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Neoliberal Restructuring, Neoregulation, and the Mexican Poultry Industry

Francisco Martinez-Gomez, Gilberto Aboites-Manrique, Douglas H. Constance

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Abstract The US poultry industry based on flexible accumulation has been advanced as the model of agro-industrial development for agrifood globalization. Similarly, Mexico has been presented as a noteworthy example of the negative effects of neoliberal restructuring associated with the globalization project. In this paper we use both of these assertions as points of departure to guide an investigation of the case of the restructuring of the Mexican poultry industry. Informed by a commodity systems analysis, archival data and key informant interviews are used to generate an overview of the history of the poultry industry in Mexico. A sociology of agrifood theoretical framework informed by regimes theory is employed to analyze the events of the case. We conclude that neoregulation related to the IMF and NAFTA restructuring in Mexico facilitated the diffusion of the US model of poultry production.

Key words Mexico; poultry; neoregulation; neoliberalism; contracts; regimes

Abbreviations

DelMarVa	Delaware, Maryland, Virginia
FDI	Foreign direct investments
FIRA	Guarantee Fund for the Promotion of Agriculture, Livestock and Poultry
GATT	General Agreement on Tariffs and Trade

IMF	International Monetary Fund
NAFTA	North Atlanta Free Trade Agreement
TNC	Transnational corporation
WTO	World Trade Organization

F. Martinez-Gomez; G. Aboites-Manrique

Centro de Investigaciones Socioeconomicas, Unidad Camporredondo Edificio “5”, C.P. 25080, Autonomous University of Coahuila, Saltillo, Coahuila, Mexico

Email: Francisco.martinez@uadec.edu.mx

Email: Gilberto.aboites@uadec.edu.mx

D.H. Constance (email)

Department of Sociology, Campus Box 2446, Sam Houston State University, Huntsville, Texas 77341, USA

Email: Soc_dhc@shsu.edu

Author Biographies

Douglas H. Constance, PhD, is Professor in the Department of Sociology at Sam Houston State University. His research focuses on the community impacts of the globalization of agriculture and sustainable agriculture. Dr. Constance has published several articles, book chapters, and books on this topic. He currently serves a Chair of the Administrative Council for the USDA/Southern SARE program. Dr. Constance is past-President of the Agriculture, Food, and

Human Value Society (2007-2008) and the Southern Rural Sociological Association (2002-2003).

Francisco Martínez-Gomez is researcher at the Centro de Investigaciones Socioeconomicas (Center of Socioeconomic Research), Universidad Autónoma de Coahuila (Autonomus University of Coahuila) and professor at Universidad Autónoma Agraria Antonio Narro (The Antonio Narro Agrarian Autonomus University), Saltillo, Coahuila, México. Most of his research has focused on the impact of globalization on rural development, in particular international negotiations in plant genetic resources and the social impacts of globalization and industrialization in agro-food systems.

Gilberto Aboites-Manrique is a researcher at the Centro de Investigaciones Socioeconomicas (Center of Socioeconomic Research), Universidad Autónoma de Coahuila (Autonomus University of Coahuila) and a professor at Universidad Autónoma Agraria Antonio Narro (The Antonio Narro Agrarian Autonomus University), Saltillo, Coahuila, México. Most of his research focuses on the impacts of globalization on the State of Coahuila and Mexico regarding labor, the home, and patterns of food consumption.

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Introduction

This research combines a commodity systems approach (Friedland 1984) with an agrifood regimes conceptual framework (Friedmann and McMichael 1989) and applies the frame to the case of the poultry industry in Mexico to inform discussions regarding the globalization of economy and society. The combination of commodity systems analysis and food regimes theory provides a terminology to interpret the internal dynamics of particular commodity sectors within the wider institutional forces that pattern agrifood systems. In particular, this combination is useful for analyzing new forms of global agrifood linkages such as contract farming and North-South food relationships (Campbell and Dixon 2009). The case of Mexico is chosen for two reasons: the process of neoliberal restructuring that has occurred over the past 30 years; and the expansion of the US poultry model in Mexico during that same time period. We are interested in the possible relationships between the two events.

The US model of the poultry industry has been advanced as the future model of agriculture: vertical and horizontal integration based on flexible accumulation (Boyd and Watts 1997; Heffernan 2000; Morrison 1998). The agro-industrial districts that emerged in the US South during the 1950s can be viewed as the prototypes of flexible organizational forms that are replacing Fordist models as part of economic globalization (Bonanno and Constance 2008; Boyd and Watts 1997). The modern poultry industry has been criticized as regional monopolies with questionable labor practices with processing plant workers (Fink 2003; Griffith 1995; Human Rights Watch 2005; Marrow 2011; Stuesse 2009; Striffler 2005; Weise 2012), exploitative relationships with growers (Constance 2008; Gisolfi 2007; Heffernan 1984), and negative community effects (Bartra and Otero 2007; Constance et al. 2003; Constance and Tuinstra 2005; Fink 2003; Gisolfi 2007; Marrow 2011; Stuesse 2008). Numerous authors have noted the asymmetrical power relationships inherent in the poultry grower contract system (Breimyer 1965; Davis 1980; Gisolfi 2007; Heffernan 1984; Wellford 1972). This model is being adopted in other commodities and countries as transnational corporations (TNCs) diffuse the system globally (Bonanno and Constance 2008; Burch 2005; Constance 2009; Constance et al. 2010; Heffernan 2000). We use the case of the development of the poultry industry in Mexico to investigate these claims and to identify to what extent the US model is being adopted, as predicted by Boyd and Watts (1997).

The case of Mexico is especially appropriate due to its recent history of neoliberal restructuring (Hernández, Andablo and Ulloa 2010; Maya and Hernández 2010; McMichael 2009a; Otero and Pechlaner 2008; Pechlaner and Otero 2010). Neoliberal restructuring refers to the historical tendency associated with globalization whereby forms of social organization grounded in interventionist states overseeing national development programs are re-regulated into a system of weakened nation-states vis-à-vis the global economic actors (e.g., TNCs) and the rise of supra-national mechanisms of governance (e.g., IMF, World Bank, WTO) (see Bonanno and Constance 2008; Harvey 2005; McMichael 2005). Through structural adjustment programs, developmentalist policies are reoriented to export competitiveness, privatization, and deregulation. The result is often accelerated de-peasantization in the South as agrifood commodities for exports or exchange became privileged over food for domestic consumption.

Neoregulation carried out by the nation-state imposes the market as the self-regulating governance mechanism under the globalization project (Pechlaner and Otero 2008; 2010)

For example, the Mexican national food system was overhauled in the 1980s as part of the International Monetary Fund (IMF) structural adjustment programs enacted after the 1984 Peso Crisis, including the amendment of Article 27 of the Mexican Constitution in 1992 (McMichael 2009a; Otero 1999). This reform ended the state's responsibility to redistribute land and allowed private investment in farmland and reduced government support for the ejido system.[1] Additionally, in 1994 the North Atlanta Free Trade Agreement (NAFTA) liberalized the maize economy, as well as further lifted restrictions on foreign direct investments (FDI). As a result, corn prices fell rapidly in Mexico through the 1990s as US imports flooded the market and agrifood TNCs increased their FDI. Due to consolidation of the corn industry in Mexico and speculation on corn related to ethanol subsidies in the US, in 2007 tortilla prices rose rapidly resulting in increased food insecurity and social movement activity (Constance et al. 2010; McMichael 2009a; Pechlaner and Otero 2010).

In this paper we respond to calls for research that bridges the North-South divide in agrifood studies (Buttel 2001) in general and Pechlaner and Otero's (2010) call for further empirical research on the role of the state in neoregulation. We offer an empirical analysis of how neoregulation carried out by the Mexican state in response to policies imposed by the IMF and NAFTA has facilitated the restructuring of the Mexican poultry industry. Our working hypothesis is that the advancing neoliberal restructuring in Mexico based on neoregulation

[1] The Agrarian Reform Act of 1915 and the Constitution of 1917 created the ejido system of communally-farmed land. Under this arrangement, a group of villagers could petition the government to seize private properties for communal and individual use. The 1992 constitutional amendment withdrew virtually all subsidies and supports for the ejidos.

accelerated the diffusion of the US poultry model into Mexico, a process that favored global capital and marginalized Mexican agrifood producers. The degree to which poultry contracting has been adopted in Mexico is an indication of the level of adoption of the US model, as noted by Boyd and Watts (1997).

The paper begins with an overview of our analytical frame, the regimes approach to agrifood studies. The case begins with a short review of the poultry industry in the United States. Then an extended presentation of the development of the poultry industry in Mexico is provided to illustrate the relationship between neoliberal restructuring, neoregulation, and changes in the industry, particularly the use of the contract system of production. The issue of contracting is critical to the investigation, for contracting is the preferred business on the ground in the poultry industry and conceptually is a central tenet of neoliberalism and flexible accumulation (Boyd and Watts 1997; Burch 2005; Burch and Lawrence 2009; Harvey 2005; Little and Watts 1994). Contracts provide companies control with maximum flexibility and limited liability and responsibility (Constance 2008).

The data sections on the poultry industry are organized and presented from a commodity systems approach (Friedland 1984; 2001). Commodity systems analysis employs a political-economic perspective centering on the state-market-labor nexus to analyze the structure of agrifood production. This research combines archival data on the modernization of the poultry industry in Mexico and key informant interviews with persons with direct experience with the poultry industry in Mexico.[2] The commodity systems approach focuses on the role of the state in

[2] The authors carried out semi-structured interviews with five experts on the development of the poultry industry in Mexico. These experts included several previous owners of poultry firms, technicians that worked for poultry firms, and representatives of an ejido that worked as aperceros for a major poultry company. The interviews were transcribed verbatim and employed to complement the archival data collected. Pseudonyms (Interviews #1 through #6) are employed to protect the identity of the key informants.

rural development, the structure of the poultry industry, and the relationships between the companies and the poultry growers. We pay particular attention to the nexus between the business, state, and social sector, in this last case the ejidos. In the conclusions we evaluate the utility of the regimes and commodity systems frameworks to interpret the case and call for more North-South collaboration to build an empirical base of research to better understand the implications of agrifood globalization.

Regimes Analysis

We employ an agrifood regimes conceptual framework to interpret the events of the case (see Friedmann and McMichael 1989; McMichael 2005, 2009a, 2009b).[3] Regimes approaches organize history into stable global trade arrangements and their symbiotic governance mechanisms. Contradictory relations within the regime generate crises and decay that produce a period of transition to the next regime. Regimes approaches support a structured method of analysis of the global political economy of agrifood by examining the historical geo-politics that underpin the stable periods of capital accumulation and the transitional periods between regimes (Campbell and Dixon 2009).

The Settler-Colonial Regime (1870s-1930s) dominated by Great Britain matured during the late 1800s as the core extracted natural resources from the periphery countries to support industrial development. This first food regime combined tropical imports from the colonies with grains and livestock from the settler states to provide low-cost foods for Europe. The global

[3] The Winter 2009 special issue of Agriculture and Human Values (Vol. 26, No. 4) titled Symposium on Food Regimes Analysis provides a valuable overview.

depression of the 1930s, combined with decolonialism and World War II, eroded the hegemony of the British regime (Friedmann and McMichael 1989; McMichael 2005, 2009b).

After World War II the Agricultural Surplus Regime (1950s-1970s) emerged as the US emphasized commodity programs over rural development and exempted agriculture from the global trade talks (GATT).[4] In this second food regime the US employed its food surplus within the supportive GATT environment as a food weapon in strategic postcolonial Cold War states. This food aid subsidized wages in developing countries and created global supply chains that further diffused the US diet. Many countries and former colonies were transformed from food self-sufficient to importing countries. Globalization in the 1970s compromised the stable political economic arrangements that supported this regime. Factors including the demise of the Bretton Woods Agreement, the delinking of the US dollar from the gold standard, the European Union's export subsidy system, and emerging economies such as Brazil, China, and India hastened the decline of the US regime (Friedmann and McMichael 1989; McMichael 2005, 2009b).

While there is debate regarding the existence and characteristics of a new regime (see McMichael 2009a),[5] at least four titles for the nascent third regime have been advanced: the Corporate-Environmental Food Regime (Friedmann 2005; 2009); the Corporate Food Regime

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[4] The agricultural sector trade was initially excluded from the General Agreement on Tariffs and Trade (GATT) because agriculture unique; it contributed to national food security and political pressure was substantial to protect the declining sector from the full competition of global capitalism.

[5] For example, Pritchard (2009) maintains that food regimes approaches have limited predictive utility and are therefore best used as a tool of hindsight. Dixon (2009) advances a Nutritionalization Rood Regime whereby the bifurcation of class diets has distributed healthy foods to affluent consumers and increasing malnutrition to less affluent peoples. Finally, Campbell (2009) expands on the works of both Friedmann regarding ecological aspects and McMichael regarding a Food from Nowhere position to advance the Food from Somewhere alternative to the corporatization of the agrifood system.

(McMichael 2005; 2009a); the Financialized Food Regime (Burch and Lawrence 2007; 2009); and the Neoliberal Food Regime (Otero and Pechlaner 2008; Pechlaner and Otero 2008, 2010).

Friedmann's (2005) Corporate-Environmental Food Regime is based on a convergence of corporate greening and green agrifood social movements whereby global agrifood retailers service subdivided class diets of transnational rich and poor consumers. In the aftermath of World Trade Organization (WTO) failures to regulate trade disputes, global retailers enacted private standards to certify green foods and protect their private brands in response to social movement demands for environmentally-friendly foods. This private standard-setting process bifurcates the agrifood system into standardized products targeted to low-income consumers and quality-audited foods for high-income consumers. The nascent Corporate-Environmental Food Regime is characterized by growing tensions between corporate, state, and social movement actors to define the parameters of the regime.

McMichael's (2005; 2009a; 2009b) Corporate Food Regime focuses on the globalization project's efforts to eliminate historical forms of peasant agriculture in favor of a global agrifood system based on neoliberal restructuring. Globalization is an ideologically-driven political project designed to weaken social-democratic successes and redistribute income along class lines. Neoliberalism enhances capital accumulation by removing the protections subordinate groups secured through social movement activity within supportive social-democratic states during the second regime. This Corporate Food Regime employs the WTO, IMF, World Bank and associated free trade agreements as institutional mechanisms to impose agrifood restructuring on the global South. A result is increased market consolidation and concentration in agrifood sectors.[6] Despite the rhetoric of free trade, the global North continues to protect its agricultural industries and dump surplus commodities into the global South with disastrous effects on indigenous producers and agro-ecosystems. Structural adjustment policies force a proliferation of agro-exporting from the global South to service debt and facilitate capital mobility. Accumulation by dispossession generates a reserve labor force for agro-exporting. Under the Corporate Food Regime nation-states are forced to shift their focus from national development strategies to global credit worthiness and agro-exporting. Resistance movements such as Via Campesina challenge the Corporate Food Regime and call for food sovereignty and the rights of indigenous peoples.

Burch and Lawrence (2007; 2009) present the Financialized Food Regime which focuses on the radical transformation of financial relations and the food retailing sector. This transformation reorganizes global commodity chains in the favor of supermarkets, fast food companies, and institutional food supply companies to the detriment of agrifood manufacturing firms. Through strategic alliances with financial institutions and creative financial instruments, global agrifood retailers organize their own flexible supply chains to service newly developed store brands and therefore avoid their historical dependence on established agrifood brands. Financialization refers to trend away from a focus on the long term production of food to short-term profits generated by capital mobility and speculation in agrifood enterprises. They provide the examples of Goldman Sachs investing in poultry production in China and other forms of direct investment in agricultural land for production (land grabs) to support their point. They conclude that these globally-focused fractions of capitalism have shifted the policy focus of

[6] Liberalization of FDI and privatization of grain marketing has consolidated the grain trade in Mexico with firms like Cargill, ADM (and its Mexican partner Maseca), Arancia (American Corn Products), Pilgrim's Pride, and MINSA (owned by an American investment bank) dominating the sector (Rosset 2006).

nation-states from social safety-net programs to profit maximization where shareholder value is the key measure of performance. Profit maximization strategies based on flexible systems of production, including contracts rather than formal ownership, developed in the global North are being exported to the global South as part of this new model of shareholder capitalism.[7]

Pechlaner and Otero (2008; 2010) advocate the concept of the Neoliberal Food Regime focused on the increasing inequalities between the North and South as a result of trade liberalization and neoliberal globalism (Otero and Pechlaner 2008). Focusing on the impact of NAFTA on Mexico, they build upon McMichael's Corporate Food Regime but amend it to focus more specifically on the ideas of neoliberal globalism and neoregulation. Neoliberal globalism is the ideological underpinning of corporate behavior that seeks flexible accumulation opportunities. Challenging views that minimize the role of the nation-state in the face of globalization, neoregulation recenters it as the organizational structure that imposes the market as the self-regulating governance mechanism under the globalization project. Their market focus, agrifood biotechnology in Mexico, is supported by WTO protocols but is also resisted strongly by peasant social movements (e.g., Via Campesina). In their view, the nation-state assumes the role of neoregulator as the globalization project is implemented in each country with varying results depending on the relative autonomy of the state in relation to corporate and social movement actors, as well as the shifting influence of fractions of the state in the face of neoliberalism. While McMichael employs a world systems analysis with global level actors, Otero and Pechlaner focus on the nation where the social contradictions that define the behavior of actors (groups and/or social classes) manifest in the form of social resistance. Through neoregulaltion, the state mediates the contested formulation of public policies that constrain or

[7] Shareholder capitalism refers to the process through which large institutional investors have replaced individual stockholders as the major investors in public corporations.

enable the actions of TNCs and thereby restructures the political economy of the region. Pechlaner and Otero (2010) call for more empirical work at the regional level on how the neoliberal regime shapes North-South relationships as part of the globalization project.

While there are substantive differences among the perspectives, the authors generally agree that during this transition phase to the third food regime flexible forms of accumulation are re-orienting and re-regulating the arrangement and stabilities of the previous regime. Neoliberalism provides the ideological underpinnings of these socio-economic changes as TNCs drive the process of neoliberal restructuring that has transformed agrifood supply chains in favor of capital over subordinate groups. This flexible accumulation system of class diet creation is diffused around the globe as new territories in the global South are integrated into the supply chains that service the global North. TNCS, with the help of global governance organizations, diffuse the globalization project within nation-states, who through neoregulation, mediate the contradictions and class conflict.

The Poultry Industry in the United States

The poultry industry in the United States first emerged in the 1930s in DelMarVa (Delaware, Maryland, and Virginia) as a system of independent growers, processors, feed dealers, and distribution systems. Synthesized vitamins allowed chickens to live indoors fulltime, government and industry research improved genetics, feed conversions, and poultry health, and rural electrification modernized poultry housing. The size and concentration of growout facilities increased (Reimund et al. 1981). Government programs during World War II nationalized DelMarVa's production. The southern US (e.g., Georgia, Alabama, and Arkansas) rapidly increased production to fill the void. Integrators built a Southern Model that took advantage of small and/or marginal farmers accustomed to sharecropping and non-union and minority-oriented processing (Constance 2008; Gisolfi 2007; Griffith 1995; Kim and Curry 1993; Striffler 2005). Production contracts were the key feature that allowed the integrators to expand their operations without incurring the fixed costs of land and growout buildings. Contract growers mortgaged their land to obtain loans to build single-use growout buildings in which they grew the integrators' birds on a sharecropping arrangement (Constance 2008; Gilsolfi 2008; Heffernan 1984). These poultry agroindustrial districts have been interpreted as early forms of flexible accumulation (Boyd and Watts 1997).

Commodity cycles drove down prices and enhanced consolidation as smaller firms were absorbed. Early integrators such as Ralston Purina divested their interests to regional firms such as Tyson and Pilgrim's Pride. Through vertical and horizontal integration, the industry developed regional monopsonies whereby the poultry grower had only one firm to contract with. Authors have noted asymmetrical power relations regarding these concentrated markets (Constance et al. 2012; Heffernan 2000) and contract growers (Breimyer 1965; Davis 1980; Gisolfi 2007; Heffernan 1984). The integrators have exported the model globally, and into other commodities (Constance and Heffernan 1991; Thu and Durrenberger 1998). For example, in Mexico Pilgrim's Pride and Tyson are the second and third largest poultry firms (Constance et al. 2010).

The Poultry Industry in Mexico

The case of the poultry industry in Mexico is organized into three sections, which are divided chronologically: pre-1984; 1984 to 1994; and post-1994, based on particular socio-economic regimes that influenced the trajectory of poultry industry modernization. Each of these sections provides an overview of the changes in the poultry industry through an analysis of the nexus between the state (Mexican government and related policies/laws), the market (activities of corporations), and social groups (the Ejidos).

The Pre-1984 Period: State Supported Modernization

The development of the modern poultry industry in Mexico was facilitated by state intervention beginning in the 1950s, although prior to this time, the Mexican State provided various programs in support of poultry production. One initiative was the land reform project initiated by President Cárdenas in the late 1930s that redistributed land to the campesinos as part of the ejido system. As part of the import substitution industrialization program, he also created finance institutions to promote agricultural modernization (Gordillo 1979). While the Banco Nacional de Crédito Ejidal was created to provide credit support to the ejidatarios, the Banco de Crédito Agricola was created to provide financing for small private producers. In the 1940s rural development programs provided technical assistance associated with the Green Revolution (Aboites et al. 2007). Although these development programs were administered very unevenly and with highly variable results (Gordillo 1979; Otero 2004), as a result of these actions the agricultural growth rate was 9.1% annually in the period 1945-51 (Del Ángel 2005).

The modernization of the Mexican poultry industry followed a similar uneven pattern with spatial concentrations in the south region of the State of Coahuila specializing in breeding stock and egg and broiler production (Interview 1, 2009). In the 1940s specialized hatchery and feed mill businesses emerged that provided inputs for campesinos growing the “double use” chickens.[8] In the 1950s entrepreneurs began to employ improved genetics sourced from the US and the size of the flocks grew rapidly from around 3,000 birds to up to 50,000 (Interview 1, 2009; Interview 2, 2009). During this same time an outbreak of Newcastle disease wiped out 80% of poultry production, resulting in a rapid increase in imports from the US (Aguirre 1980; Real 2005).

In the 1950s the government created two essential initiatives to support the recovery and modernization of the poultry industry. The first was FIRA (Guarantee Fund for the Promotion of Agriculture, Livestock and Poultry) created by presidential decree in 1954. FIRA was established as a legal fund administered by the federal government, in which the fiduciary agent was the Bank of Mexico. Monies from the Bank of Mexico were administered through FIRA to private banks to provide low interest loans to the agricultural sector. During this time agricultural credit was scarce and expensive due the limited ability of small farmers to compete in the market and the risky nature of the agricultural sector. FIRA was designed to address this crucial constraint to agricultural development (Del Ángel 2005).

The National Campaign of Poultry Recuperation of 1955 was designed to rebuild poultry production after the disease outbreak, fulfill domestic poultry demand, achieve national self-sufficiency in eggs, avoid foreign dependence, and thereby reduce imports (Aguirre 1980; Hernández et al. 2010; Real 2005). The Campaign increased credit and technical support through the National Bank of Foreign Trade and Compañia Exportadora e Importadora S.A. (CEIMSA) (Aguirre 1980). CEIMSA provided a warranty price incentive to increase egg production. The Campaign created 32 pilot poultry centers (one per state), as suggested by Purina, to teach and diffuse modern poultry practices, provided improved genetics to the small private farmers and

[8] The term refers to the traditional form of poultry used for both eggs and meat. In the 1950s new genetic lines for meat production differentiated the industry into egg and meat sectors.

ejidatarios, and barred imports of poultry from the US (Aguirre 1980; Hernández et al. 2010; Real 2005). Although the rate of egg and poultry consumption was increasing due to population growth and urban migration, due to support from the Campaign combined with the overall modernization of the industry in five years (1956-1960), self-sufficiency was achieved (Aguirre1980).

In the 1960s the "Alliance for the Progress" provided additional resources to FIRA, as did the International Development Bank.[9] Because the guaranteed price was well above production costs (Interview 1, 2009; Interview 5, 2010), a series of egg overproduction crises drove many small producers out of business. Some of the larger producers moved into vertical integration to survive (Aguirre 1980; Del Ángel 2005). The focus on integration revealed the advantage of linking improved genetics, with scientifically-balanced feed, to technologically-sophisticated grow barns, to pharmaceuticals for animal health maintenance in the large flocks. Supported by these government initiatives, national and transnational companies began to coordinate and create a modern, integrated poultry system, with access to balanced poultry feed the key component for economic survival (Aguirre 1980). Those firms that did not survive were often bought by the integrators or became sharecroppers (aparceros) linked to the integrators.

The Poultry Recuperation Plan allowed the importation of large amounts of inputs, as well as the creation of Mexican subsidiaries of US-based TNCs (Aguirre 1980; Alonso 1996; Interview 1, 2009). Many aspects of modernization were introduced by the TNCs (e.g., Anderson Clayton, International Multifoods [Hacienda in Mexico], and Ralston Purina) and innovative local private producers (Alonso 2000). Purina started as a feed supplier and soon expanded its

[9] The Alliance for Progress was a US-sponsored program created under the Kennedy Administration to provide financial support pro-Western forms of development in Latin America to counter the success of the Cuban Revolution.

investments creating several subsidiaries such as Nutricos, who by the early 1960s controlled 25% of the national poultry-feed market (Aguirre 1980; Alonso 1996). Purina also brought the contract/aparcería system to the central part of Mexico. This system gave poultry producer day-old chicks, feed, vaccines, technical assistance, and credits for poultry and feed production. Purina spread the modern system through training courses and visits to US poultry centers, and promoted the introduction of new poultry consumption patterns (Real 2005). As the poultry companies consolidated their position during the 1950s and 1960s, the National Poultry Producers Association, and many state poultry association leaders, warned that the foreign enterprises would control poultry production in Mexico. The combination of reduced government support, growth in the presence of integrators, and smuggling pushed many smaller producers out of business in the 1960s (Aguirre 1980; Alonso 1996; Hernández et al. 2010).[10]

However, in the Cold War environment and the pro-nationalist discourse during the 1970s, new projects financed with public and private monies emerged to encourage the construction of poultry facilities for the ejidatarios and small, private producers. The goal of these measures was to consolidate the modernization of the agricultural social sector and establish economic barriers to large foreign investments (Del Ángel 2005). For example, poultry producers benefitted from the low interest rates for financing as the majority of FIRA funds went to the livestock sector (Del Ángel 2005). Some of the sharecroppers linked to integrators took advantage of this financing to modernize their operations. Also, under the Land Reform Law of 1971 agricultural FDI in the ejido lands was restricted. A contradiction emerged as some parts of the government wanted to modernize agriculture while at the same time the law banned FDI with the ejidos as part of the social sector. For example, through the private sector some government

[10] Egg smuggling started in the 1960s, followed by the smuggling and dumping of frozen leq quarters in the 1980s, which continues today (Bloomberg 2011).

officials had already developed economic relationships with Purina and some were in favor of further liberalization of FDI (Real 2005).[11] But because the law restricted FDI in the social sector, it was necessary for the government to be the main provider of credit to small production units such as the ejidos to support agricultural modernization (Gordillo 1979).

An overview of the La Laguna Region is helpful in explaining the modernization of the poultry system, including the sharecropper/ aparcería development. In the absence of a well-established credit system in the region during the 1940s, forms of contract production based on sharecropping emerged that allowed cotton and other crops to be grown (Bartra 2006; Luévano 1995; Salas 2002). In the 1960s the Banco Nacional de Crédito Ejidal became a major provider of credit for ejidatarios to finance cotton, alfalfa, and water wells in La Laguna and elsewhere (Luévano 1995).

In this period the largest poultry operations were the feed factories and hatcheries that controlled the commodity chain and the small producers. Through the 1970s the proportion of small poultry producers was still high with 83 poultry associations reporting 2832 operations with less than 3000 chickens (Real 2005; Aguirre 1980). In 1962 the Mexican government created the National Union of Poultries that consolidated the state and regional association under one trade association. This Union worked with the Poultry National Committee (1958), and its successor the Poultry National Planning Committee (1971), to try to balance supply and demand. The National Poultry Plan (1975-1980) promised to control the groups with oligopoly tendencies, create national poultry breeding lines, and promote feed plants controlled by the poultry producers. But these numerous attempts to resist corporate integration failed due to

[11] Mexican law allowed FDI in the private sector as long as Mexican interests controlled at least 51% of the investment.

power of the poultry integrators, the ideological change in some members of the government elite and corruption (Aguirre 1980).

In the 1970s the government created the Institutional Program for Rural Development (PIDER) with international financial resources, which subsidized poultry facilities for ejidatarios through credit from agricultural banks or FIRA. In the 1980s the high oil prices allowed the government to increase the expenditures to the social sector to support modernization of the ejido lands. Corrupt corporatist practices and political manipulation contributed to the failure of several of these programs. Although many campesinos became poorer or were forced to emigrate, some learned to manage their farming operation and pay off their debts (Gordillo 1979; Hewitt 1999).

During this time there were already a few successful vertically-integrated operations. Although foreign firms were restricted from directly producing poultry, the link between the TNCs and the local private poultry investors was very close. For example, in the 1960s the major poultry company Bachoco established strategic collaboration with Purina that lasted for many years (Hernández et al. 2010). The regular upgrading of production technology and equipment cemented the link between the local private enterprises and the poultry TNCs (Alonso 1998; Martínez et al. 2010; Vidaurràzaga 2009).

One of the successful private enterprises was started by Manuel Villegas Torres in the La Laguna Region. In 1952 Villegas started as a small poultry producer but expanded in response to the Recuperation program that offered fixed payments for eggs (Interview 5, 2010). Following a pattern of vertical integration, in 1961 Villegas created El Trasgo in Mapimi, Durango. As part of the integration plan, in 1972 Villegas developed Provemex, a joint venture in Venezuela to source technology. After obtaining his Master of Business Administration degree at Cornell University in 1968, Mr. Villegas' son Rafael returned to Mexico and worked in feed and genetics companies before taking over as president of El Trasgo. El Trasgo was soon one of the largest poultry complexes in Latin America (Villarreal et al. 1998). Although it was difficult for poultry producers to survive the price instability in the 1980s, special government policies such as a low tax rate and the ability to borrow money from their own tax income provided advantages for the large companies compared to the smaller ones.[12]

In response to pressures from large landowners and after passage of the Law of Agriculture Promotion (Ley de Fomento Agropecuario) in 1980, the system of public support for the ejido tenure system was changed to allow local private investment on ejido land. The new law allowed the "performing" ejidos to enter into business arrangements with foreign capital (DOF 1981a, 1981b; Interview 5, 2010; Otero 1999). However, the main transformation was the change in the economic model in Mexico, which has reduced significantly the public expenditures, the amount of credits, and the public investment for the small farmers since 1984 (Aboites and Martínez 2007; Luévano 1995; Otero and Pechlaner 2010; Vidaurrázaga 1990). These changes marked the transition from the developmentalist period whereby the Mexican state protected the ejidatarios and small producers from the global marketplace to the beginning of neoliberal restructuring in Mexico.

From the Peso Crisis to NAFTA: The Entry of Tyson and Pilgrim's Pride (1984-1994)

[12] To help national companies survive the price instability, the government allowed them to postpone tax payments and use those monies to expand their operations (Monterrosa 2009).

As part of the resolution of the Peso Crisis of 1984, the agreements between the Mexican government and the IMF and World Bank accelerated the liberalization of the agricultural sector and increased FDI (Bartra 2006; Bartra and Otero 2007; Gordillo and Wagner 2005; Otero 2004). Miguel de la Madrid of the PRI (Institutional Revolutionary Party) was President of Mexico during the Peso Crisis and negotiations regarding the structural adjustment programs. During this time a group of important leaders left the PRI and formed another party (Democratic Revolutionary Party) because they thought the structural adjustments were against the interests of the majority of the Mexican people.

In the La Laguna Region there were two significant trends related to the type of associations between producers and companies that emerged. Larger producers accelerated their vertical and horizontal integration activities (Luévano 1995). And, TNCs increased FDI in poultry production through business contracts with the largest local producers (Villareal et al. 1998). Both trends were enhanced by government policies implemented in the developmentalist period and also by those policies linked to neoliberal restructuring. The increased use of sharecropping allowed the firms to maintain control over the production process without increasing their fixed costs in land and buildings and thereby spread out the risk between the firms and the sharecroppers (Hernández et al. 2010; Real 2005). The rapid growth of the urban population and per capita poultry consumption provided additional incentives for Mexican and TNC poultry firms to expand (Martínez et al. 2010; SAGARPA 2005; UNA 2010; Yañez 2007).

FIRA´s support for the development of associations between private investors (first mostly local businesses, but later also TNCs) and ejidatarios in the early 1990s is a concrete example of the policies that facilitated the expansion of the poultry industry in the La Laguna Region. The government´s focus on paying down the foreign debt, as well as new credit restrictions, resulted in a reduction in public credit for rural producers (Bouquet 2007). Also as part of the structural adjustment programs, in 1992 the Salinas Administration reformed Article 27 of the Mexican Constitution to allow restricted privatization of ejido lands. Ejidos were now able to enter into business arrangements and convert their lands into the private domain (Mackinlay 2006). The ruling PRI party pressured the Consejo Nacional Agropecuario (Agricultural National Council – CNA) to support the change. Many of the CNA members were vulnerable small and moderate-sized producers who later went bankrupt during the second peso crisis of 1992. In 1992 Mr. Eduardo Bours of the largest poultry company, Bachoco, and a close friend of president Salinas, became the CNA President. Bours was also a major NAFTA negotiator. The Consejo Agrario Permanante, which represented the eidiitarios and small private producers, had limited involvement in the NAFTA hearings (Mackinlay 2006; Mackinlay and Otero 2004). The production sector was divided into an expanding larger operations and declining small operations.

The government-supported associations between Mexican agricultural companies and the ejidatarios experienced more failures than successes (Dávalos 2000). But, the associations between local poultry producers and poultry TNCs tended to be more successful due to their ability to consolidate market power in the poultry sector. For example, the Gallina Pesada/Pilgrim´s Pride case began in 1987 when Pilgrim purchased four vertically-integrated operations serving Mexico City from Purina. With FIRA funding, in 1989 eight investors established Gallina Pesada to produce breed chickens (Interview 1, 2009; Interview 5, 2010). From 1987 to 1991 Pilgrim tripled the size of the Mexican operations, which grew to 20% of Pilgrim's total revenues by 1994 (Funding Universe 2008).

As noted above, the Villegas enterprise expanded its dominant position in the poultry industry in the developmentalist period. By 1985 El Trasgo was number one in breed hen production (Interview 1, 2009). In 1984, just after the Peso Crisis, El Trasgo bought the remaining interest in Provemex and took advantage of FIRA policies to support associations among private investors and ejidatarios. It initiated an agreement with 10 ejidatario groups through the Program of the Fund to Support Ejidos Groups (Interview 5, 2010; Mirande 2008; Villarreal et al. 1998). In 1986 Tyson, El Trasgo, and C. Itoh of Japan created CITRA, a joint venture business arrangement to combine Tyson technology with El Trasgo production to create products to sell in Japan. To support the project, the Mexican government granted maquila status to the joint venture (Interview 5, 2010).

El Trasgo's project with the ejidatarios included a total of $270.5 million pesos (US$27.5M). Sharecropper partners contributed $14 million, banks provided $25.7 million, and the federal government through FIRA contributed $230.8 million (Interview 5, 2010; Villarreal et al. 1998). The aparcería contract was structured whereby the company provided the one day old chick, poultry feed, medicines, vaccinations, disinfectants, in addition to loans, technical assistance and training courses, which were subsidized by FIRA. The aparcero provided the poultry facilities (with FIRA credit), labor force and farm expenses such as electricity, water, gas, wood shavings for poultry bedding, and disposal of the chicken manure. At the end of the flock, the value of the product was divided between the aparceros and the integrating firm based on the number of kilograms of chicken produced. Production incentives were included in the contract based on a comparison of the individual flock with the other aparceros (Interview 5, 2010; Villarreal et al. 1998).

In 1992 Nacional Financiera, through the new Fund of Support to Ejido and Small Producer Groups, financed almost all the program to establish 32 more aparcero groups linked to El Trasgo (Interview 5, 2010; Villarreal et al. 1998). In 1994 Tyson acquired majority interest of the CITRA joint venture and thereby gained direct access to the Mexican domestic market through El Trasgo (Interview 1, 2009; Tyson Foods, Inc. 2012). This system was so successful that there was a waiting list of farmers interested in participating in the program. Bachoco also utilized the program and carried out some sharecropping agreements starting in 1974 (Interview 5, 2010).

The structural adjustment programs reduced public resources available to the ejidatarios (Martínez et al. 2010; Pechlaner and Otero 2010). The political orientation that protected the ejidatarios from the corporations through the 1970s was replaced with the economic perspective based on trade liberalization that emerged in the 1980s. Inflation, price instability, high interest rates, and increasing economies of scale contributed to 27% of the poultry producers going out of the business between 1980 and 1990. A new business model was solidifying following the U.S. model of vertically-integrated poultry companies (Alonso 1996; Hernández et al. 2010; Real 2005).

The Post-1994 Period: Neoliberal Policies and the Consolidation of the TNCs

During the 1990s a major outbreak of Newcastle disease and the financial crisis forced many producers either out of business or to sell out. The two major companies Simon Bolivar and Nochistongo were sold. Bachoco bought the egg business and Tyson the broilers, thereby contributing to increased horizontal integration (Interview 1, 2009; Interview 3, 2009; Interview 4, 2009; Luévano 1995). To avoid mass bankruptcies, the government created a fund that paid 98.6% of the debt generated by the financial crisis (FIRA 2008). This was an important support for the large poultry firms. Bachoco doubled its growth rate and El Trasgo expanded to control 80% of production in La Laguna Region (Hernández et al. 2010).

In 1995 NAFTA provided further stimulus by relaxing FDI restrictions and eliminating tariffs on corn imports (Zahniser and Coyle 2004). Tyson bought majority ownership of El Trasgo, changed the name to Tyson de Mexico, and became the largest producer of value-added chicken in Mexico (Tyson Foods, Inc. 2005). The number of growout barns grew from 138 in 1997 to 730 in 2008. By 2008 Tyson had 70% of poultry and 50% of egg production under the contract/ aparcería system (Interview 4, 2009); 71% (105 partners) of the contracts were with ejidatario aparceros and 29% (16 partners) with small private producers (Mirande 2008). Tyson de Mexico extended the contract/ aparcería system into the breeding farms, which allowed it to focus its investments in sales and distribution (Interview 1, 2009). At the same time, Pilgrim became the majority stockholder of Gallina Pesada, purchased the remainder of Purina's operations in Central Mexico and controlled 19% of the Mexican market (Interview 1, 2009; Interview 5, 2010; Funding Universe 2008; Pilgrim's Pride 2005).

Changes in FIRA's organization and mission facilitated the emerging neoliberal regime. The changes were designed to convert the producers (contract farmers) into suppliers to agro-industry, as the focus switched from funding ejidatorios to funding private producers as contract growers. Under this new approach FIRA became the financial intermediary that fulfilled the capitalization requirements for agricultural production. The goal was enhanced flexibility through a client-oriented focus that provided standardized products, as well as specialized products as requested by food service industries (FIRA 2008). The preference for working with private contractors linked to TNCs instead of ejidatarios illustrates FIRA's shift to neoliberalism (Hernández et al. 2010; Martínez et al. 2010; Real 2005).

NAFTA also brought corn liberalization. Due to the cultural significance of corn and concerns over negative impacts on Mexican producers, the corn trade barriers were to be reduced gradually over 15 years (Zahniser and Coyle 2004). But, beginning under the Ernesto Zedilllo

Administration and accelerating under the free-trade oriented Vicente Fox Administration, the quota of US imports was increased beyond NAFTA levels. The planned 15-year transition period was compressed between 1994 and 1996, when prices fell 48% (Patel and Henriques 2004). According to Mexican activists (OCA 2004), a government advisory panel dominated by large-scale Mexican corn consumers, including panel members Cargill and ADM, were instrumental in accelerating the pace of liberalization, which jeopardized Mexico's corn farmers while benefitting 10 Mexican and transnational firms, including Bachoco, Cargill, ADM, Tyson, and Pilgrim's Pride.

In the first year of NAFTA US corn exports to Mexico doubled. By 2003 one-half of the corn used in the Mexican poultry industry was imported from the US (Juárez and Hernández 2003; Oxfam 2003). The large, vertically-integrated livestock corporations bought the US-sourced corn at below the cost of production, which provided them advantages over Mexican producers who grew their own feed. As a result, many of the medium-sized Mexican operations could not compete and were consolidated under the larger, vertically-integrated operations such as Tyson and Pilgrim (Otero 2011; Zhaniser and Coyle 2004).

Annual illegal immigration from Mexico to the US jumped 54 percent after NAFTA (Passel 2006; Ross 2008). By 2003 the price of corn had fallen by 70%. An estimated 600 peasants were forced off their land every day (Leight 2003; Weiner 2002). By 2004 the effects of NAFTA had driven 1.2 million farmers off the land (Judis 2008). While many campesinos migrated, other farmers adapted to the neoliberal reforms and economic crises by combining local corn production with US-bound labor migration (Fitting 2006). Ironically, many of the migrants ended up working in the poultry and meat processing plants in the US (Marrow 2011; Steusse 2009).

In 2003 Oxfam concluded that there is a direct link between government agricultural policies in the US and rural misery in Mexico; nowhere is the problem of agricultural dumping "more powerfully apparent than among Mexico's corn farmers" (Oxfam 2003:1). There have been numerous protests by campesino groups such as Via Campesina against the negative impacts of NAFTA on Mexican agriculture and the associated growth of large livestock operations (Naylor 2001; Ross 2008). A major concern was the contamination of Mexican corn germplasm by imported genetically-engineered corn, as well as the Tortilla Crisis of 2007 due to US subsidies for ethanol production that drove up the price of corn and tortillas (Ross 2008).

The policies implemented after NAFTA changed the regulatory regime of the agricultural sector of Mexico (Maya and Hernández 2010; Pechlaner and Otero 2010). These changes supported the consolidation of the larger poultry companies to the detriment of the compesinos and ejidatarios (Constance et al. 2010; Real 2005). NAFTA facilitated the emergence of a continental animal products complex whereby Bachoco (32%), Pilgrim (13%), and Tyson (12%) accounted for about 60% of the Mexican broiler market, a level of economic concentration higher than in the US (UNA 2010; Zahniser 2005).

Bachoco is one of the world's ten largest poultry producers with sales of US $1.8B in 2009. It is a vertically-integrated company with chicken, eggs, pork, turkey, feed, and other business sectors. With headquarters in Celaya, Guanajuato, the company employs 23,000 people in Mexico in its 60 distribution centers and 9 vertically-integrated complexes with more than 700 farms, 14 processing plants, and 16 feed plants. Its products are mainly sold through supermarkets, such as Wal-Mart and Soriana, and foodservice companies such as KFC, Burger King, and McDonalds (Bachoco 2008; Funding Universe 2012; PRNewsWire 2011). Bachoco was founded in 1952 in the state of Sonora by the Robinson Bours family. In the 1960s eggs production became the primary focus of the company. In 1971 Bachoco began poultry production, which surpassed eggs by 1977. By 1988 Bachoco was the largest poultry producer in Mexico and continued its vertical integration plans through the 1990s, including the acquisition of Mexico's fourth largest chicken producer, Grupo Campi in 1999, and then controlled 31% of the market. In 2011 it held a 34% market share (Funding Universe 2012; PRNewsWire 2011).

Since the entry of Tyson and Pilgrim, Bachoco has followed a pattern of both vertical and horizontal integration to increase market share. Several of these new acquisitions included the aparcería system but in 2010 contracts only made up 5% of total poultry production (Hernández et al. 2010). In 2011 and 2012 Bachoco acquired more firms using the contract system. In some regions (Saltillo and Monterrey) the aparcería system now makes up about 60% of production, while in other regions (Torreon and Durango) direct ownership is still the predominant model of production (Interview #6, 2012). In 2011 Bachoco acquired OK Industries, one of the largest vertically-integrated poultry companies in the US with $600M in sales. Mr. Rodolfo Ramos, Bachoco's Chief Executive Officer, stated, "This acquisition is one of the most transcendental steps for Bachoco, since it is our first international acquisition and first entry into the U.S. poultry market" (PRNewswire 2011:1).

In 2007 Pilgrim's Pride became the largest broiler producer in the US and the world with $7.1B in sales (Pilgrim's Pride 2007; 2010). In 2008 Pilgrim was bought by JBS of Brazil,[13] the largest meat company in the world, with sales of $30.3B. During the 2000s, JBS bought numerous major beef companies in Argentina, Australia, and the US (JBS 2009). In 2009 Tyson had sales of $26.7B (Tyson Foods, Inc. 2009). Mexico is Tyson's prototype for global expansion. "Tyson followed its American customers south – such as Wal-Mart, Burger King and Kentucky Fried Chicken – and doesn't shy away from taking on Industrias Bachoco, the local

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[13] Pilgrim's Pride used junk bonds to buy Goldkist in 2007. In 2008 the financial crisis and the increased price of feedstocks due to the ethanol boom forced Pilgrim's Pride into bankruptcy.

chicken plant" (Morais 2004:6).[14] Tyson's focus is now on the emerging economies with significant expansions in Brazil, China, and India (Tyson Foods, Inc. 2009).

Conclusions

The conclusions are structured to address two questions: (1) following Boyd and Watts (1997), to what degree has the US model of poultry production been diffused to Mexico, in particular the contract system; and, (2) following Pechlaner and Otero (2008; 2010), to what degree has the Mexican government facilitated this process through neoregulation.

The events of the case reveal that both endogenous and exogenous factors contributed to the development of the US model of poultry production in Mexico. Similar to events in the US South, a sharecropping system emerged and with government support, Villegas and El Trasgo adopted the contract/ aparcería system in poultry as part of the vertical integration efforts. Initially through the CITRA joint venture, and then through horizontal integration, Tyson invested in and then bought out El Trasgo, and Mexican endogenous innovation was incorporated into Tyson's global poultry empire. Exogenously, Purina brought the US model to Mexico in the 1950s. It provided technical assistance and credit in support of industry modernization and the contract/ aparcería model, including working closely with the government to develop poultry centers to diffuse modern innovations. Tyson and Pilgrim utilized both

[14] Wal-Mart entered the Mexican market in 1991 through two joint ventures with the major retailer Cifra, then bought majority interest in Cifra in 1997, and is now the largest retailer in Mexico (Funding Universe 2011). Burger King and Kentucky Fried Chicken also entered the Mexican market in 1991 (Burger King 2011; Chu 2003).

imported and domestic business models with merging with existing domestic firms to consolidate their dominant positions in the industry.

While there is evidence that Tyson's and Pilgrim's production is based on contracts, information available about Bachoco suggests that contracting is not their principal method of production, but is expanding (Interview #1, 2009; Interview 5, 2010; Interview 6, 2012; Hernández et al. 2010; Mirande 2008). Bachoco´s initial limited use of the contract model can be interpreted from two perspectives. It might be due to its sunk costs in a historical system of owned land and buildings and low-cost hired labor. It can also be interpreted as an example of a dominant national corporation's resistance to globalization. Regarding the first perspective, the growing evidence of Bachoco's increase use of contracts indicates it is shifting its historical preference for direct ownership. Similarly, it appears that while the resistance perspective may have been initially valid, is not well supported now given Bachoco's turn to contracts, as well as its recent acquisition of OK Industries in the US. The evidence suggests that Bachoco exercises its power supported in nationalist practices whenever it is convenient but also takes advantage of neoliberalist opportunities to expand regionally.

The events of the case suggest that Bachoco has embraced the US model of poultry production based on contracts and international expansion. It's acquisition of OK Industries provides it not only direct access to the US market, but also a working vertically-integrated operation similar to Tyson and Pilgrim. Further research on the transformation of Bachoco from the dominant nation firm to the aspiring TNC would be a valuable contribution to the literature on the globalization of the poultry industry. In summary, the adoption of the US model is uneven and heterogeneous, but the overall evidence, including Tyson's expansions into Brazil, China, and India, provides substantial support for the Boyd and Watts hypothesis that the US model is diffusing globally.

The case also indicates that there was a long history of government support for the campesinos dating back to the land reforms associated with the Mexican Revolution of 1910 and President Cardenas' policies that created financial institutions to provide credit and technical assistance to the small producers and ejidatarios. In the 1950s both the creation of FIRA and the National Recuperation Campaign supported the modernization of the poultry industry through low interest loans, subsidized markets, and import protectionism. In the 1960s FIRA expanded with financing from international sources but other government programs related to price supports and credit were reduced. At this time Purina and other sources increased their credit and technical support for poultry production. As a result of this process, national and international companies increased their role in the development of the poultry industry and accelerated vertical and horizontal integration. During this time Mexican poultry producer associations predicted that the foreign corporations would take over the industry; that prediction has at least partially come true.

Mexican Government policies regarding the poultry industry followed the same pattern through the 1970s. FIRA provided low cost loans to the small producers and the Land Reform Law of 1971 protected the ejidatarios from FDI. In the 1980s this trend changes as the Law of Agriculture Promotion allowed private investment in ejido lands and public expenditures for small farmers were reduced significantly, indicating a shift from the developmentalist to the neoliberal model.

The structural adjustment programs instituted after the 1984 Peso Crisis accelerated the liberalization of Mexican agriculture and increased FDI, thereby supporting the growth of the large poultry companies and the marginalization of the small producers. Mexico reduced its public expenditures to service the foreign debt. Under these circumstances the contract/ aparcería system received direct subsidies from the government through FIRA, supporting entry by firms like Tyson and Pilgrim. In the early 1990s changes in the Mexican Constitution allowed further liberalization of investments with ejidos and private producers creating the conditions for new business relations, such as Gallina Pesada. The associations with the ejiditarios tended to be less successful so the government shifted its focus to associations between the private producers and the large poultry companies, especially the TNCs. The FIRA association with El Trasgo is evidence of this point, which quickly expanded to the CITRA joint venture that included Tyson. The other example is the Gallina Pesada association with Pilgrim. After NAFTA, the government´s preference to link private producers to national and international poultry companies was institutionalized, signifying the solidification of neoliberalism. The Fox Administrations accelerated liberalization of the corn sector, accommodating the advice of major agrifood TNCs. The resulting negative impacts on the campesinos and ejidatarios is further evidence of this point.

Large firms like Bachoco, Pilgrim, and Tyson benefitted in this environment as small- and medium-sized companies went out of business resulting in rapid consolidation in the industry. Bachoco doubled its growth rate, Tyson bought out El Trasgo, and Pilgrim bought the rest of Purina and Gallina Pesada. By the end of the 2000s FIRA´s role had changed to a client-oriented focus addressing the flexibility needs of the large corporations. As a result of neoregulation carried out by the Mexican State under pressure from IMF and NAFTA, by 2008 the level of industry consolidation in Mexico surpassed that of the United States. While the corporations benefitted from these changes, NAFTA´s elimination of the corn tariffs contributed to campesino marginalization, migration to the North, and social movement resistance. For example, at the same time the corn imports increased, so did the social movements such as "Without Corn, There is No Country" (Sin Maíz, no hay País) and the Tortilla Protests of 2008.[15]

Regime analysis is useful for interpreting the dimensions of the case. The Corporate Food Regime approach is supported by several examples. Neoliberalism was imposed on the Mexican State through the structural adjustment programs in response to the debt crisis and the NAFTA liberalization of FDI and corn imports. The state shifted its focus from nationalist development policies in support of rural producers to accommodating the financial needs of private producers linked to poultry TNCs. These actions accelerated the process of accumulation by dispossession as campesinos were forced off the land and small and medium-sized poultry producers were forced out of business supporting concentration and consolidation in the Mexican poultry sector whereby Bachoco, Tyson, and JBS control over sixty percent of the market. The agrifood TNCs' role in accelerating the liberalization of the corn trade and the resulting emiseration of the campesinos and ejiditarios fits well with McMichael's Corporate Food Regime approach. While the creation of the regional (NAFTA) poultry complex supports his world systems orientation, it is interesting that JBS as a representative of the global South is now a major actor in this process of regional concentration and consolidation. Finally, social movement resistance to this process such as Via Campesina highlights the contested nature of the globalization project.

From the Financialization Regime perspective, the poultry contract based on sharecropping can be interpreted as an early form of creative financing that facilitated poultry industry development based on flexible forms of capital accumulation, which leads us back to the original ideas of Boyd and Watts. Additionally, FIRA's switch from a financer for the ejidatarios to financing private producers linked to the poultry TNCs supports this view. These

[15] For more information on the Tortilla Protests and the "Without Corn, There is no Country" social movement see Peabody (2008) and Campaña Nacional Sin Maíz, No Hay País (2012).

examples also fit well with the Neoregulation Regime perspective as it focuses on the specifics of the financialization aspect of neoliberalism as it is actually carried out within the Mexican State.

Evidence from the case supports strongly the Neoregulation Regime position regarding the Mexican state's management of the globalization project. The complex interplay of national and international corporate actors, government programs in support of both the campesinos and integrators, social and producer groups, and supra-national organizations illustrates the nation-specific attributes of neoregulation. The evidence reveals that neoregulation accelerated the diffusion of the US poultry model in Mexico as the Mexican state facilitated the poultry TNCs neoliberal globalism to the detriment of Mexican producers, the advantage of corporate actors, and the protests of social movement groups.

The tension between class fractions within Mexico manifested as early as the 1970s as groups worked to protect the campesinos from the poultry integrators. While some parts of the government wanted to modernize agriculture, the Land Reform Law of 1971 inhibited this agenda with the ban on FDI with the ejidos. The PRI split-up after the Peso Crisis revealed the pro-nationalist versus pro-globalist fractions with the ruling party. As part of the structural adjustments, the government pressured the Agricultural National Council to support the constitutional change that removed ejido protections and allowed FDI with the ejidos. The leaders resisted but yielded to political pressure, effectively splitting the poultry growers into large and small producers. Social movements such as Via Campesina and "Sin Maiz, no hay Pais" exposed and challenged the negative impacts of neoliberalism.

While the Corporate Food Regime perspective provides a valuable macro analysis of the process, it tends to obscure the role of neoregulation as the specific mechanism that allows TNCS to become dominant. The Neoregulation Regime provides a more detailed investigation of the tension between nationalist and neoliberlalist class fractions of the Mexican State. It exposes the contested terrain whereby neoregulation facilitates or impedes the globalization of the agrifood system in Mexico. Both types of actors, the dominant national firm Bachoco and the TNCs Tyson and JBS have been supported by neoregulation in Mexico.

It is still an empirical question as to whether local capitalists in the form of Bachoco will be able to survive or if they will be absorbed by the much larger TNCs of Tyson and JBS. Bachoco is emulating the pattern of Tyson and JBS and appears to transforming into a global actor. Following the pattern, it can be predicted that Bachoco will continue to expand in North America and also into Central and South America.

As the ideology of neoliberalism is enacted via neoregulation state by state as part of the globalization project, comparative analysis of the globalization of the poultry industry is needed to provide more evidence to evaluate Boyd and Watt's hypothesis of the global diffusion and dominance of the US model. Research on the poultry industry in Australia and Southeast Asia (Burch 2005; Dixon 1999) highlights the complexity and unevenness of globalization. Burch (2005) found that the Thai firm Charoen Pokphand was expanding aggressively in Southeast Asia using the contract model, while Dixon (1999) found that the traditional model of independent growers protected by nationalist policies prevailed in Australia. From the Financialization Regime perspective, investigations on to what extent Wal-Mart and other food retailers are driving the poultry commodity chain in Mexico and elsewhere are needed to fill gaps in the research on the global poultry commodity system (see Gereffi et al. 2005).

Mexico's proximity to the US facilitated its early adoption of the modern poultry model. That process, although incomplete, was accelerated through neoregulation. The fact that corporate concentration in the Mexican poultry industry is higher than that in the US provides telling evidence of the rapid process of agrifood globalization in the poultry industry and the continued use of state supports to advance the interests of the major poultry companies. The global diffusion of the model by firms like Tyson and JBS provides opportunities to investigate the complexities and specific geo-political circumstances to better understand the processes of neoregulation and its implication for nation-states, indigenous companies and rural producers.

Boyd and Watts focused on the labor regime in the agroindustrial poultry complexes in the US South. Regimes approaches combined with commodity systems analysis provide a broader optic that illuminates the mechanisms and impacts of neoliberalism as it is enacted within nation-states and structures labor processes. Oxfam's conclusion that US commodity programs are directly linked to rural emiseration in Mexico shows how remnants of second food regime policies from the North combine with third regime trade liberalization in the South to the advantage of dominant corporate actors. While this study provides support for more collaborative North-South research on the emerging third food regime, the globalization of economy and society as evidenced by the rapid rise of JBS of Brazil as the world's largest meat company, as well as Charoen Pokphand of Thailand and Tyson competing in Asia, problematizes the utility of the North-South dynamic. Is this evidence in support of Robinson's (2008) argument that neoliberalism has generated the rise of a transnational capitalist class that operates above the old North-South divides—in this case a global poultry cartel? Indeed, this research shows that as TNCs replace nation-states as the hegemonic actor, the South is moving North in the emerging third food regime.

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