US agro-industry. This served to depress world food prices, which in turn prompted US

farmers to expand production (increasing surpluses) while at the same time undermining third-world producers. In Brazil, internal export quotas and an intentionally overvalued currency discouraged agricultural exports as the country focused on import substitution, and so US dominance of world markets went essentially unchallenged. As Manoel writes, “The role of agriculture in the 40s and 50s was to provide resources for the emerging industrial sectors” (1985:23). The outward orientation of US agriculture was unique in the post-colonial, postwar world. Brazilian agriculture was shaped by US policy, and also shaped it by providing an important destination for PL-480 food aid. By 1960, Brazil was the 5<sup>th</sup> largest recipient of aid from PL 480 (Barrett, 2006).

Just as agriculture was central to colonial relationships during the first food regime, therefore, it was central to both state-making and nation-building in the second. At the same time that international financial instability was forcing the creation of a new agrarian politics in the US and Europe, the Brazilian government—feeling the effects of the unraveling of the first food regime with the breakdown of colonial relationships and fracturing of tropical commodity markets—looked to its own vast interior to revive its agricultural sector. Soy and wheat were seen as anti-colonial cultures modeled after the US processes of experimentation and varietal development. “Differently from traditional cultures, at the same time a consequence and effect of a bureaucratic state and a patrimonial society, the new cultures of wheat and soy, piloted by these new farmers, created a pedagogy of effort and not of social status; of merit and not of tradition; of competence and not of privilege” (Zancopé and Nasser, 2005: 63). The long-term viability of Brazil’s coffee plantations came into question due to increasingly harsh winters and a changing world market, and the country began to look beyond its traditional colonial agricultural system to new crops as well as new territories.

The “March to the West” was initiated in 1930 in the wake of the international financial crisis of 1929. The interior states of Mato Grosso and Goias occupied strategic positions within the new nationalist discourse. They were “offered to the country as a transformative panacea to the unemployed populations of the coffee-growing regions, who had been transformed into agricultural proprietors on the front of the expansion of Goias and Mato Grosso” (Bertran, 1988). Despite the credit programs described above, however, successful colonization of the interior continued to be thwarted by a lack of infrastructure to support productive agricultural communities (Pereira, 1995). After three decades of strong federal support for agriculture—and particularly for production for the domestic economy—by the end of the 1950s, the Brazilian economy was facing an inflationary crisis. By 1961, costs of agricultural inputs had risen 130%. In 1966, Brazil experienced a 14.6% reduction in agricultural production (Munhoz, 1982).

The 2 decades preceding this economic breakdown had also seen notable gains for rural workers who had successfully organized and found a sympathetic political advocate in the Brazilian Communist Party (PCB—Partido Comunista Brasileiro). Long-festering discontent between workers and landlords in the coffee and sugar industries reached a new level as rural workers unions succeeded in organizing for just pay and working conditions. The desire of planters to undermine rural workers’ newfound political power helped propel the coup that toppled the government of President João Goulart and installed a military dictatorship that lasted for two decades (Welch, 2006).

As will be described in more detail below, colonization of the central-west in the context of the second food regime served a dual purpose. First, it shored up the planter class’s political support for the military government, and second it helped to relieve the intensifying pressure on agricultural land in the south as families grew and

land prices rose. The application of Green Revolution technologies in the south during these decades transformed southern Brazilian agriculture, and those who migrated to the central-west brought with them both the technology and the ideology of “modernized” agricultural production.<sup>4</sup> The destabilization of the post-war food regime in the US that was taking place at this same time—in the 1970s and ‘80s—opened the door for Brazil’s emerging soy economy to become crucial to that global commodity system.

***Historical Convergence: Death of a food regime, birth of a new agricultural frontier***

While there is some disagreement about how the first soybean arrived in Brazil<sup>5</sup>, it is clear that its cultivation and industrialization were, for many decades, exclusively confined to the southern states. There are 2 main reasons for this. First of all, the soybean itself was a temperate crop and could not tolerate the tropical climate of most of the country. Therefore, it could not be grown north of São Paulo state until agronomists developed a variety that would thrive in the sub-tropical *cerrado*. Development of a tropical soy variety was one of the key instances of public-private collaboration that made Mato Grosso what it is today. Second, until the early 1990s soy was primarily a domestic crop processed into oil for human consumption and meal for the domestic poultry and pork industries. The industrial and population centers were in the south of the country, and this more “developed” area boasted infrastructure—both physical and financial—that much of the northern territory lacked. In addition, the small proportion of meal that was exported came out of

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<sup>4</sup> This included using sophisticated plant breeding techniques to identify the photoperiodism of soy, which allowed researcher to adapt the plant to lower latitudes, the use of chemical fertilizers and fungicides, and intense mechanization.

<sup>5</sup> Competing reports credit the arrival of soy to either Japanese or European immigrants (Hassen).

crushing plants located near the 2 major points of exit—the ports of Santos in São Paulo and Paranaguá in the state of Paraná (Hasse, 1996).

Before discussing these facts in detail, however, it is important to describe the combination of political, economic, and agronomic conditions that precipitated the northward migration of the bean beginning in the 1980s. As described above, throughout the post-war era and until the early 1970s, Brazil had maintained powerful import-substitution policies, especially in agriculture. The country had a long-standing policy of being self-sufficient in wheat, even though there are very few places in the country where wheat can be grown, and even then it is much less efficient than production in the US. However, self-sufficiency in wheat was one of the pillars of Brazil's food safety policy. Minimum price guarantees, government buying programs, tariffs, and subsidized credit allowed the domestic wheat industry to survive despite costs of production far higher than would have survived on the international market (Hasse, 1996).

This does not mean that Brazil *was* self-sufficient in wheat. On the contrary, as mentioned above, Brazil received substantial PL 480 food aid, and much of that was wheat. In fact, Brazil's commercial plus PL 480 wheat imports averaged two and a half times greater than domestic production between 1955 and 1970. PL 480 wheat as a percentage of total imports increased from 24% in 1955-59 to 47% in 1960-64, and then decreased to 16% in 1965-69. PL 480 imports averaged 28% of total imports and 70% of domestic production from 1954 to 1970 when wheat shipments to Brazil ceased (Hall, 1980: 19). However, agricultural economist Lana Hall argues that these concessional imports actually stimulated domestic production of wheat in Brazil because of specific policies requiring that revenues earned from selling cheap imports on the domestic market were to be directed to supporting domestic production. At that time, the National Wheat Marketing Board administrated all sales and purchases of

wheat, including setting consumer price ceilings and producer price floors. According to Hall, “The price at which the government [sold] imported and domestic wheat to the millers was generally higher than that which the government paid for the imported wheat, but lower than the established support price which the government paid to the domestic wheat producer” (Hall, 1980). Therefore, the revenues earned from the sale of PL 480 wheat were put back into supports for domestic producers.

This support for the Brazilian wheat sector played a crucially important role in the development of the southern soy economy. One of the reasons that soy cultivation first became important in the south of Brazil was as a crop to rotate with wheat. Soy is a legume and fixes nitrogen in the soil, which reduces the need for chemical fertilizers. Partly because of this and partly because of its usefulness to the burgeoning livestock industry, the government created incentives to encourage domestic industrialization of the oilseed. Until the mid-1990s, the Brazilian soy processing industry was dominated by the domestic companies Seara, Ceval, Sadia, Perdigão, and Caramuru. The government’s main tool used to protect domestic soy crushing was a tax known as the ICMS<sup>6</sup>. This is a tax levied on all goods destined for export. Any time an export product crossed a state boundary, the producer/manufacturer/exporter had to pay a tax. This helped keep whole beans in the country and eased the pressure on southern states that housed or were proximate to the major seaports. This tax, therefore, discouraged the production of raw materials for export, especially in the northern states that were farther from points of exit; the more state boundaries that had to be crossed, the higher the ICMS payment.

However, as the ‘60s drew to a close and Brazil’s rate of inflation began to skyrocket, pillars of the import-substitution program—like an overvalued currency—became increasingly difficult to maintain. As was the case with many developing

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<sup>6</sup> Imposto sobre Circulação de Mercadorias e Serviços (Tax on the Circulation of Goods and Services).

countries at this time, rising international debt meant dismantling the import-substitution policies that had long helped to sustain domestic industry and agriculture, and a switch to an emphasis on export-led growth, primarily driven by expanding agricultural production of commodity crops for external markets. This also constituted a crisis in the US-centered food system, as massive grain deals between the US and the USSR caused a short-term—but world-wide—food shortage (Warnken, 1991; Friedmann, 1993). While crucial in the creation of soybean export capacity in Brazil, this was necessary but not sufficient to spur soy production in the hostile *cerrado*. National political interests provided the needed impetus for such an unlikely project.

Beginning in the 1960s, the military government<sup>7</sup> intensified the 30-year-old project to “colonize” the remote corners of the central-west and Amazon regions of Brazil that were populated at that time by cattle ranchers, loggers, native peoples, and a few small producers. The “March to the West” that began in the 1930s was propelled by both ideological and economic factors. The movement of the nation’s capital under president Juscelino Kubitschek from Rio de Janeiro to the Parecís plateau in the center of the country in 1960—and the miraculous construction of the current capital city of Brasília under the “50 Years in 5” plan—was a key element of the program of national integration that sought to unify Brazil’s vast territory. Brasília was seen as the “trampoline to the Amazon” and provided a pole of development to link the central-west and the Amazon regions to the more populous areas of the south and west. As the country’s international debt mounted in the 1970s, the government pushed the “March” past the capital and into Mato Grosso, Goiás, and Pará by encouraging agricultural settlement of the region.

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<sup>7</sup> In power from 1964 to 1985.

Interestingly, the governmental organization generally responsible for land redistribution, colonization, and settlement—INCRA—began in 1971 to hand over that responsibility to private colonization businesses, such as “INDECO S.A.” (Integration, Development, and Colonization). These companies administered generous land grants to southern agricultural migrants—mainly from the states of Rio Grande do Sul (the *gauchos*) and Santa Catarina (*Catarinenses*) and to a lesser extent Paraná and São Paulo—to establish the *latifúndios* that would seed the growth of villages and towns throughout the vast frontier (Bertran, 1988). In this process, indigenous peoples were placed on reservations and tremendous tracts of land—divided into 1,000 hectare plots—were cleared of rainforest and *cerrado* to make way for enormous plantations of cattle, rice, sugar cane, and eventually soy (Hasse, 1996). The federal government supported these private colonization companies by initiating the construction of federal highways to connect the new settlements. These included the Trans-Amazon highway and the Cuiabá-Santarém highway that remains incomplete to this day.

In keeping perfectly with the ideology of the industrial food regime which emphasized intensified monocultural production focused on domestic development, these new colonies represented “a great undertaking that prompted the ‘interiorization’ of the population. The public power, allied with the private sector, accomplished the transportation of the rural population and, obeying the logic of capitalism, turned in the direction of transforming unproductive lands into economic value for the market. The colonizing companies that arose as great advancements for the solution of agrarian problems, reflected and accomplished the objectives defined by the policy of national development: the integration of the central-west into the national economy and the occupation of Amazonia” (Bertran, 1988). Perhaps even more importantly, Bertran presents the colonization by private companies as a “major project with an

ideological hallmark” that “presented as a panacea for the solution to the nation’s agrarian problems, or, more concretely, as an *alternative* solution to agrarian reform” (113). In other words, this was an agrarian solution that fit with *both* the nation-building principle of the second food regime, but it embraced the principle of nation-building *through privatization* that anticipated the third food regime.

Clearly, the colonization of the central-west by *gauchos* and their southern neighbors was not an uncontested process. It was, indeed, largely *ad hoc* and therefore wrought with conflict that often became violent. While not the main subject of this paper, suffice to say that the colonization of the central-west was and continues to be one of the world’s most under recognized ongoing subnational conflicts. To this day, many land titles are disputed. Even though official policy states that producers must have official land titles in order to secure federally subsidized credit, oftentimes multiple and competing titles exist for the same tract, and forgery is often alleged to be rampant. However, as is evidenced by the numerous (and relatively prosperous<sup>8</sup>) soy towns that dot the vast *cerrado*, it has been successful (at least from the point of view of the soy pioneers). The conversion of the *cerrado* into viable agricultural land, in turn, has been instrumental in the explosion of Brazil as a soy-exporting powerhouse. By the 1970s, the colonization process was underway, import-substitution was in retreat, and Brazil was at the vanguard of shaping a new food regime whose foundation lay in the second food regime project of nation-building through agriculture, but that ultimately was oriented squarely toward integrating Brazil’s heartland into the neo-liberal global soy commodity system.

All of this political-economic groundwork, however, did not solve the 2 major agro-ecological obstacles to soy cultivation in Mato Grosso. First, the soils of the

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<sup>8</sup> Many of these towns boast Human Development Index (HDI) ratings far above the national average, though stratification is pronounced, with soy growers literally living on one side of the federal highway and laborers living on the other.

*cerrado* were long assumed by agronomists to be too infertile to support substantial agricultural production. However, in the mid-1950s, agronomists from the federal agricultural research institute (EMBRAPA) along with other research foundations<sup>9</sup> devoted considerable attention to ameliorating the poor quality of *cerrado* soils, and by the mid-1960s the widespread application of lime to acidic soils released nutrients and fertility skyrocketed. This process essentially added millions of acres of new farmland to Brazil's agricultural base.

After rice and sugar had taken hold in the region, however, soybeans were still a strictly temperate crop. The length of time that it took the beans to mature left the plants vulnerable to rampant tropical diseases and pests that did not exist in the temperate south. Also, soy could not tolerate the high temperatures that predominated for much of the crop year. Researchers from EMBRAPA and the Fundação Mato Grosso (FMT)—a coalition of private seed companies—began working to develop a variety of soybean that could tolerate the tropical climate found above the 24<sup>th</sup> parallel. Some of the funding for this research also came from the Japanese government. Traditionally Japan had been the world's biggest importer of soy, and at that time their sole source was the US. However, a constellation of geopolitical, economic, and climatic events threatened to destabilize that commodity chain. In 1971, the US dollar was devalued which both threatened financial markets and increased demand for US exports. Also in 1971, an *El Niño* caused massive crop failures in the US. Between the crop failure and the run on exports, the US began to fear for its domestic soy industry and imposed an embargo on soy exports. Between an uncertain supply and shaky investor confidence, both Japan and Western Europe began looking in earnest for a new source of soy, finding Brazil. At that point, Brazil was already producing significant amounts of soy, but nearly all of it was consumed domestically, initially as

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<sup>9</sup> Including one funded, interestingly, by the Rockefeller Foundation.

oil and eventually also as chicken and pork. Japan saw potential in the Brazilian production capacity and began paying a premium for beans from Brazil as a way to incentivize the development of the sector (Warnken, 1999). It wasn't until some 30 years later, though, that Brazil began to show signs of someday overtaking US exports.

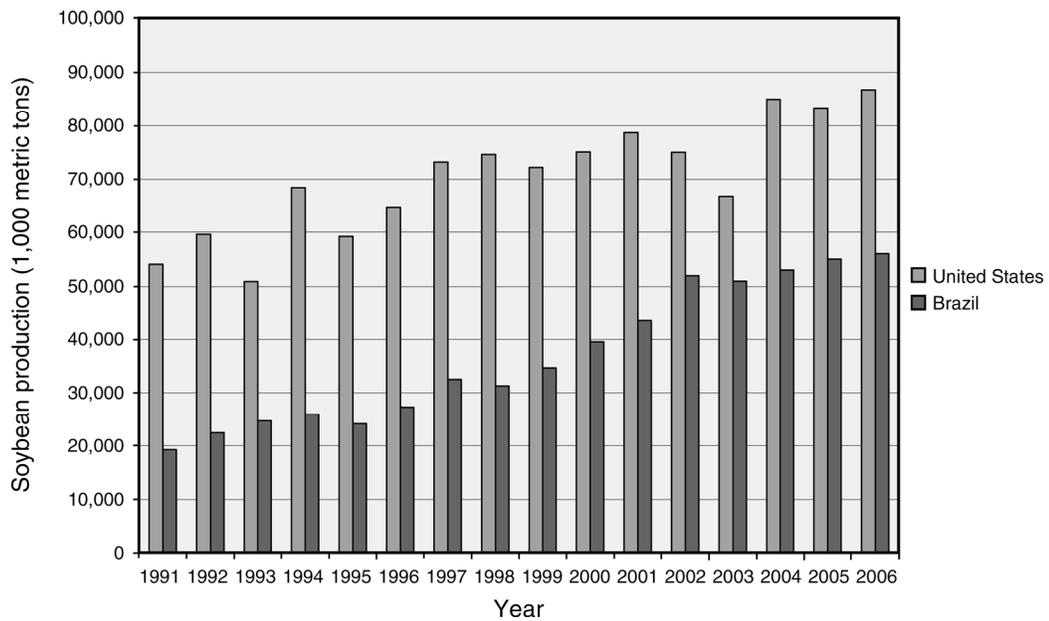


Figure 3. US and Brazilian soybean production. Source: Instituto Brasileiro de Geographia e Estatisticas (2007).

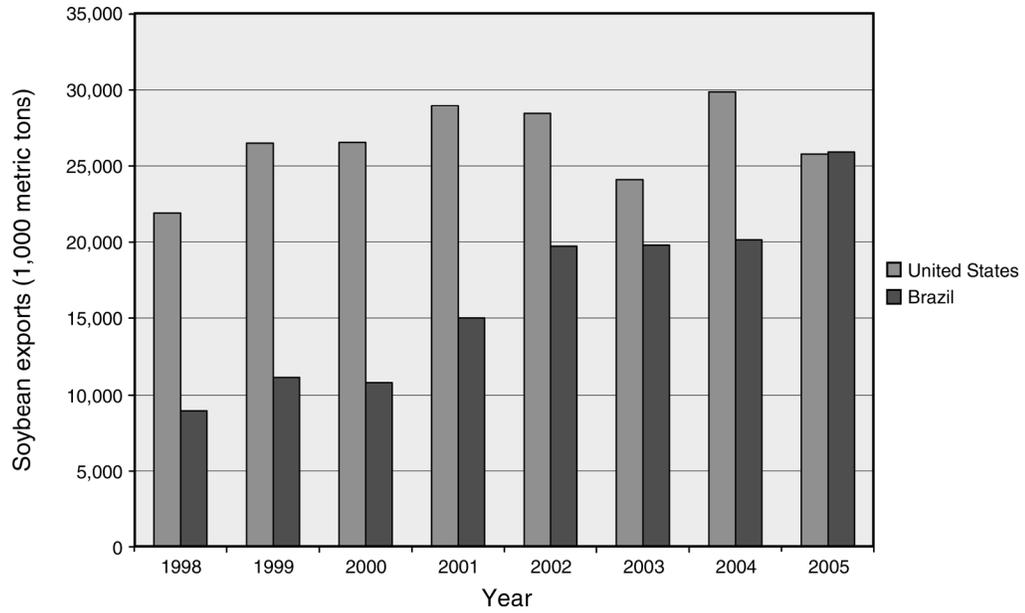


Figure 4. US and Brazilian soybean exports. Source: Instituto Brasileiro de Geographia e Estatisticas (2007).

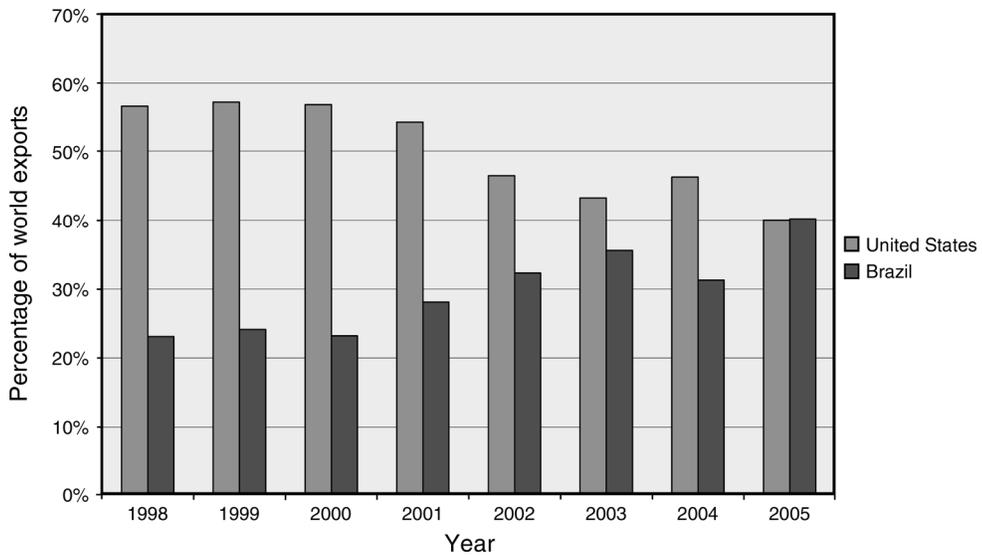


Figure 5. Percentage of world soybean exports. Source: Instituto Brasileiro de Geographia e Estatisticas (2007).

This constellation of factors—the weakening of the US hegemony over the international food system, the failure of import-substitution, the military government’s colonization project, privately funded seed research, and the involvement of foreign government investment—created the conditions for the first plantation of tropical soy in Bahia (an eastern coastal state whose western extremity extends into the mid-country *cerrado* and has since become another major soy producing region) in 1980 (Zancopé and Nasser, 2005). Unlike the southern domestically-oriented soy industry, the central-west agricultural region was created specifically to serve export markets, and therefore also a different ideological aim. The collapse of the US-led food regime opened a door for Brazil and other country governments to undermine the American monopoly on commodity exports and therefore shift the balance of power in the global agro-food system away from the industrial north. As is described in more detail in Chapter 4, this power shift both manifested in and eventually fatally compromised the WTO negotiations over an international Agreement on Agriculture. In a sense, Brazil became the leader in ushering in a new food regime based on markets organized by corporations with the complicity of both New Agricultural Country governments (Friedmann) and agricultural importers. And this new Brazilian agriculture began with and continues to hinge on soy.

*Soy Comes to the Cerrado: The arrival of the corporate food regime*



Illustration 1. Map of Brazil with Mato Grosso highlighted.

As the cattle ranches of the *cerrado* as well as hundreds of thousands of acres of virgin savannah were converted to soy, the tensions and contradictions of the second food regime became visible in Brazil's agricultural sector. These tensions were clearest in the attempts of agricultural policy in the 1980s to strike a balance between liberalization and protection of domestic agricultural production still vulnerable to high interest rates and volatile prices. Availability of rural credit had expanded dramatically in the previous decade which helped to shore up the large landholdings that reflected the military government's commitment to a certain kind of modernization of agricultural based on highly mechanized, large-scale commodity production (Munhoz, 1982; Manoel, 1986). As external balance-of-payments problems grew, restrictions were imposed on rural credit disbursements, but the system continued to favor large operations.

Throughout the 1970s, 80s, and into the 90s, the government maintained minimum price supports as well as taxes that discouraged raw material exports, which

together created incentives for Brazilian soy to be crushed domestically. When the international farm crisis converged with Brazil's fiscal woes in 1980, the Brazilian government began pushing exports in earnest through policies such as the devaluation of the currency (that had long been deliberately overvalued in order to discourage exports and make imports more affordable), abandonment of the wheat program, and the relaxation of the export surplus theory (dictating that exports consist only of what is not consumed domestically) (Warnken, 1999). All of these policies contributed to rising soy meal and oil exports throughout the 1980s and 90s, but it wasn't until after the one policy protecting the domestic crushing industry was repealed that the soybean export boom really accelerated.

As described above, up until the mid-1990s, taxes had been in place that protected domestic crushers by imposing a state-to-state transport tax on all raw materials destined for export. This encouraged internal industrialization and meant that most of the beans grown in Brazil were crushed there as well and then either consumed domestically or exported as meal or oil. This was a grave disadvantage to the central-west soy industry, however, because domestic crushing capacity was already more or less saturated with soybeans grown in the south, and to get soybeans from Mato Grosso to a port, several state boundaries must be crossed.

In 1996, however, passage of the *Lei Kandir* lifted this tax on grains and other primary products and in the next decade, whole soybean exports<sup>10</sup> grew by 290% (Rezende et al, 2001). Because the central-west region is far from the southern industrial centers and even today boasts little crushing capacity of its own, the skyrocketing production of soy in that area and the skyrocketing exports of whole beans from the country overall were mutually dependent historical processes.

According to economist Luís Carlos Vitali Bordin:

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<sup>10</sup> Primarily to Japan and Europe.

The Constitution of 1988 consecrated the understanding that only industrialized products, those that produce more added value and generate national industrial jobs in processing and manufacturing, should have the benefit of immunity from taxation. The “Lei Kandir” destroyed this vision and increased the dispensation of all goods. This change, although positive for the international competitiveness of Brazilian products in general, provoked significant alterations in the commercialization of some economic complexes. In the case of soy, in Rio Grande do Sul, the export of whole soybeans was stimulated at the expense of internal processing. This had the repercussions of generating processing jobs elsewhere and the reduction of labor in local industries.

This shift began to shape the Brazilian soy sector in line with the contours of the third food regime. The paradigm of national agriculture for national development that characterized the second food regime gave way to the incorporation of national agricultures into global markets facilitated by transnational agribusiness. The “national interest” was, therefore, redefined from self-sufficiency to market participation, which was eventually most clearly reflected in the Agreement on Agriculture that came out of the 1994 GATT negotiations creating the World Trade Organization.

The radical shift in the profile of the Brazilian soy sector reflects these broader changes in the food regime. The figure below shows the relative exports of unprocessed soybeans, soybean meal, and soy oil. It is clear from this illustration that 1996 was indeed a watershed year for the Brazilian soy industry, as the industry’s export profile changed dramatically after the passage of the *Lei Kandir*.

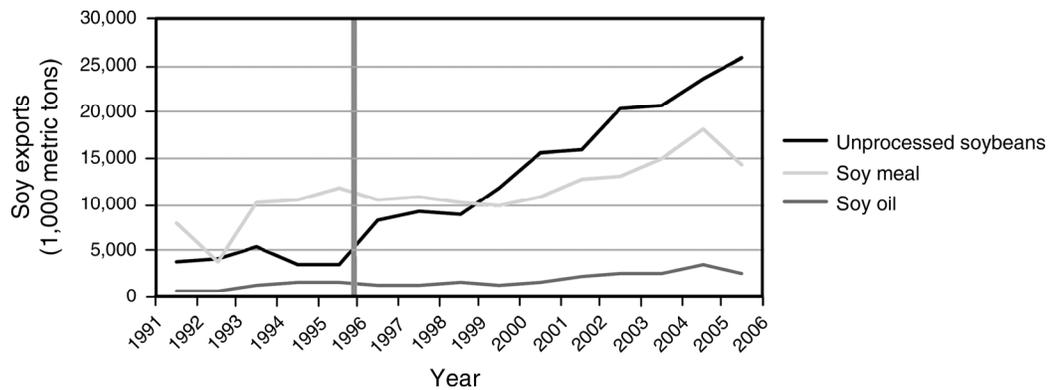


Figure 6. Brazilian soy and soy product exports. Source: USDA Foreign Agricultural Service (2006).

According to an agricultural economist at the University of São Paulo, transnational agribusinesses supported the *Lei Kandir* because it allowed them to ship soybeans to be processed elsewhere. However, according to a Brazilian trade lawyer, when the law was being discussed in the mid 1990s and most of the domestic crushing capacity was Brazilian-owned, the biggest soy industry trade group, the Brazilian Association of Vegetable Oil Industries (ABIOVE) opposed the repeal of the tax. At that time, the head of the association was César Borges de Sousa, also the chief of Caramuru, Brazil’s (then) largest domestic soy crusher and poultry processor. At that time, ABIOVE did not support the *Lei Kandir* because it essentially acted as a protection for domestic soybean processors—Brazilian feed, poultry, pork, and cooking oil producers. At the time of my fieldwork, however, the leadership of ABIOVE had transferred to Carlo Lovatelli, also the chief of Bunge—headquartered in White Plains, New York, and currently the largest transnational corporation in Brazil. Homem do Mello assured me that the Association now supports the law.

According to Fábio de Triguineiro, spokesperson for ABIOVE at the time of my research, that organization meets regularly with representatives of the Brazilian government “to help, to influence in a positive way, to bring information, to bring

naturally, suggestions, suggestions for action, suggestions for partnerships, suggestions for strategy...” What is interesting here is not simply that private industry has influence over government, nor is it that transnational businesses are enjoying such access to another country’s system of government. What is interesting is that, despite intimate knowledge of the negotiation and passage of such acts as the *Lei Kandir*, nearly everyone I spoke with—from farmers to government officials to industry and TNC representatives—reified the market to such an extent that it took on a life of its own. In this particular case, the passage of the *Lei Kandir* and the dramatic changes that it clearly produced in the Brazilian soy sector are not seen by private actors as constitutive of the “market” to which they claim to be responding.

What is interesting is that this market is being constructed in an historical moment characterized by the increasing globalization of capital and production systems. The Brazilian soy industry is being integrated into a global soybean system where the fate of Mato Grosso is at least in part determined, not only by the tax laws of the Brazilian government, but also by the tax laws (and market structure, and production standards, and intellectual property regimes, etc.) of Argentina, as well as China and India, and these institutional structures are not determined solely by state sovereignty. At the time of my research, the tax laws in Argentina closely resembled pre-Kandir Brazil, where incentives to export value-added products remained in place. Therefore, rather than build more refineries in Brazil, it made more sense to crush Brazilian soy in Argentina, or in China or India, the location of the end-user. Clearly Brazil’s tax structure helps to configure not only Brazil’s market, but also the markets of other countries integrated into to the global soy commodity system. While I cannot go so far as to say that Cargill has a master plan that involves manipulating tax law to discourage the industrialization of soy in Brazil, Cargill’s investment patterns

(mentioned above) show a strategy that fits well with the policy developments in Brazil encouraging the export of whole beans.

This also reflects the transition from the second food regime where the “national interest” was defined in terms of domestic industrial development to the third food regime where “national development” is seen to be facilitated by increasing exports and integration into global markets. This is what Hall and Biersteker call “the authority of the market”. They argue, “When state leaders proclaim that the “forces of the global market” give them little room for maneuver or independent policy choice, they are participating in the construction of the market as authoritative. They are not only ceding claims of authority to the market, they are creating the authority of the market” (2002: 6). What is fascinating is that the vast majority of people I interviewed participated in the same construction, and the fact is that transnational corporations do it too. When I asked Pedro Camargo, president of the pork producers’ association, whether the soy TNCs had a strategy for configuring the global market in a particular way, he said, “They will export what the market wants to buy. If the market wants to buy meal and oil they will export meal and oil. If the market wants to buy the bean they will export the bean”. This kind of statement puts the market “out there”, beyond both the corporations and the state when clearly as can be seen from the example of the *Lei Kandir*, the interaction of the private sector and the state *created* a particular market in Mato Grosso that articulates with markets in other states that are similarly configured. It was in the context of the historical shift in both the structure and the ideology of the food regime that soy cultivation in Mato Grosso finally surpassed southern soy production and the structure of the Brazilian (and indeed global) soybean market changed dramatically.

### ***The Private International Soy Regime in the Central-West***

Today, there exists in the central-west a private international soy regime that is made up of transnational corporations, trade industry groups, rural producers and their unions, public-private partnerships for infrastructure development, research institutes, and local, state, and federal governments. The “economic issue area” (Cutler, 2002) that these parties participate in structuring is the larger soybean complex, which includes everything from road construction and financing to the production of the beans themselves. The concept of a regime—in both the “private” way I use it here as well as in the slightly different context of the “food regime”—allows for the reorientation of our analysis away from state-centric structures of governance toward an understanding of how non-state actors participate in the construction of the material reality of a particular market and its underlying legitimated authority (Hall and Biersteker, 2002).

Insofar as there is a consensus among scholars that a third food regime is or would be built at least in part upon a corporate-centered rather than state-centered system of food production, distribution, and consumption, the theory of a private regime helps to concretize some of the particular ways in which corporations and other private actors work in concert with the state to orient national economies toward global markets. According to political theorists, private regimes rest upon the legitimation of private authority, a process with which both states and private actors actively participate (Hall and Biersteker, 2002; Cutler, 2002). The soy regime can be defined in terms of the structures of the soy market itself but also by the ideology that legitimates its expansion throughout the central-west and allows it to triumph over vociferous and plentiful protests from the environmental and landless peasant communities who argue that soy cultivation results in environmental degradation, exploitative labor relationships, land concentration, and violence. Hall and Biersteker

argue that the difference between power and authority is that authority is legitimated, institutionalized power and that it involves a level of trust between the authority and the subject. They write:

People, institutions, and states recognize the authority of tradition, the authority of expertise, the authority of moral claims, and sometimes even the authority of a “natural” inequality. These forms of authority “import some general claim on human trust into a social relationship in order to introduce an additional pressure for conformity beyond that which the relationship itself can exert...if obedience is the counterpart of power, trust is the counterpart of authority (2002: 9 [Kreiger, 1977: 259]).

Embedded in the authority of the soy regime in Mato Grosso, therefore, is trust that the environmental and social costs of soy production are outweighed by the economic (and presumably therefore developmental and social) benefits to the “nation”. In interview after interview, deforestation within the Amazon region and allegations of slavery were downplayed if not absolutely denied. There is a widespread belief in the soy sector that the international focus on soy by environmentalists is really a ploy by the North to undermine the competitiveness of Brazilian agriculture. The discussion, therefore, is framed in the context of “national” interests versus foreign interests, be they environmentalists, politicians, or farmers. The president of the National Agricultural Confederation in Brasília told me:

I think there is a lot of misinformation out there, for example, about the environmental question in BR. That soy is expanding through the deforestation of the Amazon. And clearly there is a relationship that we recognize. There is a relationship between the expansion of soy in the central-west region through the *cerrado*, the savannah.... But the

growth of soy in the central-west is generally taking the place of degraded pasture. Most of the growth has been in productivity, not in new areas planted. And so this senator [Grassley—referring to a letter sent by Grassley about US concerns about Brazilian soy production] is concerned about environmental issues, the deforestation of Amazonia..... A recent report produced in Brazil shows that deforestation in the Amazon has fallen. It has increased in the *cerrado* but has decreased in Amazonia. And so I think a big worry of the lawmakers in the US is really the increase in production of soy in Brazil, because we can compete in soy.

The president of the Mato Grosso Agriculture Foundation frames this competitiveness in clearly in terms of the greater social good when he says:

We're trying to stimulate production to try to help make up the lack of proteins, not only for our brothers in the Northeast, the Brazilian, who is often dying from malnutrition, but this is also a problem of our African brothers and in Eastern Europe where people have a lack of protein. And so...the rich countries [must] begin to give Brazil credit for all of these questions for all the ways that we are helping the world.

The national interest is defined, then, in specifically relational terms and in a specifically global frame. This includes competitiveness in corporate-centered international markets that are structured in the neo-liberal model.

As is discussed in the next chapter, this is expressed in specific terms in the relationships between soy farmers and agribusiness that dictate the conditions of production and are underpinned by moral authority of market rule. In examining Mato Grosso's incorporation into a global soy market with the specific role as source of raw material for an industrial soy complex, the

theory of private regimes helps to specify the mechanisms of the third food regime by rejecting state-centric notions of authority and crystallizing the role of private actors in a project that resolves apparent contradictions between “national interests” and “corporate interests” by using the moral authority of the market to define the former in terms of the latter. In other words, in the case of Brazilian soy, engagement with and competitiveness in international markets becomes a national priority, which puts pressure on farmers to reduce costs and increase profitability. This is in direct opposition to previous policy models that privileged inefficient, uncompetitive domestic production *over* what could be gained from the world market *specifically* because the “national interest” was defined in a different way—in terms of ‘developing’ the ‘national community’ (economically speaking at least) as opposed to participating in the global market place.

Specifically, there are many avenues by which the private regime has transformed the landscape of Mato Grosso into perhaps the largest agricultural monoculture in the world. First, a partnership between the state and private capital was instrumental in contributing to the research that yielded the tropical soybean. Second, the gradual selling off of Brazil’s domestic-owned crushing capacity to foreign investors shifted the focus of the industry away from domestic meat production and towards integration into a global bean/meal/oil/feed complex. Finally, it is clear from patterns of corporate investment in storage and processing facilities that Mato Grosso plays a strategic role in the global soybean networks that are controlled by these companies<sup>11</sup>. It appears that Mato Grosso is being “cultivated” as a source of

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<sup>11</sup> The influence of these corporations in politics—particularly at the federal level—will be discussed in Chapter 4.

industrial raw material for ADM, Bunge, Cargill, and Dreyfus's crushing plants in Argentina, China, and India.

One of the first examples of this was in the development of the tropical soybean seed. The seed industry in Brazil has long been the arena for the emergence of a variety of public-private partnerships between (mostly domestic) seed companies and various government agencies coming together to conduct research on both seed development and soil fertility. Many of these types of partnerships preceded the formation of The Fundação Mato Grosso (Mato Grosso Foundation—FMT), but the FMT was uniquely the “fruit of collective action of soy seed producers [and] an example of an organization of the private sector assuming roles previously assumed by the State” (Nasser, 1998). This foundation was crucial to the development of the Mato Grosso soy industry, and specifically succeeded both economically and technologically where a long list of state institutions and public-private partnerships between EMBRAPA and private seed companies and producers had failed. Nasser argues that the FMT succeeded primarily because it was able to eliminate the “free rider” problem (all farmers benefiting from research even if they hadn't contributed to funding it) that had stifled the capitalization of other ventures by selling quotas of new seed varieties in advance to *multiplicadores*, or companies that would grow out and sell the seed to farmers. These quotas allowed the *multiplicadores* exclusive license to sell the seeds. Intense concentration of the Mato Grosso seed industry (there existed then only 40 discrete seed companies) facilitated monitoring of these agreements (Nasser, 1998). In this way, this unique private agricultural initiative both allowed and was allowed by the particular capitalistic structure and high level of concentration in the Mato Grosso soy industry.

Second, as the domestic soy crushing industry lost the implicit protection it enjoyed before the passage of the *Lei Kandir*, TNCs quickly bought up the struggling

sector. In 1997, Sadia's soy processing arm was acquired by ADM and Bunge purchased Ceval Alimentos, which was at that time the largest soy processor and leading producer of soy meal and oil in Brazil. In 2004 Cargill Agricola (the US company's Brazilian unit) acquired Seara Alimentos and with that, 3 of the 4 largest domestic soy processors passed to foreign hands. This helped connect Brazil's soy industry to international markets by incorporating Brazilian growers into the global networks managed by these transnationals.

Finally, it is clear from patterns of investment that TNCs are keen to develop Mato Grosso to fit a particular niche within the global soy commodity system. Throughout the central-western soy boom, transnational agribusiness has been reluctant to invest in additional regional crushing capacity. Many corporate officials say this is because Mato Grosso's infrastructure is so poor that it doesn't make economic sense to invest any more money than necessary in the region. Although it may seem counter-intuitive to produce and export on a massive scale a low-value, high-volume product from a remote area with unpaved roads as the only outlet, it makes perfect sense for agribusiness. By exporting whole beans rather than buying and processing them domestically, these companies are able to pass on nearly all of the cost of transportation to the producer because the price paid at the farm gate is discounted by the cost of transport—alarmingly high in the remote towns of the *cerrado*. The farmers themselves even pay three-quarters of the cost of *paving* the roads upon which they then have to pay to have their beans trucked.<sup>12</sup> The beans can then be shipped—often via the companies' own rail cars or ocean liners—to their subsidiary crushing plants, feed mills, and oil refineries in China, bringing the processing of the final product much closer to the consumer base.

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<sup>12</sup> See Chapter 3.

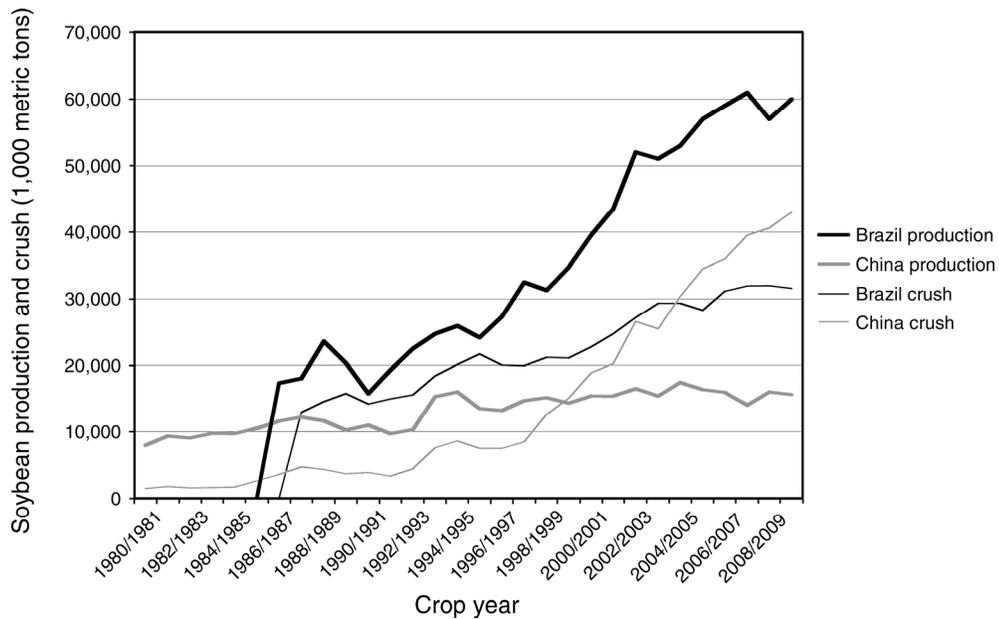


Figure 7. China and Brazil soybean production and crush. Source: USDA Economic Research Service (2009).

Although two of the largest crushing plants in the world are located in Mato Grosso's two largest cities—Rondonópolis and Cuiabá—both ADM and Bunge were quick to implement massive layoffs at the first rumblings of the 2005 soy crisis. While foreign investment in Brazilian crushing did increase in tandem with the soy boom in the early 2000s (mirroring contractions in North American crushing), it is clear that ADM, Cargill, Bunge, and Dreyfus are looking towards the tantalizingly undeveloped consumer markets of China and India when deciding to invest in new crushing capacity. Goldsmith et al. (2004) point to clear trends that corporate strategies favor expanding production in Brazil, but expanding crushing in Argentina, China, and India while shrinking industrialization in North America and the EU. The annual growth rates for soybean crushing capacity tell the story: Brazil—7%; India—14%; Argentina—15%; China—41% (FAS, 2006).

But markets are not the only factors influencing corporate investment decisions. Pedro Camargo—a trade lawyer who orchestrated the Brazil WTO cotton case (described in Chapter 4) and current head of the Brazilian pork industry association, as well as a member of the influential International Agriculture and Trade Policy Council (IPC)—insists that the TNCs do not have a specific political strategy and that they are just responding to “market forces”. He says, “Around the world you have a different market for meal and oil. One country wants to import mostly oil, another mostly beans, so sometimes you need to process it somewhere else. But these are *market forces*”, suggesting that they are independent of policy decisions. But then, in the next breath he says, “And this affects not only Brazil but it affects, like Argentina has a very different policy than Brazil with their export tax. A differential export tax between beans and meal so that of course affects their.....they are extremely competitive, and it affects the way transnationals decide where they are going to put a new plant, how well this export tax protects the industry or not”. Essentially, Camargo is first denying then asserting that *policy structures competitiveness*.

By presenting “market forces” as something outside of and independent from the actions of states and firms—something to be reacted to or taken advantage of—the leader of one of Brazil’s largest agro-industry trade groups legitimates market authority at the same time that he clearly acknowledges the importance of state action in constructing, shaping, and facilitating those disembodied “market forces”. This is an important point in understanding the convergence between the third food regime as I specify it here in this chapter and private authority. Despite the fact that “national economies [are] being subsumed and rearticulated into the global system,...National borders are not irrelevant. Nation-states have differing interests and objectives, and attempt to enforce their will on firms and other governments; national boundaries still create ‘significant differentials on the global economic surface’. The critical point,

however, is that globalization implies that the national economy is no longer the unit of economic accounting or the frame of reference for economic strategies.” (Kobrin, 2002). In the third food regime, therefore, the state does not disappear, and what appear to be state-centric agricultural policies persist in some places, though irregularly. The significant point is that market comes to be seen as arbiter of last resort. To say that ADM, Cargill, and Bunge are responding to “market forces” by exporting whole beans rather than soy meal and oil is at least somewhat misleading due to the fact that those exported soybeans are being crushed in plants either wholly owned or operated in partnership by those very same corporations.

These geo-economic trends in production and processing signal a new era for the global soy commodity system. For the first half of the 20<sup>th</sup> century, Western Europe and Japan were the decided leading importers of soybeans, meal, and oil. However, even in 1972, Houck et al. predicted that “by 1975, large net imports by India and Mainland China are anticipated, which will add these countries to the list of major world importers” (14). In 2003, China imported a record 20.7 million tons of soybeans and surpassed the European Union to become the world’s largest importer of whole beans, and imports have continued to rise dramatically since then (Tuan et al., 2004).

Chinese oil and meal consumption have increased dramatically in recent years due to rising population and incomes, but it is interesting to note that *imports* of these products have not kept pace with imports of whole beans.

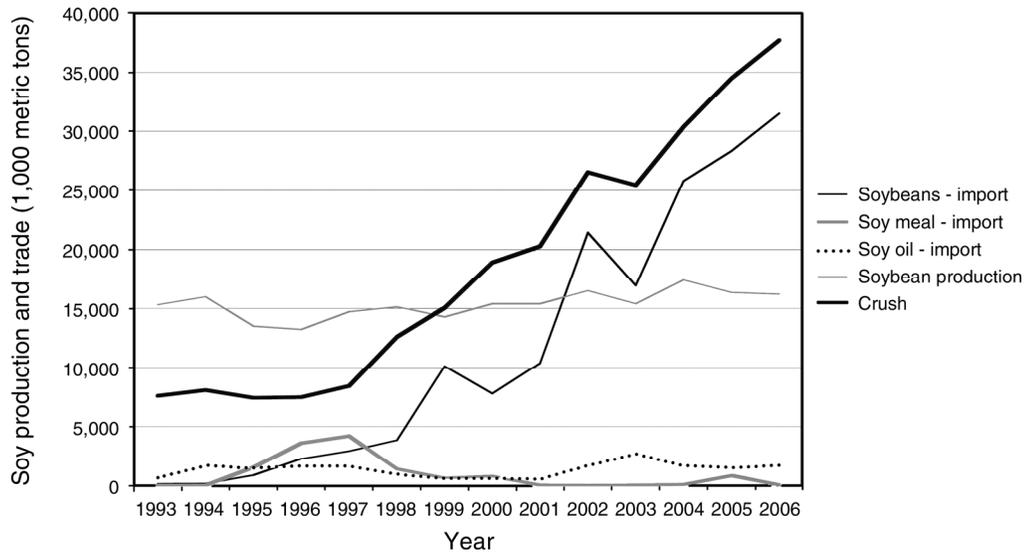


Figure 8. Chinese soy production and trade. Source: FAS, IBGE (2008).

In fact, while China is by far the largest single importer of soybeans—responsible for more than a third of total world imports—it remains a net *exporter* of soybean meal (Tuan, 2004). This is where the link between China and Brazil, and particularly between China and the state of Mato Grosso, becomes important. With the passage of the *Lei Kandir*, Brazil made a specific decision to shift the marketing focus of its soybean sector from industrialized soy products (meal and oil) to whole soybeans. The subsequent rise in whole bean exports mirrors almost exactly the rise in China’s whole bean imports. What this shows is that Mato Grosso’s soy economy is being constructed with direct reference to agro-economic changes taking place in China. The soybean industry there is not simply something in which Brazil has a natural comparative advantage and therefore produces in order to fulfill some national developmental goal. The state of Mato Grosso is being specifically cultivated by TNCs as a source of industrial raw material to feed the burgeoning Chinese meat and

oil sectors. This is an arrangement that is almost reminiscent of the first colonial food regime only now the colonial power is not a state—it is Cargill.

In the last decade, TNC investment in soy crushing has quietly exploded in China. As Koh Chin Ling of the International Herald Tribune reports, “Bunge, the world's biggest oilseed processor, is leading a charge by overseas companies to buy soybean-crushing factories in China, where demand for animal feed is rising as people eat more meat” (2006). In reality, Bunge is a relative latecomer to direct investment in Chinese crushing capacity, following first ADM and then Cargill by almost a decade (Li, 2003). While Bunge, Cargill, and Dreyfus are responsible for almost 90% of soy exports to China, they are also controlling an increasing share of crushing capacity there. Thirty percent of ADM’s worldwide crushing capacity is located in China.

India, too, is an increasingly important demand market in the global soy system. As demand for edible oil rises in India, these companies are concurrently looking to locate more brute oil refining in that country (Li et. al, 2003). In 2004, market disruptions in China related to avian flu temporarily destabilized soy demand and soy prices there (Tuan et al., 2004), and so while there is consensus that in the long term that market will continue to grow, farmers were prompted to turn their attention more actively toward India. This is the case for US soy producers as well, and in December 2006, in an unprecedented show of transnational cooperation among large soy producers, farmers from the US and Mato Grosso participated in a “joint grower trade mission” to Mumbai, India designed to improve market access in that country (American Soybean Association, 2006).

### ***Conclusion***

As will be discussed in the following chapter, while farmers are often thought to be the unwitting victims of the corporate food regime, they are inexorably

incorporated into and therefore dependent on it. More importantly, though, they become its agents, promoting its extension as a way to preserve their own livelihoods even as the total value of what they produce is expropriated by the companies that rule the regime. In fact, farmers themselves contribute to the legitimation of the regime's authority in the specifically Gramscian way that Cutler, Hall and Biersteker, Korbin, and others describe. As was apparent during the Brazilian agricultural market crisis of 2005/06, "national citizens lay responsibility for financial crises and for their resolution squarely at the door of national governments", which I argue reinforces the legitimacy conferred upon market rule by the public sector (Pauly, 2002: 76). As was the case with the government bailout of soy farmers, rarely do the state actions that result from these crises fundamentally challenge the corporatist ideology of the productive system. Rather, they serve to support and reinforce it. What appear as moments of conflict and challenge of the neo-liberal market mechanism are what Gramsci deems consent in disguise. I argue that the corporate food regime does not cast the state aside, nor does it necessarily replace state supports and protections for national agricultures with rules mandating greater market liberalization. It is not necessarily about free markets, but rather profits for agribusiness underpinned by neo-liberal ideology legitimated by state collusion (that is specifically *not* always about liberalization) (cf. Peine and McMichael).

As described in the introduction, there appears to be a lack of consensus among scholars as to what the third/corporate food regime looks like, what defines it, and whether or not it is here yet. I argue, however, that if we use the corporate food regime as an analytical tool rather than trying to pin it down as a static category, it can illuminate the nature of relations that define the current historical moment in the global agro-food system. Scholars working to develop the private regime concept are generally trying to move away from state-centric notions of governance that dominate

international relations and to elaborate a theory of private international regimes that is historically specific and captures the growing authority of private actors in the current neo-liberal conjuncture. This is useful to attempts to specify a third food regime insofar as it is generally understood to be a move away from state-centric agricultural policy to a corporate-centric system of organization. What that actually looks like on the ground is the subject of the next chapter. The historical perspective presented here shows how Brazil's soy industry is the product and exemplar of the new state and corporate strategies to integrate national and regional agro-economies into global markets that are governed increasingly by private actors and public-private networks that define the third food regime.

CHAPTER 3  
FARMING CAPITAL ON THE BRAZILIAN SOY FRONTIER



Illustration 2. A soy truck in Campo Novo dos Parecís.

***Introduction***

The soy industry in Mato Grosso is one of the most dramatic agricultural tales of our time. In most versions of the soy story—whether lauding soy’s role in the new Brazilian era of geopolitical and economic power (Hasse, 1996; Zancopé and Nasser, 2005) or decrying its contribution to environmental destruction, labor exploitation, and the disappearance of local food systems (Steward, 2007; Wallace, 2007; Lilley, 2004)—the main protagonist is ‘agribusiness’. This category is generally assumed to include both the corporations that buy, transport, process, and trade soy as well as the large *latifúndios* that produce it. This category of ‘agribusiness’ is often further juxtaposed with the category of ‘small (family, peasant) farmers’ (Wittman, 2005), suggesting that these two categories of rural producers are mutually exclusive and defined by distinctly recognizable sets of interests.<sup>13</sup> This chapter argues that these

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<sup>13</sup> Other authors such as Helfand (1999) do a very good job of disaggregating categories of producers.

essentialized categories play into the hegemonic discourse of the corporate food regime, both by defining economic and productive significance as directly proportionate to the level of integration into the global food system that the producer experiences, and also by obscuring the tensions, conflicts, and exploitation present within the ‘agribusiness’ category. The first task of this chapter is to examine the juxtaposition and political-economic significance of these two categories. The second is to disaggregate the ‘agribusiness’ category in order to expose both the power relations that obtain within the soy regime, and the ways in which the state is deployed by private interests, both producers and by firms.

Here I elaborate the lived experience of the corporate food regime, which highlights important nuances missed by a purely institutional analysis. Moran et al. make an important intervention in food regime scholarship by addressing the social foundation of global regulatory structures. The authors argue that there is a gap in the food regimes literature wherein the “way that farmers are integrated into world food systems and the reasons why they have been able to influence this integration” have been ignored (Moran et al., 1996: 248). In a sense, then, they render the food regime concept dialectical and nuanced beyond an instrumentally regulatory understanding. Like these authors, I see soy farmers as active participants in the soy regime and specifically use the regime concept to highlight relations of regulation and control in the soy industry.

Primarily, I argue that the Mato Grosso soy farmer is not simply a homogenous, complementary component of a unitary international soy regime. Rather, Mato Grosso soy farmers constitute a heterogeneous and complex group of actors in the construction of that regime whose relationships *to* agribusiness corporations, the state, nature and community are varied and often contradictory. The interests of soy farmers do not coincide directly with the interests of agribusiness

companies, and the exploitation of soy farmers by these companies is often hidden by including them in the category of ‘agribusiness’, the presumed *perpetrator* of exploitation (of nature, labor, the state, etc.). This chapter seeks to highlight the complexity of those relationships in order to understand the political and economic influence of the private international soy regime and its internal contradictions.

Again, it is important to point out the theoretical implications of using the conceptual term ‘soy regime’ or ‘agribusiness regime’ as opposed to simply ‘agribusiness’. The arguments of this chapter are predicated on a critique of that latter term insofar as it tends to *equate* the interests of firms and individual soy farmers. This obfuscation is common in literature criticizing soy cultivation in Mato Grosso and other parts of north-central Brazil for its contribution to deforestation, evidence of labor exploitation, associated land-grabbing, and other environmental hazards such as the use of agro-chemicals and GMOs (cf. Wallace, 2007; Lilley, 2004; Kenfield, 2008; Scott, 2009). Soy farmers are demonized as agents of “agribusiness” and are often referred to as one and the same<sup>14</sup>. I, on the other hand, separate ‘soy farmers’ (constituting a complex and varied group themselves) from ‘agribusiness’, arguing that the interests of the two categories—to the extent that they themselves can be distilled—are actually often in conflict. Environmental groups that lump farmers into the same categories as TNCs, therefore, not only aim at the wrong target, I argue, but also provide cover for the agency of the soy regime to subvert the attempts at social regulation of the sector.

In addition to the rhetoric of the NGO sector, the elision of the distinction between corporations and farmers also results from a level of abstraction employed by government officials and industry representatives when discussing international trade,

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<sup>14</sup> For example, see Rainforest Action Network’s piece “What Is Agribusiness?” at [http://action.ran.org/index.php/What\\_is\\_Agribusiness%3F](http://action.ran.org/index.php/What_is_Agribusiness%3F)

monetary, and farm policies that benefit corporate interests. By including producers in the category of ‘agribusiness’, these policies can enjoy greater political legitimacy because ‘citizens’ rather than simply corporations (many of them transnationals) are said to benefit. Therefore, the inclusion of producers and corporations in the same category is useful to both the environmental/social and corporate agendas (whether the term ‘agribusiness’ takes on pejorative or nationalistic overtones), but it does not reflect the reality of the relationship between farmers and firms. This is an important point because the fractured nature of the category has implications for the deployment of both movements against exploitative agricultural systems and domestic policy designed to assist the “national agricultural sector”.

By any account, the creation of Mato Grosso’s soy sector is a dramatic story. In 1980, Mato Grosso produced just over 100,000 tons of soy. In 2008, farmers harvested nearly 180 *million* tons (FAMATO). Often, the tale of soy’s colonization of the central-west region includes an image of the soy farmer alternatively as a marauding land-grabber or Brazilian national hero, either way impelled by the military government to “settle” the Amazonian frontier, subdue the wild landscape (both natural and human) and serve the Brazilian national project by cultivating soybeans for the export market, thereby helping to pay down Brazil’s international debt and usher Brazil into the new class of “emerging economies”. As described in the previous chapter, Mato Grosso’s soy farmers were born in the waning years of the industrial food regime, and this chapter specifies the ways in which they anticipate a model of the third, or corporate food regime. Key to understanding the relations of power and accumulation that underlie this regime, I argue, lies in disaggregating this category.

Deploying ‘agribusiness’ as a category that encompasses both producers and TNCs disguises some of the most important mechanisms of accumulation that operate

in the neoliberal agricultural paradigm. Relations of exploitation that exist *between* farmers and firms are one of the main sources of accumulation, and although soy farmers in Mato Grosso are relatively well-off compared to many subaltern social groups, understanding their exploitation is crucial to understanding the power of transnational corporations to shape the food system.

This chapter disaggregates the conceptual category of ‘agribusiness’ based on 3 primary empirical observations: 1) the government’s role in reinforcing essentialized categories of rural producers; 2) the significance of the credit relation; 3) the blurred line between the public and private sectors. In other words, federal farm policy, credit, and the privatization of public works like infrastructure provide three specific locations where the conflation of soy farmers’ and corporate interests have serious implications for the social and environmental outcomes of both soy farming and small family farming in Brazil.

As this chapter will show, soy farmers do indeed often benefit from the status quo at the expense of other (mainly smaller, poorer, and often indigenous) farmers. However, to conflate soy farmers and agribusiness corporations obscures the relations between them that clearly place the farmer at a disadvantage in his or her ability to actually participate in and benefit from the international market. This has serious implications for the future of food and farming, concentration of corporate power in agriculture, and global market integration. In order to understand the functioning of the international soy market, we must understand the relationship between commercial farmers and transnational agribusiness corporations. First, however, it is important to understand *why* the political bifurcation of agriculture is useful to the international agribusiness regime and what the implications are for agricultural policy, access to resources, and the structuring of production.

### ***Classifying Farmers: ‘Peasant’ vs. ‘agribusiness’***

In Brazil, the category of ‘agribusiness’ has been strategically constructed as oppositional to ‘peasants’ or ‘family agriculture (*agricultura familiar*)’. Here, farmers are commonly divided into 2 groups by size (large farmers/*latifúndios* and small farmers/*camponeses*) and/or degree of market integration (commercial/*empresarial* and family/*familiar*). Within these classifications, assumptions about technological advancement, productivity, and economic contribution are deeply inscribed. Those assumed to be producing for subsistence or small local markets, and those who produce for industry are usually analyzed as distinct and mutually exclusive, as are their respective modes of production. Despite real-life farmers constantly confounding that distinction—commercial farmers who maintain a kitchen garden or subsistence farmers who sell surplus to agribusinesses—the ideal-typical categories persist in both academic analyses (e.g., De Lacerda, 1985) and in policy.

These distinctions are not merely instrumental. The bifurcation of agricultural production has certainly been an animating dynamic throughout Latin America and the world in the era of structural adjustment and the industrial food regime. The particular form of agricultural restructuring that has taken place in Mexico (Cabello, 2003), the Dominican Republic (Raynolds, 2000), Chile (Murray, 2006), and of course Brazil (Murray, 2006; Welch, 2006) since the 1980s in the context of neoliberalism has resulted in a drastic transformation of the Latin American countryside, as well as food systems across the continent. Intensifying land concentration, the divestment of millions of small farmers, and urbanization followed agricultural reform and the Green Revolution of the 1960s. The increasing dominance of *latifúndio* agriculture and the configuration of agricultural policy to specifically privilege this type of production has resulted in the dramatic restructuring of agricultural systems as is discussed in Chapter 2.

However, to take these categories of peasant and agribusiness as undifferentiated obscures the processes of exploitation through which much of the world's food supply is produced. In order to understand this, the categories must be disaggregated. Harriet Friedmann provides a good example of how this can be done in her 1978 article "World Market, State, and Family Farm" where she unpacks the "commercial farmer" at the turn of the 20<sup>th</sup> century. She argues that within the category of farmers producing for the export market there existed 2 significant sub-groups: *capitalist* and *simple commodity producers*. What differentiates the two is that the former group hires its labor and the latter depends on family labor, while both produce tradable commodities for the world market (as opposed to subsistence producers whose primary use of their product is direct reproduction of the family unit (Friedmann, 1978). Of course, Friedmann's categories are historically specific and my intention here is not to argue that we can still find these same categories of producers today. Rather, her method of differentiating modes of production based on far more dimensions than simply subsistence versus market is useful in the Brazilian context in that these distinctions shed light on important differences in wage, property, and production relations. Second, the presumptive duality of "small" versus "commercial" farms is starkly reflected in federal policy, and this reveals interesting assumptions about agriculture and how it is shaped by the state.

In her discussion of the "environmental soy" movement in Brazil, Corrina Steward categorizes "soy actors" as "local government, agribusiness, conservation NGOs, and small farmers" (2007: 107). The absence of "large soy farmers" as a category and their subsumption within 'agribusiness' is significant. Steward's category of "small farmers" includes farmers that both participate in the market and produce for their own subsistence, while the category of "agribusiness" includes both large, "capitalist" soy producers *and* agribusiness corporations. This is significant

because one aim of Steward's article is to determine the "winners" and "losers" of Amazonian development. By situating soy farmers and agribusiness together in opposition to the *colonos*, or "small farmers" as she defines them, Steward perpetuates a commonly simplified view of 'power' and 'resistance' in the Amazon: soy versus forest, soy versus small farmers. It is undeniable that soy has indeed been directly or indirectly responsible for the dramatic transformation of the central-west landscape in the last 20 years, as has been well-documented by scholars, NGOs, and popular media alike (Wallace, 2007; Lilley, 2004; Kenfield, 2008; Scott, 2009; Zancopé and Nasser, 2005; Fearnside, 2001; Hasse, 1996). However, the complex stories of the soy farmers themselves are rarely the subject of critical analyses. I argue that the internal dynamics of the private international soy regime, including the collusion and conflict between corporate capital and the state, are obscured when large farmers are uncritically folded into the category of agribusiness.

This classification is common in academic, policy, and advocacy circles. The assumption is that the interests of large capitalist producers and agribusiness corporations generally coincide. As my research from Mato Grosso shows, this is not at all the case. I argue that in order to understand the successful advancement of the export-oriented soy industry in Mato Grosso and the successful obfuscation of the political construction of that market, it is crucial to analytically disaggregate large farmers from corporations (to unpack the category of 'agribusiness') and examine the relationship between them. This relationship is evidence of the processes by which private rule over a market is accomplished, and more generally, the role of neoliberal ideology in that process.

The capitalist development of agriculture cannot be understood by the Marxist industrial metric because family farmers' mode of production does not fit into conventional categories of wage and profit relations (e.g., Lewontin, 2000; Friedmann,

1978; Friedmann, 1987; Abramovay, 1998). The proletarianization of the artisan that characterizes industrial development in the manufacturing sector has not been mirrored in agriculture. Although land ownership and production have indeed become drastically more concentrated, production remains rather diffuse compared to other industries. Also, “corporate” farming (characterized by an absentee owner of a large operation run by a manager with a large labor force), while more common in some sectors such as horticulture and increasingly dairy, has not overtaken agricultural production on balance (Lewontin, 2000). Part of the reason for this is because economies of scale do not improve with farm size after a certain point (Reidinger and Kang, 2000; Lewontin, 2000). Even as farmers increasingly hire occasional—and usually seasonal—labor, these operations are failing to take on the aspect of “factories in the fields” as foreseen by Marxist theory (Goodman and Watts, 1997; Friedland, Sorj and Wilkinson, 1995; Sorj, Goodman, and Wilkinson, 1987).

One of the primary constraints is the wage/profit relation. As Kautsky predicted, the capacity of family farms to maintain competitiveness through self-exploitation helps guard against the development of classical agrarian capitalism (Goodman and Watts, 1997). Most farms that survive in the US are able to reproduce no more than the family unit (often supplemented by off-farm income). Excess profits are often invested in machinery that stretches the capacity of the farm family’s own labor. Again, with notable exceptions like meat, horticulture, and increasingly dairy<sup>15</sup>, farms in the US context tend to expand to the point that the land can still be worked using primarily family and occasional supplementary wage labor. In explaining the competitive superiority of US family-based agricultural production in the early 20<sup>th</sup> century, Friedmann argues that the household mode of production must meet “a very

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<sup>15</sup> Although the majority of dairy farms in the US still maintain herds of less than 100 cows, a small number of mega-dairies account for a large percentage of production (cite Guptill).

strict condition: that technical requirements allow combination of means of production with the quantity of labor on average available within commercial households” (563). In other words as farms get bigger, tractors and combines must increase in size in order to allow cultivation of a greater area with the same number of workers.

While this remains true, increasing concentration continually pushes the limits of family labor. At some point, mechanized milking operations cannot accommodate additional cows without additional human labor. This is one reason for the increase in illegal labor on US dairy farms. The “family farmer” can no longer keep it in the family. While family labor still accounts for the majority, expenditures on outside labor become necessary. And so yes, “family farms” still account for a significant proportion of US agricultural production. Yes, “family farmers” employ *primarily* unpaid family labor. But yes, these same farmers—to infinitely varying degrees—do rely on wage workers. So who is the “family farmer” and who is the “capitalist producer”? Friedmann usefully untangles these categories at the turn of the last century, specifying variations *within* the category of “family” or “small” farmer as well as specifying the role of state policy in constructing that particular type of farmer. Similarly, I set out to disaggregate the category of ‘agribusiness’ in modern-day Mato Grosso in order to specify the respective roles of corporations, soy farmers, and the Brazilian state in (re)producing the farmers and modes of production found on the Mato Grosso soy frontier.

### ***Who are the Soy Farmers?***

The majority of soy farmers in Mato Grosso were part of or descended from the wave of immigrants from the southern states that began when the military coup in 1964 precipitated a land-grab that continued in earnest through the 1980s (see Chapter 2). They brought with them the customs and accents of the south, and you still see

many tractors equipped to carry a thermos of hot water and a clay mug for the *mate* (a type of tea) that the *gaúchos* (Brazilians from the state of Rio Grande do Sul) drink all day long. Most of these farmers left the south in search of new lands after their family farms in the south could no longer be subdivided to reproduce multiple generations of farm families. Often one brother would stay on the family farm while the other(s) would head north for the newly available lands of the *cerrado*. Besides the land giveaway, many government programs such as subsidized credit to invest in machinery created incentives for these migrants to establish very large estates.

The average farm size in the center-west region of Brazil is 5,224 acres, more than 15 times the size of the average Iowa farm (353 acres). In Mato Grosso, therefore, farm size has outgrown the ability of technology to decrease labor requirements. In the central-west region of Brazil, 217 hectares are required to produce one rural job in conventional, export-oriented agriculture (Wittman, 2005: 30). However, even within the category of “soy farmer” which Steward generalizes to a homogenous set of identity and production relations, great variability exists in: 1) the farm owner’s reliance on hired labor; 2) the degree to which the proprietor acts as an “owner-operator” or a manager of others’ labor; 3) the degree of independence from transnational agribusiness corporations; 4) the ability to freely participate in the international soybean market; and 5) the degree to which the owner sees him/herself either as a “farmer” or as an entrepreneur.

There does seem to be a pervasive identity that resonates among central-west soy farmers. As Steward argues, “Soy farmers view themselves as fulfilling national economic goals when they purchase land, clear it, prepare it, and cultivate soy for the export market. As one farmer explained, ‘Soybean farmers believe they are national heroes’” (2007: 111). This was confirmed by my research as well. One farmer I interviewed proclaimed, with a sweeping gesture indicating a vast swath of virgin

*cerrado* land, “In 5 years this will all be soybeans. We are the pioneers”. As recently as April 2008, it was reported in the *Folha de São Paulo* that the governor of Mato Grosso, Blairo Maggi, argued that deforestation is Brazil’s *national duty* to help alleviate the food crisis gripping much of the developing world ([www1.folha.com.br](http://www1.folha.com.br)). As Brazil’s economic perspective has shifted from a focus on import-substitution to a global, export-oriented view, it makes sense that soy farmers specifically producing for the global market are furthering the “national interest” while small family farmers are more likely regarded by the federal government as vestiges of a previous developmental period and while they must be supported for the sake of poverty alleviation and political stability in the countryside, their economic relevance is dwarfed by the vast quantities of soy flowing through Brazilian ports. This distinction is institutionalized in the very structure of Brazilian farm policy.

***A Tale of Two Agricultural Ministries: Privileging the capitalist production relation***

In the Brazilian federal government, two separate ministries oversee agricultural policy: the Ministry of Agriculture, Livestock, and Food Supply (Mapa) which represents big, industrial, export-oriented agriculture, and the Ministry of Agrarian Development (MDA) which represents “family farmers” (their term), subsistence farmers, and landless settlements. In this way, the federal government separates 2 classes of agricultural policies: those that are framed as dealing with ‘agricultural’ issues, and those that are framed as addressing ‘rural poverty’. This division succeeds in marginalizing the policy priorities of the latter group, as is easily seen when comparing the annual budgets of the 2 ministries: in 2005 Mapa’s annual budget was R\$2.54 billion, while that of the MDA was only R\$1.4 billion—just over

half.<sup>16</sup> By defining one set of policies as oriented towards the alleviation of misery and the other towards the promotion of economic growth, the representation of each group's contribution to the "national interest" is skewed, especially since "family agriculture" is crucial to domestic food security in Brazil; seventy percent of Brazil's domestic food supply is produced by *agricultura familiar* (www.mda.gov.br).

The assumption embedded in this division, however, is that Mapa is supporting *production* of commodities for the market, while the MDA is supporting *reproduction* of poor rural communities. In keeping with the urban bias embedded in theories of modernization, rural life is by definition equated with poverty. As one federal official in charge of the agriculture department in the ministry of foreign trade in Brasília told me, "I pretty much agree with Marx that a farmer is just a sack of potatoes. The idiocy of rural life is not for me. My grandmother had a banana tree in her back yard and some people may find that beautiful, but I just see poverty". So the anti-rural bias exists even in government ministries charged with setting agricultural trade policy. Clearly this man would agree with Marx on another point as well, that farms becoming "factories in the fields" is part of capitalist development, and industrialization succeeds in "rescuing a considerable part of the population from the idiocy of rural life" (Marx, 1888/1978: 469). This reflects the Brazilian government's separation of its duty to alleviate the misery of the rural population from its duty to promote *industrial* agricultural production in the "national interest".

This is because smallholder agricultural production is not seen as contributing to a neo-liberal economic development program that requires industrialization and modernization of the agricultural sector. In an article coauthored by prominent Brazilian agricultural economist Marcos Jank, the stark division is put this way:

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<sup>16</sup> Which corresponded, roughly, to the contribution of each sector to Brazil's GDP in 2003: 20% for agronegócio patronal and 10% for agronegócio familiar (MDA, 2004).

If Brazil continues to trade off economic development with support to small-scale farmers, it will suffer the consequences of the "visibility curse." As the country has progressed as a global economic force it has greater influence, but at the same time comes under greater scrutiny. Increased market share and activity in global agrifood trade requires that the country be increasingly vigilant as to how it comports itself. Resorting back to subsidy programs and import barriers of a bygone era in order to help small farmers survive could affect the country's ability to negotiate for freer markets and gain access to important foreign markets (Chaddad and Jank, 2006).

The authors argue that the creation of the MDA in 2000 clearly drove a political wedge between *agricultura 'patronal'* and *agricultura 'familiar'* and they warn against the "rhetorical backlash" that funneled more resources to land reform during the latter years of the Cardoso government than in previous administrations. The authors clearly claim that this is a movement "backward", away from the progress and modernization in agriculture led by the soy sector that Brazil has accomplished since the 1980s.

However, the separate jurisdictions of the 2 ministries are really aiming at the same thing: providing a safety net that guarantees the reproduction of rural producers, and by extension, the relative forms of exploitation to which they are subject. Although Friedmann was examining family farming on the US agricultural frontier at the turn of the previous century, her point that agricultural *production* is not possible without the *reproduction* of rural populations, and vice versa, is relevant here. Although both categories of farmers are essentially being reproduced by state programs, the rhetorical construction of small family farmers as the *reproducers* of the

rural and urban poor and large commercial farmers as the *producers* of agricultural export commodities allows for the marginalization of the former, as the latter is privileged in the neoliberal development model. This division of labor is favorable to capital because it essentially enables the proliferation of ‘independent’ commodity producers who assume the risks of farming while leaving the reproduction of poor urban and rural populations (a decidedly less profitable business than producing industrial “HVF’s” (high value foods) for middle class consumers) to smaller, poorer producers.

The assumption that some farmers are primarily *producing* while others are *reproducing* justifies the unequal resources of the two ministries and by extension the availability of resources to different groups of producers. Ever since ISI began to be replaced by export-oriented economic structures on order of the World Bank and IMF as conditions for the receipt of development investment and currency-stabilizing loans, governments were *required* to privilege production for export (in order to earn much-needed foreign exchange) over production for the domestic market. This legacy continues to this day, although it has been strategically de-politicized by the ideology of neoliberalism. As David Harvey argues,

this treatment [the requirement of neoliberal policy reforms in exchange for a financial bailout] became standard after what Stiglitz refers to as a ‘purge’ of all Keynesian influences from the IMF in 1982. The IMF and World Bank thereafter became centers for the propagation of ‘free market fundamentalism’ and neoliberal orthodoxy. In return for debt rescheduling, indebted countries were required to implement institutional reforms, such as cuts in welfare expenditures, more flexible labor market laws, and privatization. Thus was ‘structural adjustment’ invented (2005: 29).

Despite a great leftist hope when Luis Ignacio Lula da Silva was elected president of Brazil in 2002 on a populist platform and largely by the urban poor, the Lula government has proven to be a classic example of what Harvey calls a “neoliberal state apparatus”, and the state government of Mato Grosso is leading the federal government by example in privileging a model of economic growth that is founded on robust agricultural exports. Despite industry claims that the government is disproportionately supporting small farmers, the supply of subsidized agricultural credit for industrial agriculture tells a different story. At the state level, the privatization of infrastructure development has become a model of investment for the country as a whole, and the unique economic relationship between farmers and private (and largely foreign) agribusiness anticipates a prototype of the corporate food regime.

### ***Political Construction of Markets through Credit Distribution***

Throughout the world and at various scales of production, agriculture runs on credit. The distribution of credit in Brazil, from both public and private sources, is one of the most contested aspects of agricultural policy. Access to credit appears in any discussion of the viability of rural populations in every country in the world. Lack of access to credit is responsible for farmer suicides in India that result from farmers entering predatory relationships with moneylenders (Sengupta, 2006). As dependence on technology increases, the need for credit intensifies as well, as inputs become increasingly commodified where they may not have been before. (Farmers may buy seeds where they used to save and replant their own, or buy chemical fertilizers where they used to use waste from their own livestock, green manure, or crop rotation to increase soil fertility).

While the need for rural credit is nearly ubiquitous, the institutional structures that make it available, both public and private, vary tremendously from country to

country. In order to understand how the structuring of agricultural credit in Brazil codifies the neoliberal bifurcation of agriculture and reinscribes exploitative relationships between farmers and agribusiness (particularly in Mato Grosso), it is useful to explore the differences between Brazil's credit model and that of another large agricultural exporting nation: the United States.

Farmers large and small need credit for many reasons: 1) to purchase inputs such as seed, fertilizer, pesticides and other agrochemicals, and professional services such as soil analysis; 2) to purchase or pay rent on land; 3) to purchase equipment; 4) to build structures for storage of both grain and equipment; 5) to reproduce the household. Because of the cyclical nature of agricultural production, farmers do not have a steady flow of income throughout the year, which often means that the time of year when purchases need to be made does not coincide with the time that they are selling their produce. Also, though some farmers earn enough surplus that they are able to save and self-finance their following year's planting, most earn just enough to keep themselves and their families alive until it is time to plant again, requiring them to borrow in order to finance planting. Hopefully, then, they earn enough from a year's harvest that they are able to pay off their planting loan and sustain their families until the following crop year.

Because of the cyclical nature of farm income, access to credit becomes a crucial resource for most farmers, from the most modest family-run operation to huge industrial producers. Farmers in different countries around the world rely on different combinations of public, semi-public, and private institutions to provide the financing that is their lifeblood. In the US, the biggest provider of credit nationwide is the farmer-owned and government-sponsored Farm Credit System (FCS), which provides about 30% of US agricultural lending ([www.farmcredit.com](http://www.farmcredit.com)). While at this point entirely privately funded, the FCS was created by the federal government in 1916 and

still enjoys an implicit federal guarantee on securities it sells on the global market. This allows the FCS to borrow funds at a cost just slightly higher than the federal funds rate and therefore to extend credit to rural markets that might be abandoned by banks or other commercial lenders (Jolly and Roe, 2005).

Farmers who cannot get credit from a commercial source because of a lack of capital (usually beginning farmers or those suffering substantial financial or environmental setbacks) can apply for loans directly from the USDA that guarantee a 4% reduction on prevailing interest rates (USDA). The 2002 Farm Bill relaxed some of the requirements for receiving USDA loans which expanded the base of eligible borrowers and made it easier for beginning farmers to secure funds. Loans from private banks and dealer financing of equipment purchases also figure into the US rural credit landscape, but they are less significant than the sources of credit listed above. Clearly, access to credit is crucial to the US agricultural system, but investing in the rural economy can be risky and low-yielding. This reality is not limited to the US context.

Though the risks of agriculture are universal, credit instruments are not. In Brazil, two primary challenges face farmers seeking credit: 1) a prevailing interest rate far higher than that in the US, and 2) far less diversity in terms of sources of rural credit. As of the time of this writing (August 4, 2008) the current federal reserve rate in the US stands at 2%. In Brazil, the current interest rate is 13%. Therefore, access to international credit markets is crucial for farmers there, which usually comes through either the Banco do Brasil or transnational agribusiness.

Throughout my research in Mato Grosso, one of the biggest challenges that farmers perceived was access to credit. Though credit is a nearly ubiquitous concern, it is a different kind of problem for farmers in Mato Grosso than it is for farmers in the older agricultural regions of southern Brazil. Just as the southern states of Rio Grande

do Sul, Santa Catarina, Paraná, and São Paulo comprise the traditional center of agriculture in Brazil, farmers there are also more reliant on traditional forms of credit. First of all, farms in the south tend to be smaller. In 1996 (the most recent data available), 72% of farms in the south were less than 500 hectares, while 78% of the farms in the central-west region are larger than 500 hectares.<sup>17</sup> In fact, one cooperative in Paraná cites 65% of its members holding less than 50 hectares (Gasques, 2004). Partly because of size but also because of climate and proximity to ports of entry for imports, the cost of production is lower in the south. According to the Organization of Cooperatives of Paraná (Ocepar), “the technology of Paraná is quite varied, but the general mode is not very dependent on resources from outside the establishment. It uses little fertilizer, little agrochemicals, the farmers buy seed varieties (which are seeds produced by farmers themselves). This means less demand for credit, because the establishments are not terribly complex productive units” (Gasques et al., 2004: 11). Here, fewer farm inputs are commodified and the scale of agriculture is smaller (requiring less land and equipment); therefore the reliance on foreign agribusiness is greatly diminished. By extension, access to subsidized credit is less important.

Most farmers in the south get credit from the Banco do Brasil or from members of cooperatives such as Ocepar. In 2002, the credit offered by cooperatives in Paraná went predominantly to small farmers—64% to farms under 50 hectares. In Mato Grosso, a soy farm of less than 50 hectares is almost unheard of. This is because of the way that land and credit<sup>18</sup> was distributed during the military government, which reinforced the state’s objective to encourage the production of export commodities on the agricultural frontier. Because land was practically being given

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<sup>17</sup> Source: Ministério de Agricultura, Pecuária, e Abastacimento. <http://www.agricultura.gov.br/>

<sup>18</sup> For example, the MODEFROTA program that subsidized purchases of large equipment.

away, large *latifúndios* became the norm in Mato Grosso. In the early period of the frontier's development, many southern farmers proved unable to adapt to the drastically different growing conditions of the sub-tropical region and land concentration intensified as abandoned holdings were absorbed neighboring farms. Farm size has a huge impact on a producer's need for extra-governmental sources of credit because subsidized credit is allocated by producer, based on the product. So for example, each individual soy farmer is limited to a maximum of R\$200,000<sup>19</sup>, regardless of how many hectares (s)he plants. Therefore, subsidized credit makes up a much smaller percentage of a central-west farmer's financing than a southern farmer, simply because the scale of production in Mato Grosso is so much more expansive and cost of production is so much higher.

In Brazil, R\$200,000 is enough to finance about 115 hectares of soy. But the average farm size in Mato Grosso hovers around 2,000 hectares (that's about 5,000 acres). In the 2004/05 harvest season, the resources available at this subsidized rate accounted for only around 6% of total production costs in Mato Grosso. The other 94%, at an interest rate of around 15%, came directly from agribusiness (Menegheti, 2005). While some southern states actually received *more* federal funding for commercial agriculture than Mato Grosso, this can be attributed to the fact that, because farms are smaller, there are more producers receiving the per-farmer limit.

But what does this mean exactly? Why does it matter where rural credit is coming from? First, the availability of government-subsidized credit both expresses the developmental priorities of the state, clearly divides farmers into 2 distinct groups, and marginalizes smaller producers. This is clear in that the federal government outspends on "commercial" agriculture 5-1 over "family" agriculture (Mapa, 2008). However, contradictions arise within the category of "commercial" farmers with the

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<sup>19</sup> Credit allotment as of 2004.

comparison of “commercial” farmers in the south/southeast and those in the central-west. This comparison shows that the perception of privilege masks the ways in which the large soy farmers of Mato Grosso are locked into a market structure that is arguably more exploitative than the one in the south. It is difficult for critics of the Brazilian soy economy to see soy farmers as exploited. However, in order to fully understand the political economy of the emerging Brazilian soy regime, it is important to more closely investigate the category of the privileged, capitalist soy farmer and to take a critical look at how credit relationships between these producers and agribusiness *exploit* the farmer *in the interest of* agribusiness, and to look beyond soy farmers and agribusiness as a unitary category.

***Soy Farmers and Agribusiness: An uneasy partnership***

*It seems clear that the contract functions simultaneously as both a means of subordination and a point of resistance.*

—Michael Watts, *Living Under Contract*

Like many “middle-class peasants” producing for export markets throughout the global south, soy farmers in Mato Grosso depend on contracts with agribusiness to both access those markets and to finance each planting season. As argued above, most soy farmers in Mato Grosso get only a small percentage of their financing from the Banco do Brasil or any of the other federal programs designed to help them. The majority of their funding comes directly from the soy buyers/brokers/processors that line the roadsides of every single Mato Grosso town: ADM, Bunge, Cargill, Maggi, Coinbra (Louis-Dreyfus). Contracts in Mato Grosso serve to guarantee TNCs a steady and reliable flow of beans. They also allow companies to tie purchase of soy to sales of inputs as farmers pay off their agrochemical costs in sacks of soy. These businesses

are not banking institutions. They are soy exporters. Therefore, most of this farmer debt is held in soybeans, not in currency. According to one farmer, “agriculture has three currencies: soy, dollar, and real. When I’m insecure I guarantee all my loans in sacks of soy. This is the most stable currency” (Menegheti, 2005).

However, when the farmer ceases to have control over his or her produce, when a corporation has a claim on the soybeans before they are even harvested, the farmer is unable to participate in the market. While some growers may find a degree of stability in having a guaranteed market for their produce, it is not hard to see why many are unsatisfied with this arrangement that is in many ways much more favorable to agribusiness. For one thing, farmers must sell their beans to their creditors first, which means these businesses buy beans at harvest time when prices are at rock bottom. Second, in the event of crop failure, farmers have no other way to pay back their loans, and so they must promise a larger proportion of their harvest in the subsequent year. Eventually, most if not all of their product is owed in advance to one of these 4 major buyers. The president of the Mato Grosso farmers’ association (FAMATO), Homero Pereira, expressed his discontent with this system:

We do not have an alternative form today. As long as the government doesn’t liberalize resources for rural credit, the producer doesn’t have any other option than to be bound to the transnationals. We know that it is not the desire of all producers to be in these relationships. The desire of the producer is to get capital from a source of financial resources, and to owe in financial resources as well, rather than in produce. Because the biggest problem that we have with the system here today is not so much the interest rates that you pay to the transnationals, but the market opportunities that you lose. Because when you get financing you tie yourself, you compromise so many tons

of grain and so you lose sometimes a market much larger than your own interest rate. And so to be in debt to a financier and to remain in control of your own product is obviously much better.

What Pereira is expressing here is something that recurred often in my conversations with farmers: frustration at the lack of independence they felt as producers, despite the equally widespread rhetoric that they were able to produce soybeans without government assistance. As Michael Watts argues, “The contract, to the extent that it ties the grower to the buyer or broker through credit, carries the potential of transforming the independent grower into a sort of bonded laborer, or at the very least of eroding the purported autonomy of independent and “uncaptured” peasants” (Watts, 1994). By specifically holding debt in product rather than cash, agribusiness is in effect thwarting the mechanisms of both financial and agricultural markets, guaranteeing a captured supply of raw material at interest rates of their own determination. The reality of agricultural commerce in Mato Grosso, therefore, in no way resembles a ‘free market’.

Pereira however, like many farmers I interviewed, expressed a deep market fetishism, regarding markets as *a priori* mechanisms through which the laws of supply and demand operate like the laws of gravity and thermodynamics. In describing this type of market fetishism, Polanyi writes, “Their [economic liberals’] whole philosophy hinges on the idea that *laissez-faire* was a natural development, while subsequent anti-*laissez-faire* legislation was the result of purposeful action on the part of opponents of liberal principles. ... While we assert the inherent absurdity of the idea of a self-regulating market system would have eventually destroyed society, the liberal accuses the most various elements of having wrecked a great initiative” (1944: 141, 145). This philosophy crept into discourse about the Brazilian soy industry throughout my research, from farmers, government officials, and agribusiness alike.

In particular, in an age where markets are truly global, the failure of *laissez-faire* principles can be ideologically traced to unfair government intervention in other soy-producing countries whose policies undermine the ‘great initiative’ of the Brazilian soy industry.<sup>20</sup>

Interestingly, however, farmers were as critical of corporate concentration in the soy sector as Adam Smith would have been. They regarded the contracts that they must enter into with agribusiness as *perversions* of free market principles since they are unable to operate as free and independent actors in that system. Of course, the existence of a soybean market in the state of Mato Grosso in the first place is, as described in the previous chapter, a construct of the state. In addition, the credit system itself and the macroeconomic factors that influence it—interest rates, currency values, etc.—are creations of state policy. In short, farmers signing contracts with transnational agribusiness *are participating in the market form* that has been structured through cooperation between capital and the neoliberal state.

Clearly, although financially far less desirable a situation, debt peonage to agribusiness is more in concert with neoliberal principles than reliance on government subsidies. This is reflected in the rhetorical tendency of farmers to profess their independence from government handouts, while nearly in the same breath complaining about being under the thumb of Cargill. This illustrates what Harvey might call one of the internal “tensions and conflict” within the theory of the neoliberal state whereby markets allow for or create externalities that threaten their own foundations (2005: ch. 3). The example of Mr. Pereira shows clearly how the interests of soy farmers and corporations are often at odds despite their interdependence, and complicates the inclusion of farmers in the conceptual economic category of “agribusiness”.

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<sup>20</sup> See Chapter 4.

This is not to oversimplify the situation and say that farmers are bound to only one source of credit or that their relationship with corporate agribusiness is unitary. These relationships are constantly being re-negotiated, but farmers remain, as McMichael says of the antebellum cotton regime in the US south, “bound to the credit system in general” (1991:19). Like the cotton plantations that McMichael analyzes, soy farms in Mato Grosso are only able to exist due to their absorption into the global credit facility (1991). By de-monetizing the credit relation, however, producers are unable to actually participate in markets, and cease to be the owners of the commodity they produce. When a farmer’s debt is held by a corporation in sacks of soy, the farmer loses the freedom to make marketing decisions about his or her own produce. In any given harvest season, the degrees of freedom may vary (this is one thing that distinguishes soy production from the type of contract farming seen in US pork and poultry industries). This is not a unitary process and de-monetization is not ubiquitous, but the *degree* to which this occurs proportionally limits the degrees of freedom that the individual farmer enjoys to take advantage of or insulate her/himself from the vagaries of the market.

The informal nature of many of these credit relationships also reflects the realization of neoliberal preferences in structuring markets. While neoliberal rationality certainly favors formal rules of commercial interaction, it is the particular ways in which these rules are circumvented that contribute most significantly to the governance of the soy market by agribusiness. In other words, functional rationality is trumped by substantive rationality when formal means are not the most effective at achieving neoliberal ends. For example, farmers are formally required to possess land titles in order to receive either public or private credit. While this requirement may be enforced in the public realm, it is strategically overlooked in the private one. Many farmers I spoke with claimed that if you’re big enough, have a good production

history, or have a personal relationship with a buyer, the corporations will overlook a missing or obviously forged land title in granting commercial credit. In theory, a contract ensures a mutual relationship between two parties, enforced by some rule of law, which adheres to the rules-based rationality of neoliberal economics. However, the asymmetrical enforcement of this relationship in practice serves to deepen the power of transnational capital over “independent” growers (cf. Watts, 1994). The type of contract most common in Mato Grosso has a minimal *a priori* structure, which allows maximum manipulation of market power by TNCs.

The most common type of credit contract in Mato Grosso is the Cédula do Produtor Rural (CPR). This is a very simple and flexible type of contract that essentially is a promise on the part of the producer to deliver a certain quantity of grain at harvest time. The company, therefore, has a claim on X number of sacks of that producer’s grain. The amount is determined by the costs of the inputs that that producer receives from the company. For example, if the producer has a need of US\$150,000 in input costs (fertilizers, fungicides, insecticides, herbicides, etc.) the company figures out how many sacks of grain the producer needs to deliver to cover that amount. The price is generally set at 30% of the price on the futures market. Although prices have risen significantly since the time of my research, the prevailing prices at that time serve as an illustrative example to show how the contracts work. In 2005, Cargill set the price at \$5/sack.<sup>21</sup> With US\$150,000 in input costs, the producer must sign a CPR promising to sell 30,000 sacks of grain to Cargill at the end of the season. Cargill, of course, pays more than \$5/sack when it comes time to buy and the price is supposedly determined by the Chicago Board of Trade. But, if the producer is locked into selling that grain at an unidentified price, the company is able to pay

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<sup>21</sup> Even at that time there was little chance the price would be that low at harvest, but this price guarantees that the farmer will commit enough grain to pay off the debt.

significantly less than if it had to buy on the open market. Still, according to one Cargill employee in the town of Campo Novo dos Parecís, the price is determined by the Bolsa do Chicago. He said that in January of 2005 it was going for \$9/9.5 but by February when we spoke—just one month later as the harvest began in earnest—there was essentially no market as farmers with no on-farm storage capacity rushed to deliver soy straight to the *armazéns* of the big transnationals.

Multiple degrees of CPRs determine who has the primary claim on a farmer's grain in the event that—due to weather, pests, or unfavorable market conditions—there is not enough soy or money at the end of the season to pay all the debts. The first degree CPR usually goes to large agribusiness while second and third degree contracts go to local service providers like Rural Tech in Campo Novo dos Parecís, a local soy broker and provider of inputs like fertilizers and agrottoxins as well as irrigation systems and technical assistance like soil analysis. An employee of Rural Tech named Luiz told me that even if a producer comes up short in a given season, the holder of the CPR will usually *dar um jeito*<sup>22</sup> to help the producer get through to the next season. But usually this means that an even greater proportion of the farmer's crop is preemptively committed before the seeds are even planted in the ground.

Sometimes these credit relationships are informal and rely only on a verbal agreement, but according to Luiz, “the informal agreements are based on the assumption that there is no way the *fazendeiro* (farmer) can go under, which is why they only happen with the biggest producers who have a history of good yields”. The biggest producers also enjoy preferential price agreements with the TNCs. According to Luiz:

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<sup>22</sup> This is an expression in Brazilian Portuguese that basically means “to find a way”. In the face of nearly any bureaucratic or formal roadblock, it is usually possible to *dar um jeito*, or find a way around it.

The bigger the producer, the more favorable the terms, meaning they can get better prices for their inputs because they can deal direct with the TNC rather than going through these other intermediaries, they can get better interest rates, etc. This individual, direct relationship with the TNCs is only the domain of the biggest producers. When they say big they are talking more than 3,000 hectares.

These larger producers enjoy other advantages not available to smaller farmers. Formally, land titles are crucial to securing credit from TNCs for most farmers. Employees from ADM, Bunge, and Cargill all insisted that legal land titles are a prerequisite for securing a CPR with the company. However, land titles are notoriously questionable in Mato Grosso, with forgeries common. Often, multiple competing titles exist for the same parcel of land, or no title exists at all for a parcel under cultivation by the same family for decades. These difficulties are the direct result of the *ad hoc* settlement of Mato Grosso that occurred in the 1970s and '80s, and the difficulty of monitoring property rights over such an immense area with very little government investment in bureaucracy (Wittman, 2005). It is clear, though, that this system affords the most favorable terms of trade to the largest farms with while also reinforcing the interdependent relationship between TNCs and hyper-capitalized producers. According to Luiz, “whether the producer must present a land title to use his land to guarantee the loan depends on the value of the loan and the reliability of the producer”. Not only are soy farmers a heterogeneous group, but even the economic heavyweights are often forced into exploitative relations with firms because of the debt relation.

So, if this arrangement is so unfavorable, why do not farmers in Mato Grosso just take out bank loans like farmers in the US do? As has been mentioned above,

prevailing interest rates in Brazil remain exponentially higher than international markets.<sup>23</sup> According to Fernando Homem do Mello, an agricultural economist at the University of São Paulo, domestic businesses do not have access to international credit markets as easily as TNCs do. Therefore, TNCs are able to offer credit to farmers at rates lower than the national bank rate but still far higher than the rate they are paying, thereby substantially increasing their returns. According to do Mello, the TNCs are able to borrow on international credit markets at more favorable rates than domestic Brazilian businesses and even the Brazilian government. Therefore, companies like Cargill and Bunge can offer interest rates to producers of around 11-12%, while private banks in Brazil charge as much as 18%. The subsidized rate offered by the Banco do Brasil is around 8-9%, but as described above, this is only enough to finance a small portion of the average Mato Grosso soy farmer's yearly planting.

Since the vast majority of chemical inputs are imported by the same companies that buy soy, producers have an even greater incentive to finance the cost of their fertilizers and fungicides in sacks of soy promised for delivery to the purveyor of those chemicals at harvest time. The ability of farmers to access the resources of TNCs on favorable terms, therefore, depends on the degree to which the farmer's mode of production conforms to the substantive rationality of the corporate interest. In other words, farmers often have to conform to recommendations from these companies such as how many times to spray their crop with fungicide to stave off Asian rust, how much fertilizer to apply, or at what percentage moisture to harvest their crop. Also, the bigger the customer, the more favorable the terms of credit and more importantly, the more flexibility or leeway the farmers gets in terms of when and

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<sup>23</sup> At the time of my research, interest rates in Brazil hovered around 15%. Although they have fallen to around 12% currently, this is still far higher than rates available on international markets of around 4-5%.

how to pay off the debt, and the concessions they are given in being advanced more credit after a disappointing harvest.

Alvater and Mahnkopf (1997) observed, "...it is credit schedules which determine the rhythm of global time regimes. The maturing of debts, and no longer—as in agrarian societies—the harvest cycle—or as in large-scale industry—the rate of circulation of fixed capital, defines the horizon of action and the periodization of the cycles within globalized finance capitalism. In this way money's logic determines global society" (455). Here, the debt maturation period converges with the harvest cycle to make the terms of repayment most favorable to agribusiness and least favorable to farmers. Because industrial agriculture is so capital intensive, farmers must borrow every single season in order to plant the next year's crop. Because of the power of TNCs, they are able to stitch "money's logic" into the natural cycles of planting and harvest. They can set the maturation of debt to coincide with harvest, guaranteeing a delivery of soy when prices are lowest, thus maximizing their profit and minimizing the farmer's return.

Instead of the rural credit system *responding* to and ameliorating the vagaries of volatile agricultural systems and markets as the New Deal era system in the US was designed to do, the TNC-dominated credit system in Mato Grosso *exacerbates* agricultural risk in two ways. First, farmers lose autonomy and are therefore unable to make the best marketing decisions for themselves, instead submitting to the buying conditions of a monopsony (a kind of 'Wal-Mart effect' of soy). Second, there is no political accountability embedded in the credit relation (as there is in the US agricultural credit system). Embedded within a state-sponsored rural credit system is an implicit safety net that is specifically structured to cushion farmers when they are most vulnerable to the inherent risks of agricultural production (weather, market fluctuations, etc.) Here in Mato Grosso, the structure of the credit relation is designed

to maximize farmer dependency and the expropriation of wealth from independent producers to firms.

Although soybeans challenge money as an important medium of exchange in the Mato Grosso soy economy, international financial markets still drive its logic. “A capitalist economy creates a specific hierarchical order of markets: the money market directs the goods market...” (Altvater and Manhkopf, 1997). Therefore, international financial markets shape the credit structure of the Mato Grosso soy economy, thereby shaping the processes of production. The priorities of capital are imposed on the production system, often at the expense of the ability of farmers to participate in international markets in such a way as to maximize their own personal utility. By extension, to return to the arguments made above about the bifurcation of agriculture, this discrimination in favor of the private soy regime rationalizes the privileging of export-oriented production over small-scale commercial or subsistence agriculture at national level as well.

### ***Interdependence Works Both Ways: Reproducing the Mato Grosso soy farmer***

As crucial as transnational agribusiness and the federal state have been to the development of soy farming in Mato Grosso, soy farmers themselves and their presumptive political agent—the provincial state—have also participated in constructing the political-economic as well as physical infrastructure to enable the soy sector to flourish. The point here is that the soy farmer is not a political construction of “the state” and “capital” alone, but s/he participates in unexpected ways in the configuration of the market as a whole. The clearest example of this participation is in addressing the problem of infrastructure.

Everyone I talked with in Mato Grosso agreed that the biggest obstacle facing the industry there was infrastructure. I experienced this problem several times

throughout my travels. What follows is a vignette I wrote shortly after such an “experience”:

On my way to Sapezal, a soy town in the north of the state of Mato Grosso, an endless line of soy trucks stretches out on either end of the bus like dusty jewels on a string. The line moves along past endless miles of soy fields as fast as the ruined chassis can tolerate the cavernous potholes that must plague every truck driver’s dreams. As we approach the border of the indigenous reserve, however, the substrate gives way and we are traveling over mud roads that—now, in the height of the wet season—resemble something between quicksand and glue. It is not long before the grossly overloaded soy trucks are mired in the goop. The bus stops. We all poke our heads out of the bus’s windows to see a gaping mud pit before us with a bulldozer crawling back and forth across it, pulling soy trucks behind it one by one. One southbound truck, one northbound truck, one southbound, one northbound, at an achingly tedious pace. I lean out the window with my camera and a young woman behind me says sadly, “Please do not take a picture of this. It is the shame of our country.” I snap some photos anyway, laughing and saying that we’re all in the same boat now, right? And what are we going to do? Luckily for us, there is a southbound bus on the other side of the mud pit. Drivers of immobilized soy trucks swarm around the bus, shouldering our luggage and trudging off through the mud to cross the pit. Women in stiletto heels totter for a few steps and then abandon their shoes altogether. Soon we meet another group of bus riders crossing the miasma to claim our seats. In short order we’ve switched busses and are back on our

way. In a few miles we leave indigenous territory and the asphalt returns along side endless stretches of green soy plants and we're back up to speed, bouncing over fissures in the pavement that no one has the time or money to fix.



Illustration 3. Soy trucks stuck in the mud outside of Sapezal.

This is how it works in Mato Grosso. Roads get paved wherever citizens are willing and able to pay for it themselves while billboards erected alongside gleaming stretches of new blacktop proudly pronounce “Another Public Works Project Brought to You By The State of Mato Grosso”. The condition of the hundreds of thousands of kilometers of remote highways in Mato Grosso that soy must traverse by truck in order to reach distant ports of exit is of great concern to both the state and federal governments. It is considered to be one of the greatest barriers to Brazil’s overtaking the US as the world’s largest soy exporter. However, what is often considered a public service in other countries, paving roads in Mato Grosso is a matter of private responsibility. Blairo Maggi, the governor of Mato Grosso and largest single soy producer in the world, pioneered a system of “public-private partnerships” between

the state government and soy farmers dividing the cost of paving roads. If the local “highway association” (made up of participating soy farmers who contribute a percentage of their annual income to the association) can put up the money for preparing the roadbed, the government will pay for the asphalt. Most of the money that the government pays comes directly from a tax levied on soy farmers themselves. So in a sense, the farmers are paying for the road twice. Finally, the large soy companies dock the price they pay to the farmers by the cost of transportation to the port, which means that, in a sense, the companies are externalizing the cost of the roads to the farmer while at the same time acting as by far the largest users of a “public good” financed through a partnership between the soy farmers and “the public”, which is, in this case, largely soy farmers.

The case of infrastructure development in Mato Grosso provides the clearest example of how soy farmers, the state, and transnational capital work together to construct and perpetuate the underpinnings of the private international soy regime. By the standards of neoliberalism, this is an ideal arrangement. Public functions are turned partially over to the private sector and the result is a more smoothly functioning market. Presumably. Anyone witnessing the infrastructural fiasco through which I slogged would be hard pressed to argue that the system is “smooth”, but so far the cost/benefit ratio works out well enough to encourage growth of the sector. As global demand for soy skyrockets due to the double force of changing diets in Asia and the diversion of soybeans and corn for biofuels, agribusiness must exploit new sources of the crop to keep their industrial oil, lecithin, and animal feed operations churning.

### ***Breaking the Chain: Opting out of the TNC system***

As has been described above, corporations, the state, and farmers all participate in constructing a market that distributes economic benefits among all of

these actors (but not equally) in such a way as to mask or minimize resistance to the power relations embedded within that market structure. This is not to say, however, that TNC power is totalizing and that farmers across the region simply bow under their conditions. Some farmers are actively seeking ways out of this closed-circuit economic exploitation. The most common strategy is to form cooperatives that are able to compete on par with the big TNCs. In Portuguese, the word for “cooperative” is *condomínio*, and the *Condomínio Marechal Rondon* in Campo Novo dos Parecís—named after the famous explorer of Mato Grosso known for his alliance with native peoples and for creating the Xingu National Park—is a prototypical model of such an attempt to opt out of the private soy regime. The cooperative has 12 members producing soy, cotton, corn, rice, sorghum, sugar cane, peanuts, popcorn, and sunflower on over 50,000 hectares (or 100,000 acres). They have built what amounts to a small city on the outskirts of Campo Novo that employs 1,200 people in farming, facilities for storing grain, producing fertilizers, and refining cotton. They are planning to build a biodiesel plant as well.

What is interesting about this project is that it allows soy farmers to be more than just soy farmers. It reveals the inherent insufficiency of the market alone to perpetuate itself. Just as the majority of family farmers in the US depend on some off-farm income to reproduce the household, the members of *Condomínio Marechal Rondon* have found that in order to decrease the precariousness of their economic situation, they have to look beyond the soy market.

However, the other thing these cooperatives enable farmers to do is, essentially, compete *at the level of the transnationals*. This emphasizes that fact that the structure of the *global* soy market affects farmers here as much as the specificities of roads and contracts in Mato Grosso. This situation is not limited to the central-west region of Brazil. Especially to big agribusiness, the market is global and its

particularly industrial nature requires industrial-scale production of a standardized commodity. Soybeans must meet particular benchmarks of protein and oil content in order to be useful to the industrial machine. These benchmarks are pushed increasingly upwards by ever-advancing seed technology that seeks to maximize these qualities, as well as other factors that make the crop more suitable to an industrialized system: fungus resistance, shorter maturation period, etc. Therefore, even when farmers manage to break away from the immediate need for financing from big corporations, the cooperative alternative—at least insofar as it operates in Brazil—may actually only be eliminating one of the links in the chain rather than breaking it altogether.

But the elimination of the transnational link at the local level is not insignificant for farmer livelihoods. A farmer named Vitório told me that one of the main advantages of belonging to a cooperative is that by opting out TNC financing, farmers can hold onto their crop until months after harvest when prices are higher. Farmers whose soy is committed through a first-degree CPR to an TNC must deliver at the time of harvest, when prices are lowest. Vitório claims that the cooperative commands a price an average of 25% higher for its members. He says, “It is difficult to work in groups, but the return is undeniable”.

Some farmers, including Vitório, talked hopefully about the potential of biotechnology to create “boutique” varieties of soy engineered for specific characteristics of value to the consumer (greater oil or protein content, nutritive or disease-fighting qualities, etc.). Vitório seemed to think that this was the only way to loosen the monopsony power of the large traders. In some areas I did see evidence of space within the market for alternatives, such as one Brazilian trader called Ovetril had a sign prominently displayed in front of its loading dock that read “We Do not Take Transgenic Soy”. I talked to the broker for this company and he said they are a

small trader that works with a handful of buyers in Europe and Japan to deliver soy certified to be non-transgenic.



Illustration 4. “We do not take transgenic soy”.

As soy cultivation in the Amazon region becomes increasingly politicized and the “environmental soy” movement gains steam, these kinds of specialty markets may provide legitimate opportunities for soy growers in Mato Grosso to opt out of the mass market by offering a product that is more socially and environmentally sustainable. However, one could draw parallels with the dairy industry and speculate that these markets will remain niches until transnationals see the profit potential in offering this specialty product, at which point it will cease to be a real “alternative” for farmers.

### ***Conclusion***

Neoliberal theory argues that trade barriers and other government policies that affect the flow of goods onto global markets distort those markets and undermine countries’ abilities to use their comparative advantage. These comparative advantages are presumed to be “natural” attributes, derived from cheap and abundant natural resources, a low-wage labor force, climate, geography, etc. However, comparative

advantages are not “natural”. They are historically constructed through relations of colonialism and the facilitation of capitalist expansion by corporations and the state. Many in Brazil make the argument that the central-west has a comparative advantage in large-scale commodity production based on the quality of the soil, predictability of rains, and cheap land prices. However, this advantage was constructed historically through government colonization policies and funding for large-scale agricultural development. Today, Mato Grosso’s comparative advantage remains dependent on subsidized credit and, even more importantly, on intense levels of foreign capital investment and saturation of the soil with unprecedented levels of petrochemical-based fungicides, fertilizers, insecticides, and other agrottoxins.

The central-west region of Brazil does indeed have “natural” advantages, principally the tropical climate, which offers highly predictable precipitation patterns and an extended growing season that allows for two harvests (a primary crop and a smaller inter-cycle “safrinha” of some other product such as corn, cotton, or rice). But this climate is the reason for the perpetuation of and difficulty in fighting a wide range of diseases, fungus, and insect predators that compromise Brazilian production. And ironically, the exploitation of Brazil’s other “natural” advantage, vast tracts of unconverted land, is causing a destabilization of the schedule of rains that make the region so attractive to farmers, as is evidenced by the 3<sup>rd</sup> year running of drought in the southern region of the country and the retreat of the rains that shadows the retreat of the forest (Wittman, 2005).

But for Brazilian farmers, the proof of their competitiveness comes partly from a political comparison with the US. *From their perspective*, they are able to survive international markets dominated by heavily subsidized American producers without the help of government supports. Because heavy infusion of transnational capital into the productive system is seen as a legitimate “market” activity, while infusion of state

money is not, their dependence on an external source of capital does not theoretically undermine their competitiveness. On the contrary, they argue that the reason these corporations continue to invest in Mato Grosso is *because* they recognize its *inherent* competitiveness. Brazilian farmers would love their government to step in and make more credit available to them and guarantee a minimum price, but recognizing that their government has neither the will nor the capacity to do so, they see their “independence” from state supports as proof of their superior efficiency and productivity. The fact that they are in fact completely dependent on transnational corporations not only to finance their operation but to provide nearly all of the inputs that they use in the productive process and so therefore are not producing *pelos próprios pés* (on their own two feet), however, does not contradict the logic of neo-liberalism and therefore is a legitimate politico-economic strategy.

Drawing on Gramsci, Jacobson writes that the “ongoing social contests to define the context within which key animating notions are forged as to who legitimately gets what, when, and so on – a struggle, in short, to define ‘common sense’” is being won by the interests of capital (1998, 2). The goal of these interests is not merely to foist a particular world order on a resistant public, but to gain the approval of the very society that is inevitably threatened by such an order. He writes:

If citizens are persuaded...that markets exist apart from the social relations that have created them and sustain them, that public control in any form is authoritarian whereas private control is not, that private operators are always efficient and public ones are not, then one likely beholds a stable if fatalistic political culture. If markets are believed to be perfectly just allocative mechanisms, losers would be no concern of public policy. Indeed, a neo-liberal orthodoxy apparently has eroded the post-war “bargain of embedded liberalism,” which...affirmed state

intervention to regulate business cycles and to protect citizens against egregious inequities. An antiquated 19<sup>th</sup> century image of a market system is now taken seriously, at least in higher socioeconomic strata, as if it were a brand new process (Jacobson, 1998).

In Mato Grosso soy, the “allocative mechanism” is a highly concentrated market dominated by the investment of 4 transnational agribusinesses and Grupo Maggi. These firms, together with the Fundação Mato Grosso, the state, public/private highway associations, industry groups, rural unions, and soy farmers comprise a private international soy regime that structures agricultural production. The extent to which the result does or does not reflect broader society’s goals (of development, sustainability, etc.) is of little concern to the state government, since its executive is the premier soy magnate himself.

In my interview with the state secretary of Rural Development (otherwise known as the secretary of Agriculture), Otaviano Pivetta, he said “The commercial agricultural sector is taking care of itself. We’re really not concerned about that. We’re more focused on assisting family agriculture.” This quote reveals two things. When asked about the dominance of transnational corporations and their overwhelming economic power in the sector that is responsible for a large portion of the state’s revenue, Pivetta responded by saying that the view that this could be potentially problematic is simply wrongheaded, and that TNC investment has done more to advance Mato Grosso’s development than anything else in the last 20 years, and so the sector doesn’t need the state’s intervention.

And so, the degree to which this economic relationship undermines the independence and “freedom” of producers is not seen as a contradiction.<sup>24</sup> The role of the federal government in constructing that competitiveness—through subsidized

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<sup>24</sup> See David Harvey (2005) on how “freedom” is defined under neoliberalism.

credit, land give-aways, failure to enforce land use regulations, and increasingly through its negotiations in the WTO (see next chapter)—clearly challenges the notion that comparative advantage is only something that can be fully realized if the state gets out of the way. The view expressed by Pivetta above that commercial agriculture can take care of itself while family agriculture “needs” the state reflects the general assumption that the former fits into a neoliberal growth model while the other is a relic of the welfare state. The neoliberal assumption is that *agricultura familiar* would eventually be eliminated entirely by the evolutionary growth of market efficiency, but that it does indeed serve a social function and so, although it is not economically relevant, it is important to the survival of poor communities.

A glaring irony exists in juxtaposing this reality with the argument that industrial agriculture is necessary to produce cheap and abundant food for the world’s growing population. As mentioned in the introduction to this chapter, between one third and one half of the world’s population survives through subsistence or small-scale farming. The reality is that industrial food is not cheap, and its true price is masked because the burden of the externalities associated with its production (things like environmental degradation, air and water pollution, obesity, malnutrition, animal welfare, unemployment, soil compaction, deforestation, etc.) is borne by the public sector. As the true costs of industrial food become ever more evident, the contradictions within agrarian capitalism will become increasingly difficult to reconcile. As crises of energy, credit, fertility, disease, water, and climate intensify, it is possible that smaller, family farmers will emerge, exhibiting advantages in soil and water management, energy consumption, and other important factors of production. For the time being, however, the Mato Grosso soy farmer remains as an ideal-typical construct of state and corporate collusion in the neoliberal market system.

CHAPTER 4  
PRIVATE GOVERNANCE AND THE NEW CONSTITUTIONALISM  
OF AGRICULTURE IN THE POST-DOHA ERA

*The concept of a regime needs to be broadened to include social institutions created by non-government actors that generate transnational norms and rules that guide behavior by private actors*<sup>25</sup>

***Introduction***

This chapter addresses private governance at the global level, examining the interactions between public and private actors in establishing and enforcing the rules that govern the soybean economy. The apparent collapse of the Doha “development” Round of WTO trade negotiations has dramatically changed this landscape. This collapse appears to leave behind a vacuum of leadership at the global level, but practically speaking, the WTO has been paralyzed since the first fiery collapse of negotiations in 1999 in Seattle. Since that time, bilateral agreements have proliferated, and cases continue to be tried in the Dispute Settlement Mechanism of the WTO on the basis of the (supposedly binding) Agreement on Agriculture that was negotiated in the Uruguay Round. Rules are, therefore, being made and enforced even in the absence of a multilateral institution to provide a centralized location where we can find governance happening. I argue in this chapter that the neo-liberal era requires a non-state-centric understanding of governance in order to allow us to see where the processes are taking place, both sub- and supra-statally, with the explicit participation of social movements, corporations, industry trade groups, and other private actors

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<sup>25</sup> Webb, 1999:54.

*interacting with states* to create the new global governance of non-state-centric global agricultural systems.

The collapse of the Doha round appears to reflect the clash of countervailing trends in the global trading system. On the one hand, emerging economies seem to have managed to effectively refuse an agreement that threatened their farm sectors by refusing to accept the US's high threshold (140% surge in imports) for triggering of protective tariffs (ICTSD, 2008). On the other hand, it also represents the failure of the multilateral system to effectively dismantle the massive US and EU subsidy payments that have fueled overproduction and dumping for the last 50 years. Critics decry the evasion tactics used by these agricultural powerhouses of shifting subsidy payments into superficially WTO-friendly categories (decoupled income support rather than countercyclical or loan-deficiency payments), while at the same time demanding greater market access from the poorest countries in the world (Sharma, 2004; IFG, 2003; Peine and McMichael, 2005; IATP, 2004).

From the point of view of food regime analysis, it can appear that the WTO stalled as a result of its failure to reconcile the contradictions between the industrial and corporate food regimes. Bill Pritchard calls this the “hangover” from the second industrial food regime that was sufficiently institutionalized in the WTO to prevent across-the-board market liberalization. He argues that the institution was built upon the foundation of the second food regime but has as yet been unable to adapt to the third. Pritchard argues that “the pursuit of [an agenda to recompose national agricultures into global agriculture (McMichael, 2005: 281] has been complicated and compromised by the entity's very structure. Expectations that a new, comprehensive WTO agreement would swiftly enshrine a new global politics of agriculture have proven unmet” (forthcoming: unpaginated). But have they? My argument in this chapter is that in an attempt to locate a “global politics of agriculture”, state-based

institutions are perhaps the wrong place to look. While a new food regime has yet to be institutionalized in a cogent multilateral governance organization, it is being implemented in piecemeal fashion through WTO dispute settlement, bilateral free trade agreements (FTAs) and bilateral investment treaties (BITs), and other more fractured processes. The second point is that just because the Doha Round is at best on life support, one must not discount the importance of the WTO in laying the foundation for the corporate food regime. I argue in this chapter that the uneven landscape of liberalization that it has ushered in is in fact more conducive and favorable to a food system organized in the corporate interest than the across-the-board liberalization for which the WTO rhetorically calls.

Moran et al. write:

Socio-political forces of particular nations are sufficiently distinctive and powerful to differentiate national and regional organization of rural production in space and time. Such international socio-political diversity is expressed in the formulation, writing and interpretation of legislation. Once legislation is in place, by the very processes involved in its administration and interpretation, it creates an inertia which ensures that some components of previous agro-food systems are maintained (1996).

The apparent contradictions that have persisted and even been increasingly calcified in the WTO system through dispute settlement, therefore, must be understood as products of the distinctiveness of the individual nation-state members of the organization. The attempts to understand the WTO as a single seamless system of global governance that obviates state sovereignty overlooks the crucial importance of spatial, historical, and political-economic context.

This chapter uses Brazil as a point of inquiry to understand how and why these contradictions—Pritchard’s “hangover”—persist.

Brazil’s rise to power on the international trade-negotiating stage has occurred concurrently with the rise of its soy economy. The emergence of New Agricultural Countries (NACs)—former colonies that began in the late 20<sup>th</sup> century to compete with northern industrial powers in traditionally northern agricultural markets like wheat, rice, and soy (Friedmann)—refocused attention on the imbalances in rules governing agricultural trade. The intransigence of governments on both sides of this historical divide (traditional versus emerging agricultural exporters) made agriculture one of the most significant roadblocks to a successful negotiating round. The same year that the WTO met in Seattle, Brazil steeply devalued the real, prompting a surge in exports. Almost as soon as Brazil began competing directly with the US and EU in agricultural markets (namely soy, cotton, and sugar), the WTO talks came to a halt due to developing countries’ refusal to accept an agreement they had no hand in drafting. The absence of a new agreement, however, did not stop Brazil from moving ahead with its challenge of US hegemony in the global trading system. At this same time, the Brazilian government also began to explore the utility of the Dispute Settlement Body (DSB) in furthering their challenge of US and EU agricultural policies on a commodity-by-commodity basis as will be described in more detail below.

I argue in this chapter that although WTO negotiations are at a standstill, one cannot discount the importance of the Uruguay Round in paving the way for the kinds of market restructuring (usually, but not always, in the direction of liberalization) that has been furthered via dispute settlement within the WTO as well as alternative trade agreements outside of it. Examining Brazil’s evolving role and strategies in the international trading system provides a clear window into how rules are being contested and shaped at the international level by an emergent private soy regime that

incorporates the Brazilian government, transnational agribusiness, producers, and other private interests, while still anchored (in interesting and contradictory ways) in state legitimacy. It also illustrates how the increasingly fractured processes of global trade governance continue to codify the principles of market liberalism into legal structures—a process that Steven Gill (1998) describes as the “new constitutionalism” of market rule—while at the same time opening new and varied spaces for its resistance.

### ***Constitutionalization of Market Rule through Dispute Settlement***

Despite the fact that WTO negotiations have been stalled for the last 10 years, individual cases have proliferated in the DSB that challenge individual countries’ policies regarding particular commodities. Since the transition from the GATT to the WTO in 1995 to the time of this writing, there have been 380 cases mounted in the DSB. They span a vast array of products and policies and have been used to both weaken *and* strengthen government regulation. For instance, they have consistently challenged anti-dumping and countervailing duties, food and product safety regulations, and import quotas. But, they have also been used to challenge lax enforcement of intellectual property rights and certain tax exemptions. It seems that where negotiations have failed, countries are strategically using the DSB as a *de facto* forum for advancing their trade agendas.

Pritchard argues, as I do here, that the legal jurisdiction of the DSB over sovereign state policy is an important mechanism for the constitutionalization of “disciplinary neo-liberalism” at the global level whereby “legal processes represent a formal superstructure for the enforcement of economic and political power” that explicitly demonstrates “an overarching preference to facilitate trade liberalization” (2005: 781, 782) despite claims that the DSB is an unbiased rules-based system that

‘levels the playing field’ between rich and poor countries. Pritchard presents evidence suggesting that due to a lack of popular political accountability in the dispute settlement process, the Appellate Body demonstrates worrisome inconsistency in its interpretation of agreement texts, and could effectively push liberalization beyond what is called for in the original agreements (2005). The process is also employed much more often to address perceived trade barriers to strategic products in which countries with the means to take advantage of the DSB have an interest. Brazil has challenged policies on coffee, orange juice, and poultry, for instance, and 12 of Argentina’s 14 cases have regarded agricultural products.

While the US and EU are at the forefront of this movement to use the DSB as a tool to selectively advance their interests—acting as complainant on 90 and 79 cases, respectively—Brazil comes in fourth (behind Canada with 30 cases) with 23. This is by far more than any other “developing country” and reflects Brazil’s position as a country with the resources and professional legal expertise to use the DSB strategically. Of those 23 cases, 9 were against the US, 6 against the EU, and 3 against Canada. Brazil has used the DSB to challenge the EU on preferential treatment for coffee, tariff rate quotas on poultry, customs classifications of chicken parts, and sugar subsidies. It has challenged the US on the patent code, countervailing duty disbursement (the “Byrd Amendment”), excise taxes on citrus, upland cotton subsidies, and most recently, domestic agricultural subsidies in general. Many, if not all, of these cases have been successful. One of the major goals of the negotiations for a new Agreement on Agriculture was to close the loopholes left in the Uruguay Round AoA that countries like the US and EU had continued to exploit by repackaging subsidies, export credits, and domestic protections as WTO-friendly and non-trade-distorting. Despite the failure of negotiations, Brazil appears to be advancing this agenda through the DSB, one policy or commodity at a time.

For example, in 2007 Brazil called for a panel to examine specific *years* (1999-2000, 2001, and 2004-2005) in which they believe that the US exceeded its commitment levels for agricultural subsidies as established during previous negotiations. Brazil has also taken on policies like the EU's definition of salt content for packaged chicken cuts. Brazil argues that a newly established designation of salt content subjects frozen chicken to higher tariffs, and therefore acts as an unfair trade barrier. Perhaps the most famous case was the one mounted against US cotton subsidies, where the DSB found that marketing loan payments, market loss assistance payments, and counter-cyclical payments caused sufficient harm to Brazilian cotton producers via price suppression to warrant withdrawal under AoA agreements.

In this way, then, Brazil and other countries are challenging what they see to be their rivals' efforts to skirt negotiated obligations. But this is not simply a project undertaken by the government. While a new broad-based agreement is the priority of the trade negotiator, individual cases in the DSB are the purview of private interests. Much has been made of the investment title of NAFTA and the ability of private corporations to challenge the domestic policies of sovereign states under the Chapter 11 investment title. In a way that is more heavily cloaked in traditional intra-governmental politics, essentially the same thing happens through the DSB, as participation by the private sector is filtered through the representation of national governments.

Despite the fact that the sugar and cotton cases (against the EU and US, respectively) are what Brazil is known for, it was actually soy that started Brazil down the path of WTO dispute settlement. Pedro Camargo—former Secretary of Production and Trade in the Brazilian Ministry of Agriculture who later worked as a trade lawyer in the private sector and was the primary author and litigator of the successful case in the WTO against US cotton subsidies—tells the story:

When I entered government I really decided to do the [dispute settlement] case as a negotiating strategy because with a case you get more to feet on the ground, more explicit, you have to understand, you leave speech and go to practice. So the first case that caught our attention—I had been thinking of this before entering government—was a case on soybeans. Because soybeans during the Uruguay round was a cash crop in the United States. It did not have a target price or loan deficiency payment. It was outside more or less of agricultural policy. And then suddenly they approved, included agricultural fixed target prices for soybeans and we thought that was not...that was a back-stab. On what theoretically the Uruguay Round had produced. The Uruguay Round had produced an Agreement on Agriculture that did not give us much, but was not supposed to give us a back-stab. And we saw a back-stab on soybeans. So we went to analyze what was happening with soybeans. Soybeans had zero subsidies in the Uruguay Round and went to \$2 billion in 2000/2001. So we mounted a case, identified a case, challenged soybeans, and Guilherme Dias did the econometric modeling for us, estimating the loss Brazil had because of the American subsidies. And when it took us a little time to file the case, and then prices went up because of climatic problems in the US and China and everything else, and then subsidies disappeared and we didn't have a case anymore. So we were happy. It's better to have prices than have a case. But then we kind of learned the route and we started the cotton case and the sugar case against Europe. I was still in government when we filed the case—the Fernando Henrique government—and the Lula government continued the process and we

won. Of course it is under appeal<sup>26</sup>, it is still being absorbed I guess in the US, but it certainly has implications.

The implications are that, as in any legal system, each case sets a precedent for future cases. According to Camargo, Brazilian producers would be emboldened by the success of the cotton (and sugar) cases to address what they see as the unfair trade practices embedded within the US farm bill.

Camargo claims that without the private sector, the cotton case never would have been brought to the DSB. He argues that there must be a combination of private interest and political will, but that with the expense and technical expertise needed to mount a case, the support of producers and industry is crucial. To the extent, then, that the DSB is used to codify the rights of private capital to challenge government policy, that process is more readily available to and successfully exploited by both governments and private sector groups with the greatest resources. Therefore, while there is obvious unevenness between the governments of the global North and South in their ability to take advantage of the DSB, farmers with highly coordinated advocacy organizations (soy, cotton, sugar, beef) are much more likely than producers of domestic food crops to bring their grievances as well, despite the fact that these same trade policies affect farmers across the board in both direct and indirect ways.

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<sup>26</sup> As of May, 2008, the DSB had rejected the US's most recent appeal.



Illustration 5. A billboard in Rondonópolis, MT, that reads: “Congratulations producers and Brazil for the cotton victory in the WTO”.

The process of codification of capital rights via the DSB is therefore a highly fractured one. It fractured along two particular lines—commodities and states. First, not all commodities will receive the same attention in the DSB. Clearly sectors that are more deeply embedded in global markets will experience more litigation. Commodity sectors in Brazil like manioc and dry beans which serve a mostly domestic market will obviously not figure highly into WTO disputes regardless of how greatly they may be indirectly affected by WTO negotiations that require elimination of domestic protections for such products. Commodities like soy, however, will receive much closer scrutiny because market ‘distortions’ caused by government policies are more likely to affect corporate profits both broadly (across many national markets) and deeply (in terms of total volume and profits). Commodities that are more heavily traded on international markets characterized by high levels of corporate concentration (sugar, cotton, coffee, bananas and other

tropical fruits, wheat, etc.) account for most of the agriculture-related cases in the DSB<sup>27</sup>.

So, too, will certain states appear much more frequently than others as complainants in WTO disputes. One of the primary criticisms of the WTO from insiders (and often ignored by NGOs) is that the DSB process is prohibitive to the majority of signatory countries. After lauding the benefits of the rules-based system—“The new DSB provides WTO member states with an automatic right to lodge a complaint, entitles them to use an independent appellate review and offers them an effective enforcement mechanism. It provides a system that guarantees the framework of predictable, enforceable, and generally stable rules for traders”—Speyer tacks on the following qualifier: “The DSB is used actively by all member states, with the notable exception of the poorest, especially African, countries” (275). This is due at least in part to the rising cost of bringing these complaints to the DSB. While all countries technically have access to the mechanism, there is no provision for assisting developing countries in covering legal costs. The Advisory Center on WTO Law (ACWL) was established in July, 2001, but it acts only as an information and training center (Orozco, 2002: 25). What many countries of the Global South critically lack are the political and financial resources to take advantage of any of the WTO bureaucracy. Delich writes:

Article 21.7 mandates that when a matter is raised by a developing country, the DSB [Dispute Settlement Body] is to consider what further action might be appropriate to the circumstances. To date, this provision has not been used by a developing country, perhaps because a precondition is that the country devote resources to analyzing and

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<sup>27</sup>For details on DSB cases by product, see the WTO Dispute Settlement Gateway website: [http://www.wto.org/english/tratop\\_E/dispu\\_e/dispu\\_subjects\\_index\\_e.htm#agricultural\\_products](http://www.wto.org/english/tratop_E/dispu_e/dispu_subjects_index_e.htm#agricultural_products)

following cases. This involves checking arguments, issues, and possibilities and comparing experiences and results; exploring new legal as well as economic arguments; and domestically, building up an efficient and transparent liaison between the state and industry in order to obtain up-to-date information on trade problems in which developing countries have a stake. Developing countries lack the high-level expertise and resources to devote to such activities (2002, 74).

Camargo argues that Brazil is the “limit” for countries able to participate in the DSB.

He says:

An African country cannot bring a case against the United States. They will never have a chance. Is it not only the technical aspect, the cost of the lawyer, it is the political courage to file against the empire. So if you look at society, the way we live here outside, if a rich man causes some injury to a poor man it is the public defender that enters against the rich man. You do not require the poor man to have the understanding of the law. In the WTO you do not have a public defender. You have a supposedly member-driven organization with members with equal rights, but members are very different from one another. So you have an institutional major problem which will never work. Brazil is at the limit. Below Brazil you can not bring a case against the United States. ... It is a huge shortcoming of the organization.

As of 2008, the US and EU brought nearly half of all complaints to the DSB, and the US has reserved its third party rights in almost every other major case. While Brazil and other ‘developing’ countries brought the imbalance of power in trade negotiations to light during the Seattle talks, the imbalance built into the very structure of the DSB

has received far less attention. As long as the legal arm of the WTO process is inaccessible to poorer countries, this supposedly impartial rules-based institution contains a fatal flaw that allows it to be manipulated by powerful countries in the corporate interest.

Another way that the DSB is biased against developing countries lies in the ultimate softness of what is supposed to be a binding process. Speyer writes:

“The weakness...is that there is no mechanism that compels a losing party to implement a panel’s decision properly. By doing something, but not enough, a defendant can still drag out the whole process almost indefinitely, because the complainant must challenge the new, still non-compliant measure anew” (2001: 277)

Perhaps even more problematic is the enforcement measure of last resort, which allows the complaining country to levy sanctions or suspend concessions formerly afforded to the defendant (Qureshi, 1996: 105). This amounts, ultimately, to a lack of real enforcement, especially when it comes to a complaint brought by a poor country against a wealthy one. Brazil rejected tariffs as a retaliatory mechanism against US non-compliance with the DSB’s cotton ruling arguing that raising tariffs on US imports would make capital goods prohibitively expensive and would ultimately hurt the Brazilian economy far more than the much larger US economy (ICTSD, 2005—bookmarked). Therefore, despite the argument that the WTO is an unbiased, neutral mechanism, in the end, it *comes down to individual economic power after all*. The rules-based system is a myth, because a country with the means to withstand sanctions is able to drag its feet, while the country without is crippled by noncompliance.

As the US dallied in implementing reforms to its cotton subsidies, Brazil proposed a novel retaliatory tactic. Previously, countries judged by the DSB to have been injured by non-compliance with WTO agreements were allowed only to impose

tariffs (or otherwise suspend trade concessions agreed to in WTO negotiations) on the offending country. In 2005, however, Camargo (on behalf of AMPA, the Brazilian cotton growers association) approached the Brazilian Congress with a proposal to suspend the intellectual property rights of US-based corporations as long as the US government remained non-compliant with DSB rulings. In other words, if the US failed to suspend the offending cotton subsidies, Brazilian farmers could stop paying royalties on their Round-Up Ready seeds bought under license from Monsanto. This tactic has been approved in at least 2 other cases so far (related to online gambling in Antigua and bananas in Ecuador). Rather than simply imposing tariffs on imported goods, therefore, this ruling can affect the business of subsidiaries operating within the country and, in a way, challenges the *basic property rights* of corporations as negotiated in the WTO.

What is significant about this retaliatory tactic is that it *brings the private sector in* to what is cosmetically a “political” issue by directly threatening corporate profits, and not just in the agricultural sector. One may argue that import tariffs do the same thing by threatening profit and therefore creating incentive for businesses to pressure governments to change the offending laws. However, suspending intellectual property rights threatens the *property rights* of corporations in a more fundamental way that reveals the political vulnerability of these legal arrangements. This strategy targets state power via the corporations that stand to profit and/or suffer from the state’s non-compliance. An explanation of the particulars of this strategy can help crystallize an understanding of the relationship between the state and private firms that Cutler and her colleagues are working to define through the development of a theory of private regimes.

First, the complaining country must request permission to cross-retaliate against a defending country that has both been ruled against by the DSB and has failed

to change the offending policy. The WTO must then determine whether or not it would be ineffective for the complaining country to withhold trade privileges from the defending country. This often occurs when a small economy challenges a large one and a suspension of trade privileges would cause greater injury to the small economy than to the country in violation of WTO agreements. If the WTO allows the suspension of TRIPS, then manufacturers can produce generic versions drugs and IP-protected seeds without paying royalties to the companies that hold patents for those products. Suspension of TRIPS could also affect movies, music, trademarks, and any other form of intellectual property. This tactic allows governments to rally the power of capital against state intransigence on agricultural protections. Companies like Monsanto and Pioneer have fought long and hard to guarantee the protection of proprietary seeds and chemicals in countries like Brazil—to rescind patent protection could provide the necessary impetus for these companies to pressure the US government to bring its cotton policy in line with the DSB decision.

Revolutionary as this approach may seem, it still requires that the retaliating country be a significant trading partner. LDCs would remain at a disadvantage. This is all to say that the general fairness and effectiveness of the DSB is greatly disputed. Speyer argues that the high rate of finding in favor of plaintiffs in cases brought before the WTO proves that the DSB is being used as it was intended, and “cases brought so far have merited the charge” (276). Iida argues, in contrast, that the high rate of conviction suggests that the WTO is an organization driven by a particular ideology rather than an impartial set of rules. In a way, both can be true. Many authors argue that the role of the WTO is not necessarily always to *liberalize* economies. Although the general principles of liberalization are written into agreements, exceptions and loopholes allow powerful countries to selectively retain strategic market protections. Therefore, some say that the purpose of the WTO is to enforce the WTO agreement.

It has a “negative function”, that is, “it responds to complaints by telling nations if the burdens their regulations impose on international commerce are disproportionate to the objectives they are seeking to achieve or otherwise violate WTO rules on permissible trade restrictions” (Vogel, 1997:5). The appeal process rests on “negative consensus...that is, all members must agree not to proceed or not to adopt panel and AB [Appellate Body] recommendations or rulings” (Delich, 2002: 71) Put another way, “The basic philosophy of the WTO...is non-discrimination. Member governments agree not to discriminate against the trade in goods and services of other members...” (Das, 2001: 2). Vogel, however, goes on to acknowledge that “there is often a fine line between a legitimate health and safety regulation that is more difficult for a foreign producer to meet and a disguised form of protectionism” (5). The role of the judicial branch of any governing body is the interpretation and enforcement of rules. The DSB, therefore, is a necessary mechanism, as many aspects of trade agreements are written intentionally broadly to allow for interpretive flexibility. However, it is clearly a tool much more readily available to powerful players.

It should not come as a surprise, then, that the WTO’s effectiveness in instituting across-the-board liberalization has been only partial. Broad agricultural subsidies and other protections in rich countries are much more likely to have withstood WTO restrictions than those in poor countries. If one looks at the WTO from the perspective of the new constitutionalism as described by Gill—as an institution that works to legally codify the rights of capital through an iterative process of dispute litigation—the failure of the WTO to dismantle agricultural subsidies appears less of a contradiction. In reflecting on the history of food regime analysis, Pritchard writes that “much initial food regime scholarship was animated by the prospect that the Uruguay Round would cause agriculture to become subject to an internationally-binding set of rules that would progressively eliminate nations’

capacities to subsidize their rural economies, and thus bring into being a new food regime” (Pritchard, forthcoming: unpaginated). The uneven levels of domestic support that persist under the AoA between Northern and Southern countries do not contravene this project. Rather, this unevenness allows agribusiness to leverage North against South and vice versa as southern producers are forced out of production by northern dumping, which further depresses northern prices and inscribes subsidy programs ever more deeply (McMichael, 2005). In fact, agricultural economists Daryll Ray and Daniel Ugarte have shown that subsidies are both triggered in response to and exacerbate *low* commodity prices on the world market, which clearly *benefits* agribusiness (Ray, 2006b).

### ***Economic Citizenship Rights and Governance through Dispute Settlement***

The point here is that neo-liberalism as expressed in the corporate food regime does not require the differences between countries to be smoothed out by liberalization. In fact, as Gill points out, liberalization is not necessarily the end goal of the new constitutionalism. Rather, it is ensuring the rights of private property and capital over other social rights (2000).

[N]ew constitutionalism can be understood historically as part of the *longue durée* of liberal state formation as well as a political project to “lock in” the power gains of capital on a world scale in the 1990s and beyond . . . . The World Trade Organisation and other organisations of governance such as the international financial institutions are attempting to create a set of long-term economic and political reforms that gain constitutional status, thus underpinning the extension of the disciplinary power of capital on a world scale (2000, 7).

Arguably, that is what is happening via the dispute settlement mechanism in the WTO and also various other bilateral and regional agreements (including Bilateral Investment Treaties) that have proliferated in the wake of Seattle. The relative ability of governments to participate in these mechanisms of governance comes down to economics.

Saskia Sassen calls this substantive economic citizenship. The formal terms of economic citizenship are based on the fundamental right of all people to participate in and benefit from the global economy. In the context of the WTO, one could extend the concept to mean the fundamental right of all *countries* to participate in and benefit from the rules-based system governing global trade. Substantively, however, these rights are limited to those with the capacity to participate, which excludes the vast majority of WTO member states. The dominance of economic citizenship is continually re-inscribed through this unequal power. Sassen writes, "...global capital has made claims on nation-states and these have responded through the production of new forms of legality" (2000: 384). The DSB, as a legal form supporting economic rights, substantively works to prise open certain markets to certain interests while allowing others to remain protected under the jurisdiction of the national state. Commodities that are more deeply embedded in global markets or policies that directly undermine transnational profit potential are much more likely to be the subject of WTO arbitration.

Soy is an interesting case in this vein because it is the quintessential global industrial food commodity. Inedible by humans without at least some processing (which can be as simple as home fermentation or as complex as industrial crushing and extrusion) soy is a durable and versatile industrial food additive. Additionally, up until 2000, soy received relatively few subsidies in the US. As cited above, the change in these policies caught the attention of the world's other largest soy exporter

and prompted legal inquiry, but economically speaking, soy remained robust on the world market throughout the first half of the decade. Officials in the Ministry of Agriculture, Livestock, and Food Supply (MAPA), speaking in 2005 just before a major market crisis plunged Mato Grosso soy farmers into debt, put it this way:

This is a product that has the freest markets in the world. More than oil, more than gold, is soy. Soy is a commodity that is almost pure, because it is a very homogenous product, there is very little restriction on international trade, from the point of view of market access and export subsidies, and essentially you have 3 producers: the US, Brazil, and Argentina. In Brazil and Argentina, our governments do not have the capacity to subsidize the sector. So, the sector is extremely free in terms of trade and has little government intervention. The Americans have a strong intervention in soy. Until the 1996 Farm Bill, there was little intervention in soy. American agricultural policy never reached the target price for soy. There's a target price for corn, for wheat, never for soy. From '96 until now there have been many instruments introduced for soy. The Brazilian product with the greatest freedom in trade we call "soy". From the production of an *orgulha* through the entire chain...it is a thing *sui generis*. You have practically free exchange to negotiate, you have practically no intervention by the government to buy, finance, commercialize... It is entirely financed by the international market. You were in Mato Grosso you know that the producer there in Mato Grosso, in Rondonópolis, in Sorriso, is linked to Chicago every day, he knows the exchange rate every day.

The “purity” of soy as a freely traded global commodity, however, lasted only as long as macroeconomic conditions, oil prices, and currency values remained stable. From the beginning of the soy boom in the mid-1990s up until the 2005 harvest, Brazilian soy was highly competitive on the world market and soy farmers enjoyed healthy profits. During this meteoric rise in production, gains gleaned from converting new land to soy and technological advancements in seed varieties and disease and soil management kept ahead of the volatile agricultural market. But by June 2005, rising oil prices increased costs for both agrochemicals and transport, the dollar fell relative to the real, and Brazil’s interest rate remained stubbornly high. Brazil’s production began to level off, and US production rebounded from a series of poor harvests. Soon soy profits began to erode, and farmers from Mato Grosso drove their tractors onto Congress’s lawn and burned piles of soybeans in the streets. Just two years after the height of the soy boom and a mere few months after the above interview was recorded, the government was refinancing Bank of Brazil loans and holding soy auctions to pass premiums on to producers.

Because, like most developing countries, Brazil’s domestic support remained well below its WTO commitment levels it was able to include soy in its government buying program that essentially acts as a minimum price guarantee. Interestingly, however, a brand new instrument had to be constructed in order for this system to work for soy. Because the majority of each year’s soy crop is committed through CPR contracts to transnational agribusiness before it is even harvested (see Chapter 3) few producers were able to participate in traditional auctions. The government, therefore, had to develop separate auctions for farmers and agribusiness, essentially passing premiums to farmers *through* the corporations that hold their contracts. If a company is willing to take a slightly lower market price, it wins the auction, receives a subsidy payment from the government, and passes the difference between the government

minimum price and the CBOT spot price to the farmer. In this way, the government is directly subsidizing private debt and protecting agribusiness profits. This is, of course, happening in the context of the AoA, which had consistently contributed to the *reduction* in supports such as minimum price guarantees and subsidized credit for producers. Clearly this is an inconsistent and contradictory process, which illustrates how closely government and industry are interwoven in the structuring and maintenance of markets, despite the ideology of liberalization.

This process of government intervention in markets also shows how substantive economic citizenship rights are awarded to certain types of producers over others, which is reflected in both the extension and intensification of market integration of those farmers producing crops most relevant to industrial food companies, and in the litigation taking place in the DSB. Cutler and her colleagues have worked to move us away from state-centric understandings of economic citizenship, however, by arguing that though political legitimacy is a crucial element of private authority and the state remains a key arbiter of that legitimacy, the exercise of authority comes increasingly from the private sector. I argue that, in order to understand the current conjuncture in the agro-food system, we must expand the theory of food regimes to make room for the kind of private authority that Cutler describes. Only then does the unevenness and conflict within the governance system of global agricultural trade begin to make sense, because the contradictions that animate the emerging food regime are not only geopolitical, but economic as well. Just as the disputes in the DSB are nominally arbitrated by governments and substantively constructed by the private sector, the emerging contours of the third food regime are defined through the interactions of states and agribusiness in both cooperation and conflict.

Cutler et al. argue that “the private sector [is] a major player in organizing the international system and increasingly in establishing the rules of the game. These rules concern who gets to play, what are the limits on play, and often who wins. This means that we should be concerned about the increase in private international authority on a number of counts. First, what does this mean for the continued functioning and existence of the state itself? Second, who gets to participate in making decisions given that corporations are not democracies? Third, are the rules the private sector establishes fair and equitable, incorporating mechanisms for access and accountability?” (1999: 369). These questions are all relevant in examining the role of agribusiness in establishing trade rules, and even determining which trade rules are challenged and which are not.

### ***Negotiating Politics: Private regimes and setting the trade agenda***

When it comes to the political process of negotiating trade agreements, of course, transnational soy companies have to engage in a delicate balancing act. In a market as globalized and highly concentrated as soy, the same 4-5 companies exert market influence in countries with seemingly very different trade policy positions. However, when one begins to look at the international network of research institutes, trade associations, and high-level advisory committees, one begins to get a sense of multiple and often hidden ways that corporations are able to exert their influence across the globe, and the invisible hand of the market is revealed as the visible hand of the private regime.

In Brazil, the single most influential organization in agricultural trade policy is the Institute for the Study of Trade and International Negotiations (ICONE). This organization is a research group, and claims not to involve itself in issues of politics or policy advising. However, the majority of the research and studies upon which

Brazilian trade policy is based come from this institute. ICONE claims as its partners the Ministry of Agriculture, Livestock, and Food Supply as well as two university research and study groups dedicated to agribusiness issues.

ICONE is funded by various trade and industry associations, including the Brazilian Agribusiness Association (ABAG) and the Brazilian Oilseeds Association (ABIOVE) as well as pork, poultry, beef, and sugar interests, and its board of directors consists of representatives from these associations. ABIOVE is, in turn, funded directly by the Brazilian affiliates of transnational companies: Cargill Agícola S/A, ADM Brasil Ltda., Bunge Alimentos S/A, Comércio Indústria Brasileiras Coimbra S/A (a subsidiary of Louis-Dreyfus). ABAG is funded by these and many others including Monsanto, Pioneer, Bayer Crop Science, AGCO, etc. Carlo Lovatelli, president of both ABIOVE and ABAG at the time of writing, is also the director of Bunge Brasil.

According to a researcher at ICONE, all of the major agribusiness sectors except orange juice are associated with the institution. Industry groups commission research, and these studies are passed on to the government only after passing the approval of companies via their trade or industry associations, headed by their own executives. While ICONE claims not to have a political agenda or to be a political actor, they characterize their work as “technical support” for those advocating at the political level for agribusiness interests. And, insofar as their research is directly approved by businesses with interest in increasing the flow of exports all around the world, it is clear why their focus is market access first, domestic support second, and issues like food security, sensitive products, and special and differential treatment not at all.

Even though the G-20, under Brazil’s leadership, is advocating Special and Differential Treatment (S&DT) and sensitive products as priorities for negotiation in

Hong Kong, ICONE is not lending its “technical support” to these issues. According to a researcher,

Brazil, within the G-20, says to the countries of the G-20: you who have concerns about food security, make a proposal about food security. There exists a certain division of labor within the G-20. Brazil has done all of the technical work about the issues of market access and domestic subsidies. And everything related to special and differential treatment, food security, livelihood needs, food sovereignty...the countries that are interested in this need to do this work.

Clearly, there are parties within Brazil who *are* interested in these issues—like the landless workers’ movement, small farmers’ organizations, and the Ministry of Agrarian Development (MDA, different from the Ministry of Agriculture, Livestock, and Food Supply: MAPA)—but they lack both the resources and the access to make those issues part of the Brazilian government’s trade agenda. As is discussed below, the ways in which trade positions are determined in the Brazilian government structurally privilege agribusiness interests. The limited influence of the MDA and absence of non-governmental or grassroots groups (with the exception of ICONE) ensure that agribusiness interests top the trade agenda.

### ***Setting the Agenda: MAPA versus MDA***<sup>28</sup>

Brazil’s trade agenda is determined through a two-tiered structure; the first level is comprised of technical advisors and researchers that come to decisions about trade issues, who then advise those at the second, or political, level made up of

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<sup>28</sup> Differences between these 2 ministries are discussed in more detail in Chapter 2.

ministers and negotiators. According to an official at the Ministry of Agrarian Development (MDA), until 2005, the ministry only had representatives at the technical level. If advisors at the technical level were unable to come to consensus on an issue, it passed to the political level, where the interests of landless and small farmers were not represented. Though as of 2005 they did have representatives at the political level, they still only had 3 staff members working on issues of importance to these constituents; MAPA had more than ten times that number.

It is no surprise that Brazil's most influential advisors would prioritize the issue of market access, given their ties to international advocacy and advisory networks backed by transnational agribusiness. According to an official at the Ministry of Foreign Relations, the Brazilian government recognizes that promoting market access among members of the G-20 could cause problems for the integrity of the coalition, but "if there is a critical mass of agreement, the others will fall into line. The point is that there is no other game in town for these [smaller] countries. They would be taken advantage of if they were alone." The G-20, therefore, becomes a platform for the extension of the *type* of trade liberalization sought by corporations among some of the countries that may be most resistant to it.

But corporate influence, like corporate capital, does not stop at state boundaries. Corporations must operate in very different political contexts across the globe. In their respective studies of international mineral markets, intellectual property, and maritime transport, Michael Webb, Susan Sell, and Claire Cutler<sup>29</sup> present examples of different ways in which private firms work with and across state boundaries to establish politically legitimate and coordinated market structures, norms, and rules that smooth out global commerce. None of the authors argues that this is a unitary or complete process. Rather, they show the complexity and contradiction built

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<sup>29</sup> Chapters all appear in Cutler et al., 1999.

into the establishment of a private regime and how that complexity shapes the way in which private actors govern in conjunction with states.

Webb shows how cooperation among mineral firms to stabilize markets and support prices constitute a private regime, but that the regime is often undermined by the inconsistency in the political and ideological landscapes in which it operates. Webb's emphasis on the contradictory nature of a private regime is important in nuancing the public/private relationship. The processes through which governance is accomplished are not unitary or uncontested, and still, political interests that contravene those of capital shape the contours of the regime. In terms of soy, this can be seen in the highly contested movement towards private certification of "sustainable" soy that both responds to and deflects concern that the encroachment of soy into the Amazon region could have huge implications for climate change. In 2006, Greenpeace convinced ABIOVE (Brazilian Oilseeds Association) to agree to a moratorium on purchasing soy grown in newly deforested regions. Aerial photographs taken in the first months of 2009 show that soy cultivation in newly deforested areas has slowed significantly, and the moratorium is being credited with this progress.

Grupo Maggi, the Brazilian soy company owned by the governor of Mato Grosso, began requiring environmental audits of many of the farms from which it purchased soy as early as 2005. In Sapezal, one of my research sites, Maggi required all farmers to fill out a form detailing their environmental conservation measures. While this formally enhanced the corporation's environmental credibility, not a single farmer I interviewed reported that anyone from the Maggi corporation ever actually came out to verify the information reported on the form. While the rules of the game, therefore, are negotiated by competing interests (in this case agribusiness firms, environmentalists, farmers, and the state), the stated outcome of these negotiations (in this case, soybeans produced more sustainably) can not be taken for granted. The

process of contestation shapes the behavior of these companies in some ways, but in this instance they are also able to turn the criticism to their advantage.

In the case of subsidies for soy as well, inconsistencies in farm and financial policies across countries can both complicate and work in favor of corporations' interest in a stable market. While domestic subsidies can help stabilize prices and smooth out market volatility, individual countries' currency policies and interest rates—as seen in Brazil—can dramatically affect patterns of foreign investment and can either undermine or enhance producers' competitiveness. When the Brazilian real strengthened against the US dollar in 2005, Brazilian soy exports immediately felt the effect. However, tax policies that encourage raw material exports from Brazil give that country's soy farmers an edge in export markets over their competitors in Argentina (the world's third largest producer of soybeans behind the US and Brazil). TNCs take advantage of these differences as can be seen in the pattern shown in the development of whole bean exports and crushing in Brazil and Argentina. The graph below shows that, although Brazil and Argentina's respective soy production has increased apace, Argentina's crushing has outstripped Brazil, while Brazil's exports of whole beans have clearly and decisively topped Argentina's.

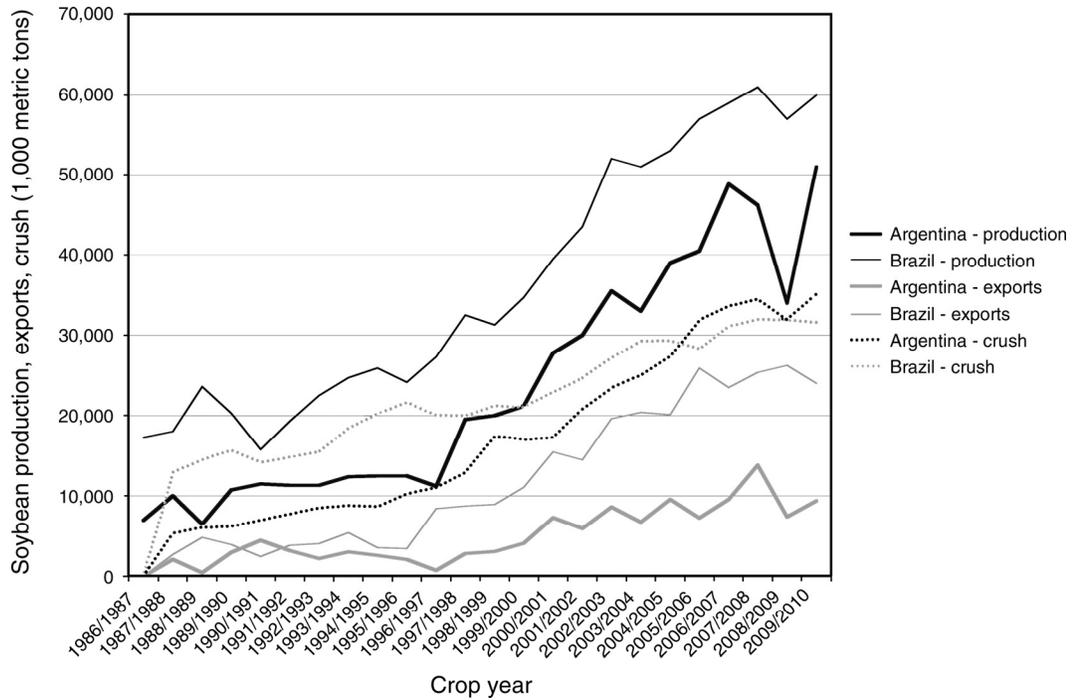


Figure 9. Soybean production, exports, and crush. Source: FAS, 2009.

As complex and contradictory as the process is between individual nation-states, in another example, Sell shows how interfirm cooperation in politics can happen at the transnational level. She argues that private firms directly created public law for the entire world in the creation of the WTO TRIPS agreement through a coordination of “domestic interindustry counterparts, domestic governments, foreign governments, foreign private sector counterparts, domestic and foreign industry associations, and international organizations” (1999: 172). Much as in the agribusiness industry of Brazil and the cases brought before the DSB, she argues that “the transnational leadership of these US-based corporations was decisive in the achievement of the TRIPS accord” (172). As has already been described in the case of Brazil’s action in the DSB and the determination of trade policy at the federal level in Brazil, corporations are heavily influential in configuring trade law both nationally

and internationally. Cutler addresses this dynamic as well in arguing that the line between public and private international trade law in maritime transport is actually quite blurry but that the rhetorical distinction between the two “serves to enhance the authority of corporate actors while simultaneously rendering such actions politically unaccountable” (283).

Because agribusinesses are both transnational *and* grounded within particular political contexts that are defined at least in part by “national agricultures” and farmer constituencies, private governance at the global level must navigate conflicting political interests. It could become problematic, for example, for Cargill Agrícola to support an organization that attacks US soybean subsidies. But as the above authors describe in their respective cases, agribusinesses find ways around these difficulties.

For example, ABIOVE is a member of the International Association of Seed Crushers (IASC), along with its US counterpart, the National Oilseed Processors Association (NOPA). Researchers from ICONE attend all of the international meetings of the IASC, and an ICONE researcher claims that

...they [at IASC] do not talk about [domestic] subsidies. Never. They discuss market access, and also distortions. For example Brazil is very critical of North American export credits. And the businesses of NOPA recognize that it is necessary to make a level playing field in the market. And so today there exists work by IASC to promote a level playing field in the soybean market. Like eliminating all [export] subsidies in the soybean chain for oilseeds, oil, and meal. And to eliminate all distortions, export credits, and export taxes.

And this is where a vision of the private international regime begins to coalesce. ICONE is also affiliated with the International Agriculture and Trade Policy

Council (IPC), an international coalition based in Washington, D.C. that counts among its members executives from Cargill, Nestlé, Syngenta, ADM, Bunge, Kraft, and Monsanto, as well as former agricultural secretaries, world bank officials, trade advisors, and leading agricultural economists from top universities. These members hail from agricultural exporting countries all over the world. This organization—also *funded* by Cargill, ADM, and Bunge (also including Syngenta, Monsanto, Unilever, Nestlé, Rabobank, etc.)—has a specific agenda of total trade liberalization, and though it is based in the US and funded primarily by US agribusiness, its members hail from around the world. The IPC recently invited Pedro Camargo to sit on its board of directors. As mentioned above, Camargo is a former Secretary of Production and Trade in the Brazilian Ministry of Agriculture and was the primary author and litigator of the successful case in the WTO against US cotton subsidies.

While the IPC does argue for reductions in northern domestic subsidies (insofar as they are trade-distorting), it never does so without in the same breath downplaying special and differential treatment and arguing that developing countries must promote market access.

“With their newfound influence, developing countries can obtain a strong agreement that goes beyond the narrow confines of S&D to promote their integration into the world economy and provide an opportunity to compete in the marketplace. First and foremost, that means developed countries must substantially reduce trade-distorting subsidies and expand market access. Indeed, for most developing countries, an ambitious outcome that increases market access, eliminates government funded export competition, and reduces trade-distorting domestic subsidies will deliver greater benefits than traditional S&D ever could.

In the Doha Development Round, developing countries should also insist that both developed and developing countries be required to adhere to the same set of rules. Separate rules or exemptions from the rules for developing countries sets a dangerous precedent. As has been evident in 2004, when developing countries won cases against the United States and the European Union in the WTO, the rules-based trading system is particularly important for developing countries precisely because all countries, regardless of size or power, are bound by the same rules. If developing countries insist on a different set of rules, developed countries could more easily rationalize skirting the rules for their own benefit. It took many years to address agriculture under the GATT because agriculture was subject to special exemptions that kept sensitive commodities off the negotiating table. It is extremely dangerous to go back down that road.” (IPC, 2004).

Aside from the condescending tone of the language, the IPC at once purports to empower developing countries to embrace their newfound standing in negotiations, while at the same time cautioning them not to ask for too much. The IPC undercuts the importance of special and differential treatment by arguing that the same rules should apply to all countries, and amazingly, that S&D could set a “dangerous precedent” that might embolden northern powers to skirt the rules. The fact that US subsidies have remained largely unchanged since the Doha Round began shows the absurdity of this argument.

Interestingly, the IPC argues that, while exceptions for the northern subsidies were bad for the talks, exceptions for vulnerable markets in developing countries would be bad for *development*. In fact, in an article on the food crisis, they state clearly: “Counterintuitively, subsistence farming cannot solve the most basic needs for

food security” (IPC, 2005), citing data showing that countries with a greater reliance on subsistence farming tend to be more impoverished. It seems that today, at least at the time of this writing, amongst talk of reimagining the Bretton Woods institutions and Bill Clinton’s speech to the UN (where he admitted that distributing food aid in the form of commodities rather than money—which undercuts local producers in poor countries—was a monumental mistake that contributed significantly to the food crises of the late 2000s), there is some mainstream acknowledgement it has been at least in part the policies of liberalization—not small farming—that have robbed populations of their subsistence. A study conducted by the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) acknowledges that the paradigm of the industrial and corporate food regimes are not capable of addressing the needs nor taking advantage of the promise of local agriculture in developing countries.

For many years, agricultural science focused on delivering component technologies to increase farm-level productivity where the market and institutional arrangements put in place by the state were the primary drivers of the adoption of new technologies. The general model has been to continuously innovate, reduce farm gate prices and externalize costs. This model drove the phenomenal achievements of AKST [agricultural knowledge, science, and technology] in industrial countries after World War II and the spread of the Green Revolution beginning in the 1960s. But, given the new challenges we confront today, there is increasing recognition within formal S&T organizations that the current AKST model requires revision. Business as usual is no longer an option. This leads to rethinking the role of AKST in achieving development and sustainability goals; one that seeks more

intensive engagement across diverse worldviews and possibly contradictory approaches in ways that can inform and suggest strategies for actions enabling to the multiple functions of agriculture (IAASTD, 2008: 3-4).

As McMichael recounts, however, the report was largely ignored in favor of an emphasis on facilitating private investment in agriculture at the FAO's 2008 world food summit in Rome (2008).

Though an entire paper could be dedicated to analysis of the synergy between IPC's policy positions and corporate membership, suffice to say that this organization, especially with its connections to other industry trade groups *and* agricultural and trade ministries around the world, is an exemplar of what Cutler et al. would identify as a constitutive element of a private agriculture regime precisely because of a) the extreme market concentration of the sector that allows close and effective cooperation between firms, and b) the explicit inclusion of the state in the association itself. Clearly, corporate leaders are connected to one another and to the public sector, not just through economic or market networks, but through political and advocacy ones as well. The IPC is one important node in the private agribusiness regime wherein "the interfirm cooperation...operates on multiple levels in complex ways, and often involves extensive interaction and cooperation with the state". Cutler goes on to argue that, "Indeed, one of the most important analytical goals in studying private international regimes is to understand the degree to which the private actors in a regime are dependent on the public ones" (Cutler et al., 1999: 14). As I have shown above, the participation of the private regime in governance of agriculture in general and the soy sector in particular provide an excellent illustration of how business and IR literatures' tendency to treat strategic alliances of transnational firms and interstate regimes as distinct (respectively) fails to capture the ways in which "private authority

emerges *both* from the interactions of firms and from the interactions between firms and the state” (Cutler, 1999: 335).

This is, however, a fractured and contradictory process. Most notably, India scored one for domestic protection of farmers in this last round of negotiations. Pressure from grassroots groups, NGOs, and social movements have brought environmental sustainability and food security into mainstream trade policy debates, and many of these organizations cite the collapse of Doha as a signal that society is reasserting control over the market in a Polanyian swing of the double movement. However, I maintain that to argue that we are seeing a re-embedding of trade policy is an overly state-centric view, and that such a focus obscures the fractured ways in which the new constitutionalism of capital in agriculture continues with little attention. Globalization scholars Trebilcock and Howse point to an “unfortunate semantic legacy” of Ricardo’s theory of comparative advantage, which is that in the global economy we have “*countries* trading with one another. This of course, is rarely the case. [Rather], *private economic actors* are trading with each other” (Trebilcock and Howse, 1995: 3). The significance of this legacy cannot be overlooked, because from the discourse of globalization to the bureaucratic structure of the WTO, the taken-for-granted unit of analysis remains the nation-state, which obscures the role of private actors and complicates how we understand civil society, the nation, and the “public interest”.

### ***Conclusion***

Pritchard argues that in the WTO-DSB, “the rule of law [is] over-determined by the institutionalized politics of the WTO” (2005: 796). In this chapter, I have shown how the “institutionalized politics” are driven by neo-liberal ideology that is ushered in via the participation of transnational corporations in the processes of

governance and reinforced by the exclusion of other constituencies. This is a crucial element of the accomplishment of authority by the private international soy regime as business interests are increasingly able to exert political influence beyond their national borders, often being explicitly provided with a seat at the international trade-negotiating table (Cutler et al., 1999). As regulatory frameworks become increasingly diffuse, however, particularly in light of the collapse of the Doha Round, opportunities are opening up for civil society just as they are opening up for private regimes.

Fridmann refers to the environmental regime as a new non-governmental vector of regulation that emerges in response to increasing popular concern over production processes and their outcomes (2005). Lipschutz and Fogel look at this issue from the 'regime' perspective, arguing that popular 'moral authority' informs the creation of transformative campaigns through civil society-based regulatory regimes that govern labor in the apparel industry, small arms trade, and toxic waste among others (2002).

Aside from, or in addition to, the circumspect 'victories' for developing country governments mentioned above, these observations highlight the contradictions of governance within the corporate food regime and the opportunities for alternative visions to gain traction, particularly given the increasing attention in mainstream discourse on re-localization and food sovereignty as real solutions to intensifying food insecurity (see Chapter 5). McMichael argues that the importance of the food regime analytic in the context of the neo-liberal food crisis is that it politicizes food and brings it to the center of a host of debates, not least among them that of emerging structures and processes of governance (forthcoming).

However, even as WTO negotiations remain at a standstill, the codification of market rule continues through channels even more obscure than negotiations themselves. Scholars must train the analytical lens—as Pritchard has usefully done—on dispute settlement as an avenue for neo-constitutionalism as the processes of

governance are increasingly informalized. This requires a move away from state-centric regime analysis to a theorization of private governance.

## CHAPTER 5

### CONCLUSION

At the time of this writing, the world appears to be in a moment of profound transformation. Global food, energy, financial, and environmental crises are converging to destabilize once and for all the post-war hegemonic order over which the US has presided for the last 50 years. Because the WTO has remained impotent since the breakdown of negotiations in 1999 under intense protest from the public and developing country governments—and now appears definitively unable to resolve the conflicts of global trade politics—it is no surprise that the food regime concept is being revisited. In this dissertation I have argued that to understand the organization of the global agri-food system at this historical moment, it is crucial to look beyond the state, not just at how private actors influence or undermine governments, but rather at whole systems of private governance, whereby networks of public and private actors and institutions collude to shape markets in the neo-liberal image. I argue that what may often appear as contradictions from a state-centric perspective—i.e., the persistence of northern country agricultural subsidies—make more sense as part of a system of rule by private regime.

I have, therefore, theorized a private international soy regime—following models put forth by scholars of political science and international relations—in order to help the food regime concept illuminate the current moment in which, I argue, the Brazilian soy industry is emerging as a prototypical organizational form of global agriculture in the context of neo-liberal globalization. I argue that, when used as an analytic, the concept of a ‘food regime’ is useful in highlighting relations of power in production, consumption, and trade. Intuitively, Mato Grosso seems to represent a clear departure from business-as-usual in global agriculture, as any US soybean farmer

would tell you. Unlike the corn market (the other pillar of the global industrial food system), the soy market has undergone a significant geographic shift in the past 20 years. Many US farmers were caught unawares by the meteoric rise in South American production, which in itself caused great anxiety in the US. Biological obstacles such as fungus and pest infestations, and political controversy over the environmental impact of soy in Mato Grosso, have tempered Brazil's assault on the US as the world's primary soy producer, but every season Brazil challenges the US for that top position.

My analysis in this dissertation tries to make sense of the historical development of Mato Grosso's soy industry in terms of larger political-economic shifts in global agricultural governance, while also investigating the experience of that development on the ground in the soy towns themselves. While Chapter 2 addresses the former question from alternately historical-economic and geo-political perspectives, Chapter 3 more directly addresses the second thread. Finally, Chapter 4 begins to look ahead at what the Brazilian model of agricultural governance might mean for the trajectory of agricultural governance at the international level.

What links all three chapters together, aside from a multifaceted exploration of the Mato Grosso soy phenomenon itself, is an explicit focus on the private sector and its role in the processes of governance at multiple levels. As post-war structures of governance continue to break down, I argue that such an understanding will become increasingly crucial to any study of multilateral political relations.

We are in an historical moment where the very structure and function of the Bretton Woods institutions are being reexamined. These institutions have long embodied, promoted, and enforced the fundamental principles of export-led neoliberal development. However, these principles are now clearly in question, particularly as they apply to the way in which the global North addresses hunger through aid. In a

speech to the United Nations' World Food Program, Bill Clinton directly questioned the wisdom of his own administration in placing food aid at the service of US agribusiness rather than African communities, acknowledging that using food aid as an outlet for US agricultural surpluses has contributed directly to intensified food insecurity in Africa's poorest nations.<sup>30</sup> The fact that treating food as a commodity is being vocally questioned by a former (and still influential) US president signals a *dramatic* shift in the "common sense" of economic liberalism, at least as it pertains to food. These questions will continue to be raised as climate change and biofuels focus new attention and put pressure on global food stocks and agricultural production methods.

The Brazilian soy phenomenon—and particularly its integration into deepening global agri-food networks—raises numerous questions that span broad new areas of inquiry. Already, many scholars are focusing on the social and environmental consequences of soy production in the pan-Amazonian region, with particular emphasis on landless workers, indigenous communities, deforestation and climate change. This issue also raises questions of governance (both national and multilateral) as environmental problems are increasingly recognized as global, and as charges of "green colonialism"<sup>31</sup> challenge private conservation efforts by both firms and international NGOs. These debates are particularly centered on intensified soy production in the *Amazonia Legal* region of Mato Grosso, Pará, and other northern Brazilian states (Jowit, 2007). An extensive and graphic story appearing in *National Geographic* in 2007 did much to bring these issues to mainstream attention (Wallace, 2007).

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<sup>30</sup> On October 23, 2008 CBS News ran the following headline: Bill Clinton: "We Blew It" On Global Food: Ex-President Tells U.N. World Erred In Treating Food As A Commodity Instead Of Vital Right [http://www.cbsnews.com/stories/2008/10/23/world/main4542268.shtml?source=RSSattr=HOME\\_4542268](http://www.cbsnews.com/stories/2008/10/23/world/main4542268.shtml?source=RSSattr=HOME_4542268)

<sup>31</sup> Cf. Luke, T. W. (1997-8); De Boeck, G. (2000).

In this context, the role of transnational agribusiness has received ample attention. In particular, the construction of a port on the Amazon River at Santarém in the state of Pará has fostered intense controversy and a flurry of ongoing academic inquiry. As detailed in Chapter 3, however, much of this inquiry lumps the corporations together conceptually with soy farmers, thereby ignoring the larger structures of exploitation that entrench destructive systems of production. In order to understand these relationships more completely, and beyond what I have presented here, scholars must push past easy conceptualizations of ‘power’ and ‘resistance’. Elsewhere I have argued that bringing a social movements analysis to an examination of the planter class in Mato Grosso informs our understanding of capital mobilization on the soy frontier (Peine, forthcoming).

This will become increasingly important as the energy and food crises converge on the point of biofuels, and as the growing cooperation between agribusiness and energy companies suggest an emerging private international regime that is helping to shape a new bio-energy complex. This is clearly not a unitary process, however, as the systemic crises also open new spaces for civic engagement in the food system. At the same time that a corporate-centered private regime is redefining the relationship between food and energy, we also see increasing attention to the concepts of ‘food sovereignty’ (the rights of people and countries to determine their own food policies) and re-localization as strategies for a new generation of community-based food, energy, and credit policies. After decades of structural adjustment policies wiped out local agricultures in poor countries, the idea that local, sustainable agriculture is essential for national food security is once again gaining ground in mainstream discourse. I argue that this is part of—rather than resistance to—the same process of redefining food regime governance that is producing alliances between agribusiness and oil companies. I analyze this dialectic from the perspective

of Polanyi's "double movement", but go one step farther to argue that the underlying assumptions of each model offer fundamentally different visions of the future of food, as well as the future of global governance.

Another vector that promises to be significant in shaping the emerging food regime and could be a crucial site of inquiry for a broader examination of the private soy regime is the intensifying relationship between South American soy and Asian meat. As I point out in the dissertation, traditional centers of production and consumption are shifting, and south-south trade may soon dominate the "spaces of flows" in the global soy network. This study of Brazilian soy, therefore, could serve as a starting point to examine the empirical dynamics of the emerging soy economy with China and Brazil as its anchoring points. Since Brazil's agricultural profile began to change dramatically in the 1990s from an import substitution to an export driven model, commensurate changes have taken place in global commodity flows. As traditional northern exporters (the US, Canada, Australia, etc.) face new competition from South America, traditional import markets (the EU, Japan) are being eclipsed by skyrocketing demand from China and India. An important question arises, then, of how transnational corporations mediate the links between these newly emerging producer and consumer countries, especially given the drastically different political context of the Chinese agricultural sector.

As Moran et al. argue that the differences in political contexts affect how the food regime is accomplished, the particularities of the new sending and receiving countries—in terms of domestic governance of their agricultural sectors and their relations with other countries in the WTO and beyond—will require close investigation. Corporations are very savvy at negotiating and even exploiting these inconsistencies, but they can also sometimes cause difficulties, as evidenced by the complexities of international property rights enforcement. This is one area in which

much effort has been made by Monsanto and other firms toward “harmonization” with only limited success. However, firms have ways of disciplining states as I saw in my research when I visited the second largest port in Brazil at Paranaguá in the southern state of Paraná and saw ports standing empty because the state government had enforced a ban on genetically modified soy. In retaliation, the large soy traders were diverting their shipments to the port of Santos in São Paulo and Paranaguá was as a result facing severe unemployment and fiscal difficulties.



Illustration 6. Soy loading bays at Paranaguá stand empty.

All this is to say that the importance of understanding the role of private interests in governance is not diminishing but rather becoming even more important in light of the fracturing of the institutional bases for those relationships. As I learned from this project, conducting research on corporations, particularly large *private* corporations like Cargill, is not an easy task. But understanding the goals and strategies of the private sector in political projects is absolutely imperative for any real understanding of how governance happens. As argued at length in different parts of this dissertation, there is a dearth of empirical studies on the particulars of private governance. This dissertation has begun a line of inquiry that I will continue to

develop in hopes of making a continuing contribution to the scholarship on private governance, food regimes, and the future health and resilience of global agriculture.

## BIBLIOGRAPHY

Abramovay, R. (1998). Paradigmas do Capitalismo Agrario em Questao. São Paulo--Campinas, Editora da UNICAMP.

Altvater, E. and B. Manhkopf (1997). "The World Market Unbound." Review of International Political Economy 4(3): 448-471.

Arantes, N. E. and P. I. D. M. De Souza (1993). Cultural da Soja nos Cerrados. Piracicaba, Associacao Brasileira Para Pesquisa da Potassa do Fosfato.

Bertran, P. (1988). Uma Introducao a Historia Economica do Centro-Oeste do Brasil. Brasília, Universidade Catolica de Goias.

Bordin, L. C. V. A POLÊMICA SOBRE A LEI KANDIR, Banco Nacional de Desenvolvimento (National Development Bank). São Paulo, Brazil.

Bovard, J. (1988). How American Food Aid Keeps the Third World Hungry. Heritage Foundation Backgrounder, The Heritage Foundation.

Cabello, G. R. (2003). "THE MEXICAN STATE AND THE AGRIBUSINESS MODEL OF DEVELOPMENT IN THE GLOBALISATION ERA." Australian Journal of Social Issues 38(1): 129-139.

Chaddad, F. R. and M. Jank (2006). "The Evolution of Agricultural Policies and Agribusiness Development in Brazil." Choices 21(2).

Crook, F. W., Hsin-Hui Hsu, and Michael Lopez (1999). "The Long-Term Boom in China's Feed Manufacturing Industry." Agricultural Outlook 1999(December): 13-16.

Cutler, A. C. (2002). Private Regimes and Inter-firm Cooperation. The Emergence of Private Authority in Global Governance. R. B. a. T. J. B. Hall. Cambridge, Cambridge University Press: 23-42.

Cutler, A. C., V. Haufler, et al., Eds. (1999). Private Authority and International Affairs. Albany, State University of New York Press.

da Nobrega, M. F. (1985). Desafios da Politica Agricola. São Paulo, Gazeta Mercantil.

Das, D. K. (2001). Global Trading System at the Crossroads: A post-Seattle perspective. London and New York, Routledge.

De Boeck, G. (2000). "Green Zones or Greenbacks? The Debt-Nature Exchange: Green Neocolonialism and Environmental Exploitation." Contradictions 92: 99-110.

De Lacerda, G. N. (1985). Capitalismo e Producao Familiar na Agricultura Brasileira. São Paulo, Instituto de Pesquisas Economicas.

Delgado, G. d. C. (1985). Capital Financeiro e Agricultura no Brasil. São Paulo, Universidade Estadual de Campinas.

Delich, V. (2002). Developing Countries and the WTO Dispute Settlement Mechanism. Development, Trade, and the WTO: a handbook. B. Hoekman, A. Mattoo and P. English. Washington, IBRD/World Bank.

Fearnside, P. M. (2001). "Soybean cultivation as a threat to the environment in Brazil." Environmental Conservation 28: 23-38.

Forrestal, D. J. (1982). The Kernel and the Bean: the 75-year story of the Staley Company. New York, Simon and Schuster.

Friedmann, H. (1978). "World Market, State, and Family Farm: Social Bases of Household Production in the Era of Wage Labor." Comparative Studies in Society and History 20(4): 545-586.

Friedmann, H. (1987). The Family Farm and International Food Regimes. Peasants and Peasant Societies. T. Shanin. New York, Blackwell: 247-58.

Friedmann, H. (1993). "The Political Economy of Food: A Global Crisis." New Left Review 197: 27-59.

Friedmann, H. (2005). From Colonialism to Green Capitalism: Social Movements and the Emergence of Food Regimes. New Directions in the Sociology of Global Development. F. H. Buttel and P. McMichael. San Diego, Elsevier. 11: 227-264.

Friedmann, H. and P. McMichael (1989). "Agriculture and the State System: The Rise and Decline of National Agricultures, 1870 to the Present." Sociologia Ruralis 29: 93-117.

Gasques, J. G., Carlos Monteiro Villa Verde, and José Arnaldo F. G. de Oliveira (2004). CRÉDITO RURAL E ESTRUTURAS DE FINANCIAMENTO. Discussion Texts. I. f. A. E. Research. Brasília, Institute for Applied Economic Research.

Gill, S. (1998). New Constitutionalism and the Reconstitution of Capital.

Gill, S. (2000). The Constitution of Global Capitalism. International Studies Association 41st Annual Convention, Los Angeles, CA.

Goldsmith, P., L. Bing, et al. (2004). "Global Shifts in Agro-Industrial Capital and the Case of Soybean Crushing: Implications for Managers and Policy Makers." International Food and Agribusiness Management Review 7(2): 87-115.

Goodman, D. a. M. W. (1997). Globalising Food: Agrarian Questions and Global Restructuring. London, Routledge.

Hall, R. B. and T. J. Biersteker (2002). The Emergence of Private Authority in the International System. The Emergence of Private Authority in Global Governance. R. B. Hall and T. J. Biersteker. Cambridge, Cambridge University Press.

Harvey, D. (2005). A Brief History of Neoliberalism. Oxford, Oxford University Press.

Hasse, G. (1996). O Brasil da Soja: Abrindo Fronteiras, Semeando Cidades. Porto Alegre, Ceval Alimentos/L & PM Editores S.A.

Haufler, V. (1993). Crossing the Boundary Between Public and Private: International Regimes and Non-state Actors. Regime Theory and International Relations. V. Rittberger and P. Mayer. Oxford, Clarendon Press.

Houck, J. P., Mary E. Ryan, Abraham Subotnik (1972). Soybeans and Their Products: Markets, Models, and Policy. Minneapolis, University of Minnesota Press.

IATP (2004). WTO's Empty Framework Allows Agricultural Dumping to Continue, Institute for Agriculture and Trade Policy.

ICTSD (2008). "Agricultural Safeguard Controversy Triggers Breakdown in Doha Round Talks." China Programme 12(27).

IFG (2003). WTO FOOD AND AGRICULTURE RULES: BRIEFING ON CRITICAL ISSUES. San Francisco, International Forum on Globalization.

Jacobson, J. K. (1998). 'Putting It All Into Context': Economic Ideas, Persuasion, and Legitimacy. Ideas, Culture and Political Analysis Workshop, Princeton University.

Jolly, R. W. and J. D. Roe (2005). "Selling a Piece of the Farm Credit System." Choices 20(1).

Jowit, J. (2007). "Amazon tribe hits back at green 'colonialism'." The Guardian.

Kahn Jr., E. J. (1990). Supermarketer to the World. New York, Warner Books.

Kenfield, I. (2008). "Brazilian Agribusiness Boom's Dark Side: Violence and Plunder in the Amazon." Brazzil.

Kobrin, S. J. (2002). Economic governance in global economy. The Emergence of Private Authority in Global Governance. R. B. Hall and T. J. Biersteker. Cambridge, Cambridge University Press.

Kreiger, L. (1977). "The Idea of Authority in the West." American Historical Review 82(2).

Li, B., Peter Goldsmith, Jerry Fruin, Rodolfo Hirsch (2003). Global Trends in Soybean Processing, University of Illinois Board of Trustees.

Lilley, S. (2004). Paving the Amazon with Soy. World Financial Institutions. San Francisco, CorpWatch.

Lipschutz, R. D. and C. Fogel (2002). "Regulation for the rest of us?" Global civil society and the privatization of regulation. The Emergence of Private Authority in Global Governance. R. B. Hall and T. J. Biersteker. Cambridge, Cambridge University Press: 115-140.

Luke, T. W. (1997-8). "The World Wildlife Fund: Ecocolonialism as Funding the Worldwide "Wise Use" of Nature." Capitalism, Nature, Socialism 8(2): 30.

Manoel, A. (1986). Politica Agricola, Eficiencia, e Concentracao na Agricultura Brasileira: Um Estudo do Setor Canavieiro Paulista. São Paulo, Universidade de São Paulo (USP).

McMichael, P. (1991). "Slavery in the Regime of Wage Labor: Beyond Paternalism in the US Cotton Culture." Social Concept 6(1): 10-28.

McMichael, P. (2005). Global Development and the Corporate Food Regime. New Directions in the Sociology of Global Development. F. H. Buttel and P. McMichael. San Diego, Elsevier. 11: 265-300.

McMichael, P. (forthcoming). "A food regime analysis of neo-liberalism's food crisis." Agriculture and Human Values.

MDA (2004). PIB DAS CADEIAS PRODUTIVAS DA AGRICULTURA FAMILIAR. Brasília, Ministerio do Desenvolvimento Agrario.

Menegheti, G. (2005). "E Agora, Valcir?" Produtor Rural (149): 19-28.

Moran, W., G. Blunden, et al. (1996). "Family Farmers, Real Regulation, and the Experience of Food Regimes." Journal of Rural Studies 12(3): 245-258.

Munhoz, D. G. (1982). Economia Agrícola: Agricultura--Uma Defesa Dos Subsidios. Petropolis, Editoria Vozes Ltda.

Murray, W. E. (2006). "Neo-feudalism in Latin-America? Globalisation, Agribusiness, and Land Re-Concentration in Chile." Journal of Peasant Studies 33(4): 646-677.

Nasser, A. M. (1998). FUNDAÇÃO MT Um caso de ação coletiva no Agribusiness. VIII SEMINÁRIO INTERNACIONAL PENSA DE AGRIBUSINESS. São Paulo, PROGRAMA DE ESTUDOS DOS NEGÓCIOS DO SISTEMA AGROIROINDUSTRIAL (PENSA).

Pauly, L. W. (2002). Global finance, political authority, and the problem of legitimation. The Emergence of Private Authority in Global Governance. R. B. Hall and T. J. Biersteker. Cambridge, Cambridge University Press.

Peine, E. (forthcoming). Corporate mobilization on the Mato Grosso soybean frontier. Critical Struggles: Re-envisioning development and social change in neoliberal times. P. McMichael, Pending.

Peine, E. and P. McMichael (2005). Globalization and Global Governance. Agricultural Governance: Globalization and the New Politics of Regulation. V. H. a. G. Lawrence. New York, Routledge.

Pereira, B. (1995). Industrializacao da Agricultura de Mato Grosso. Cuiaba, Universidade Federal do Mato Grosso.

Polanyi, K. (1944). The Great Transformation. New York, Farrar and Rinehart.

Pritchard, B. (2005). "How the rule of the market rules the law: the political economy of WTO dispute settlement as evidenced in the US – Lamb Meat decision." Review of International Political Economy 12(5): 776-803.

Pritchard, B. (forthcoming). "The Long Hangover from the Second Food Regime: A World-Historical Interpretation of the Collapse of the WTO Doha Round." Agriculture and Human Values.

Pritchard, W. N. (1998). "The Emerging Contours of the Third Food Regime: Evidence from the Australian Wheat and Dairy Sectors." Economic Geography 74(1): 64-74.

Qureshi, A. H. (1996). The World Trade Organization: implementing international trade norms. Manchester and New York, Manchester University Press.

Ray, D. (2006a). In the agricultural "whodunit," subsidies may not be the prime suspect. Weekly Agricultural Policy Columns. A. P. A. Center. Knoxville, University of Tennessee.

Ray, D. (2006b). WTO panel identifies problem, but will their implied solution work? Weekly Agricultural Policy Columns. A. P. A. Center. Knoxville, University of Tennessee.

Raynolds, L. T. (2000). "Negotiating Contract Farming in the Dominican Republic." Human Organization 59(4): 441-451.

Reidinger, J. and S. Kang (2000). Back to the Land: Revisiting the Rationale for Agrarian Reform. The Impact of Agrarian Reform and the Changing Market on Rural Households. Manila, MODE.

Ruggie, J. G. (1982). "International Regimes, transactions, and change: Embedded liberalism in the postwar economic order." International Organization 36(2): 139-174.

Sassen, S. (2000). "Territory and Territoriality in the Global Economy." International Sociology 15(2): 372-393.

Sassen, S. (2002). The State and Globalization. The Emergence of Private Authority in Global Governance. R. B. Hall and T. J. Biersteker. Cambridge, Cambridge University Press.

Scott, C. (2009). "The Amazon: it's what's for dinner: the spread of soy plantations poses a new threat to the rainforest." Earth Island Journal. January 1.

Sell, S. K. (1999). Transnational Corporations as Agents of Change: The Globalization of Intellectual Property Rights. Private Authority and International Affairs. V. H. A. Claire Cutler, and Tony Porter. Albany, State University of New York Press.

Sengupta, S. (2006). "On India's Farms, a Plague of Suicide." New York Times.

Sharma, D. (2004). "WTO and Agriculture: Green Box Subsidies Must Go."  
Economic and Political Weekly 39(20).

Soares, R. P. and Carlos Álvares da Silva Campos Neto (2004). CONSIDERAÇÕES SOBRE O PROJETO DE LEI DE PARCERIA PÚBLICO-PRIVADA (PPP) EM FACE DA EXPERIÊNCIA RECENTE DO BRASIL. Discussion Papers. Brasília, IPEA.

Sorj, B., Goodman, D., and Wilkinson, J. (1987). FROM FARMING TO BIOTECHNOLOGY: A Theory of Agroindustrial Development. Oxford, Blackwell.

Sorj, B. and Wilkinson, J. (1995). Transnational and the Agrofood Systems of Developing Countries. From Columbus to ConAgra - The Globalization of Agriculture and Food. A. Bonanno, Bush, A., Friendland W. et al. Lawrence, University of Kansas Press.

Soskin, A. B. (1988). Non-Traditional Agriculture and Economic Development: The Brazilian Soybean Expansion, 1964-1982. New York, Praeger.

Speyer, B. (2001). Dispute Settlement: a gem in need of polish and preservation. The World Trade Organization Millenium Round: Freer Trade in the Twenty-First Century. K. Gunter and B. Speyer. London and New York, Routledge: 275-284.

Steward, C. (2007). "From Colonization to "environmental soy": A case study of environmental and socio-economic valuation in the Amazon frontier." Agriculture and Human Values 40.

Strange, S. (1983). Cave! Hic dragones: a critique of regime analysis. International Regimes. S. D. Krasner. Ithaca, Cornell University Press.

Tuan, F. C., Cheng Fang, and Zhi Cao (2004). China's Soybean Imports Expected to Grow Despite Short-Term Disruptions. Electronic Outlook Report. Washington, D.C., United States Department of Agriculture.

Vogel, D. (1997). Barriers or Benefits? Regulation in Transatlantic Trade. Washington, Brookings Institution Press.

Wallace, S. (2007). "Last of the Amazon." National Geographic 211(1): 40-63.

Warnken, P. F. (1999). The Development and Growth of the Soybean Industry in Brazil. Ames, Iowa State University Press.

Watts, M. (1994). Life Under Contract: Contract Farming, Agrarian Restructuring, and Flexible Accumulation. Life Under Contract: Contract Farming and Agrarian Transformation in Sub-Saharan Africa. P. Little and M. Watts. Madison, The University of Wisconsin Press.

Webb, M. C. (1999). Management of International Mineral Markets. Private Authority and International Affairs. A. C. Cutler, V. Haufler and T. Porter. Albany, State University of New York Press.

Welch, C. (2006). "Globalization and the Transformation of Work in rural Brazil: Agribusiness, Rural Labor Unions, and Peasant Mobilization." International Labor and Working-Class History 70(Fall): 35-60.

Windish, L. G. (1981). The Soybean Pioneers: Trailblazers, Crusaders, Missionaries. Galva, Ill, Leo G. Windish.

Wittman, H. (2005). THE SOCIAL ECOLOGY OF AGRARIAN REFORM: THE LANDLESS RURAL WORKER'S MOVEMENT AND AGRARIAN CITIZENSHIP IN MATO GROSSO, BRAZIL. Development Sociology. Ithaca, Cornell University: 244.

Zancopé, G. J. a. J. M. N. (2005). O Brasil Que Deu Certo: A Saga da Soja Brasileira. Curitiba, Triade Editoria.