Against the Grain

Globalization & Agricultural Subsidies in Canada and the US

by

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I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners. I understand that my thesis may be made electronically available to the public.

Abstract

This thesis investigates whether developments associated with globalization and regional integration have caused the levels of government support provided to agricultural producers in Canada and the United States to converge in a downward direction. The literature is sharply divided as to whether governments retain the ability to pursue an independent agricultural policy course. To shed light on this debate, the levels of government assistance payments made to farmers in six contiguous Canadian provinces and American states (Manitoba, Saskatchewan, Alberta, North Dakota, South Dakota, and Montana) are compared over the 1990-2001 period. This time-frame allows for sufficient periods both before and after the establishment of NAFTA and the WTO to study the effects of these developments on the relevant policy outcomes. After outlining the programs and policy changes that drove the shifts in levels of government support provided to farmers, the paper argues that although the levels of government payments made to farmers in the six sub-units converged in the mid-1990s, they diverged thereafter. The evidence drawn from this examination supports the contention that governments do possess considerable room to manoeuvre in the agricultural policy making arena and significant ability to chart an independent policy course.

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Introduction

Globalization and regional integration have raised serious concerns that governments are increasingly constrained in their choice of public policies and are increasingly unable to pursue an autonomous policy course. Echoes of this debate are evident in the area of agriculture where there is concern as to whether governments retain the latitude to maintain programs of producer support (such as subsidies) or whether subsidy levels provided to agricultural producers in industrialized countries will be forced to converge in a downward direction.

To the degree that economic integration constrains policy choices, these constraints should be evident in the agricultural sector. It has been an arena of significant economic integration as a result of the establishment of such international institutions as the World Trade Organization (WTO) and such trade agreements as the North American Free Trade Agreement (NAFTA).[1] Such international institutions impose rules and disciplines on member governments with the aim of reducing barriers to trade and eliminating policies that are thought to distort markets. Partly stemming from these developments, the agriculture sector is now considered to be one of the more open economic sectors in terms of trade.[2] Indeed, pressures to conform have seen governments reduce trade

[1] The WTO was established in 1995 and NAFTA subsumed the Canada-US Free Trade Agreement of 1989 when it went into effect in 1994.

[2] According to Zahniser et al, the US farm sector had an openness ratio of 0.52 as compared to 0.19 for the entire US economy. The openness ratio is calculated as the ratio of trade (exports plus imports) to total output. Steven S. Zahniser, Robert A. Hoppe, James Johnson, and David Banker. "Structural Change in an Era of Increased Openness: A Background Paper on the Structure of US Agriculture," Structural Change as a Source of Trade Disputes Under NAFTA. eds. R.M.A. Loyns, Karl Meilke, Ronald D. Knutson and

barriers and make policy changes. However, at the same time as governments have faced exogenous pressures to harmonize their agriculture polices, they have had to confront the domestic challenges related to the chronic income problems of farmers, resulting from environmental and market conditions.

A very interesting case for examining the effects of globalization and regional integration is Canada and the United States (US). These two countries are similar in terms of their agricultural and economic environments, trends in important economic variables found in each, and the issues and problems facing governments in both countries.[3] These similarities are further enhanced if one focuses on the neighbouring political sub-units such as those of the Canadian prairies and American great plains. Together, Manitoba, Saskatchewan, Alberta, North Dakota, South Dakota, and Montana share a similar geographic location and experience identical climatic conditions. They are also very comparable in terms of the particular commodity production mix of their respective agriculture sectors, and thus in terms of the market conditions they face. Moreover, the predominant commodities produced in these six sub-units – wheat, other grains, oilseeds and beef – are relatively far more open to trade and global competition than those produced in other regions of their respective countries.

Given the shared characteristics of their respective agriculture sectors and the exogenous pressures in common to all, one could reasonably expect that producer subsidies in the six sub-units would converge towards reduced levels with the

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Antonio Yunez-Naude, Proceedings of the Seventh Agricultural and Food Policy Systems Information Workshop (Winnipeg, Friesen Printers, February 2002): 8.

[3] Richard R. Barichello. "Overview of Canadian Agricultural Policy Systems," Understanding Canada/United States Grain Disputes, eds. R.M.A. Lyons, Ronald D. Knutson, and Karl Meikle, Proceedings of the First Canada/US Agricultural and Food Policy Systems Information Workshop, (University of Manitoba, Texas A & M University, University of Guelph, , April 1995): 37.

establishment of NAFTA and the WTO. Congruent with these expectations, the levels of government program payments provided to agricultural producers in Manitoba, Saskatchewan, Alberta, North Dakota, South Dakota, and Montana did converge in a downward direction in the mid 1990s, only to diverge again thereafter. These findings raise interesting and important questions regarding the issue of the constraining effects of economic integration on domestic policy choice.

Chapter 1

Literature Review

1.1 Convergence versus Divergence

The arguments found in the debates considering the effects of globalization and regional integration on domestic agriculture policy can be divided into two distinct camps. On the one hand, there is the position that governments are weakened by pressures associated with globalization and regional integration. According to these commentators, domestic policies are destined to converge towards less government intervention in the economy. For the authors discussing the agriculture sector, the eventual harmonization of agricultural policies is imminent. In contrast, the other perspective contends that the effects of globalization and regional integration are overstated. In the eyes of these analysts, domestic policies have not converged, and if they have, it has not occurred to the extent it is often described. For them, governments are still capable of pursuing an independent policy course. According to the authors discussing the agriculture sector who espouse this point of view, domestic forces are much more important in driving the direction of agricultural policy development. The following section outlines these debates.

1.2 Globalization and the State

As described above, the first perspective holds that globalization is constraining the ability of governments to pursue an autonomous policy course. According to the commentators taking this view, states have been super-ceded by transnational actors. These authors also argue that international institutions govern the global political economy on behalf of transnational corporations (TNCs).

According to this view, the coming of the new millennium marked a profound change in the global political economy and the role of the state in particular. As Farazmand describes it, "radical changes" signalled the onset of a "great transformation" and the rise of a "new civilization."[4] Gouveia's portrayal is similar: "globalization entails a radical change in strategies of capital accumulation."[5] Meanwhile, for Arrighi the emergence of the transnational enterprise "marks the end of the process of supersession of the Westphalia System and the beginning of the withering away of the interstate system as primary locus of world power." Similarly, in the view of Strange "governments of states had less control over their economies and societies than they did ten, twenty, or thirty years ago."[6] Finally, Hobsbawm concludes that as the world entered

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[4] Ali Farazmand. "Globalization, The State and Public Administration: A Theoretical Analysis with Policy Implications for Developmental States," Public Organization Review 1 (2001): 438.

[5] Lourdes Gouveia. "Global Strategies and Local Linkages: The Case of the U.S. Meatpacking Industry," From Columbus to ConAgra: The Globalization of Agriculture and Food, eds. Alessandro Bonanno, Lawrence Busch, William H. Friedland, Lourdes Gouveia, and Enzo Mingione, (University Press of Kansas, 1994): 125.

[6] Susan Strange. Mad Money: When Markets Outgrow Governments, (Ann Arbor: The University of Michigan Press, 1998): 180.

the new century "some features of the global landscape stood out." The first of which, was "the weakening of the nation state."[7]

According to Hobsbawm, there were two major causes of the deterioration of the nation-state. On the one hand the state was yielding power and purpose to proliferating supra-national regimes. On the other hand, the state was "losing its monopoly of effective power and its historical privileges within its borders."[8] For Hobsbawm, the forces of globalization had undermined the room to manoeuvre available to governments. In terms of such traditional roles as mediating the economy and redistributing wealth, governments had been made subordinate and obsolete by new transnational actors. Clearly, in the eyes of Farazmand, Arrighi, Strange, and Hobsbawm, the onset of globalization was an unprecedented phenomenon that brought forth extraordinary changes with significant socio-economic and systemic consequences. These changes and their consequences include the eclipse of state sovereignty, the containment of the policy options available to governments, the rise of governance of the global economy by international institutions on behalf of transnational corporations, and the eventual harmonization of domestic policies.

While these authors propose that the effects of globalization on the state are quite drastic, others such as McMichael take an even more extreme stance on these issues. For them, the state is the victim of a new process of colonialization by the forces of globalization resulting in the loss of sovereignty. For example, McMichael writes that "states increasingly assume, albeit unevenly or incompletely, the colonial posture: administering the colonizer's needs by organizing the exploitation of labour and natural

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[7] Eric Hobsbawm. Age of Extremes, (London: Michael Joseph, 1994): 575.
[8] Ibid: 576.

resources for banks and corporations."[9] According to Farazmand the "designers of the global capitalism" have been striving to create "a global empire of corporate barons whose rule of the world shows no tolerance for alternative social system perspectives, ways of governance and administration, and indigenous approaches to self-determination."[10] Thus, he writes, globalization has made states into "practical colonies" and thus put their "sovereignty at bay"[11] In reference to this concept O'Brien states "the end of geography is, on many respects, all about the end or diminution of sovereignty."[12] In O'Brien's view the end of sovereignty is the result the dismantling of government exchange and capital controls which allow for the freedom of capital flow across borders.

Meanwhile, McKenzie and Lee write that governments are increasingly coerced into making their territories more competitive domains for business by deregulating industries, reducing taxes, and privatizing services. The result, they say, is that "governments at all levels – local, state, and national – have lost the vestiges of unchecked economic sovereignty."[13] Supporting this interpretation, Koc states that "although the nation-state is still an important actor in the international arena, the pressures of the global economy and international rules and regulations have increasingly limited its sovereignty."[14] In reference to the capabilities of competitive global capital Ohmae describes the actual non-relevance of political boundaries: "on a political map,

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[9] Philip McMichael. "The New Colonialism: Global Regulation and Restructuring of the Interstate System," A New World Order, eds. David A. Smith and Jozef Borocz, (London, Praeger Publishers, 1995): 55.
[10] Ibid: 56.
[11] Ibid: 58.
[12] Richard O' Brien. Global Financial Integration: The End of Geography, (London: Royal Institute of International Affairs, 1992): 100.
[13] Richard B. McKenzie and Dwight R, Lee. Quicksilver Capital: How the Rapid Movement of Wealth Has Changed the World, (New York: The Free Press, 1991): xi.
[14] Mustafa Koc. "Globalization as a Discourse," From Columbus to ConAgra: The Globalization of Agriculture and Food, eds. Alessandro Bonanno, Lawrence Busch, William Friedland, Lourdes Gouveia, and Enzo Mingione (University Press of Kansas, 1994): 274.

the boundaries between countries are as clear as ever. But on a competitive map, a map showing the real flows of financial and industrial activity, those boundaries have largely disappeared."[15] Given that the global economy operates according to its own patterns and compulsions "national interest as an economic, as opposed to a political, reality has lost much of its meaning."[16] Undoubtedly, for these authors, the colonization of the state marks the end of its exclusively national orientation.

A major contention of these critics of globalization is that the ability of governments to pursue autonomous policy options is constrained by globalization and regional integration. According to Strange, the state:

> is undergoing a metamorphosis brought on by structural change in world society and economy. This metamorphosis means that is can no longer make the exceptional claims and demands that it once did. It is becoming, once more and as in the past, just one source of authority among several, with limited powers and resources.[17]

In regards to the exact nature of this change - the loss of the state's national orientation – McMichael writes "the national coherence of states is being eroded by the internationalization of economic relations."[18] He expands on this concept in another work by stating that "not only is governance itself redistributed among agencies operating above and below the nation, but the policy agenda is also undergoing a fundamental redefinition. The result is less and less a nationally organized state, and more and more transnationally organized one."[19] Similarly, Farazmand refers to the reorientation of the state when he writes "globalization has changed the character of the state, governance,

[15] Kenichi Ohmae. The Borderless World: Power and Strategy in the Interlinked Economy, (Harper Business, 1990): 18.
[16] Ibid: 183.
[17] Susan Strange. The Retreat of the State: The Diffusion of Power in the World Economy, (Cambridge: Cambridge University Press, 1996): 85.
[18] Philip McMichael. "Tensions Between National and International Control of the World Food Order: Contours of a New Food Regime," Sociological Perspectives, 35. 2 (1992): 6.
[19] Philip McMichael. "The New Colonialism" (1995): 38.

and public administration, transforming it from a public service state and administration to a corporate welfare state."[20] Moody has a similar perspective and states that "it seems clear that the direction of state policy has changed under the regime of neoliberalism."[21] For Moody, the state has been restructured to support the transnational endeavours TNCs.

Taking the idea of the restructuring and reorientation of the state a step further, Teeple writes that the very meaning of the state has been altered: "these developments should not be seen as merely the "restructuring" of the national state but as the redefinition of the state because its original definition was the political expression of a national bourgeoisie and its subordinate classes."[22] According to Teeple, the purpose of the nation-state was to serve the interests of national capitalists through a compromise known as the Keynsian Welfare State. However, capital eventually emerged from this stable base that nurtured it throughout that time period to follow its inherent expansionary compulsion beyond the borders of the welfare state, leaving it a badly weakened entity.

In the view of this group of authors, the turning point at which the state first became significantly weakened and its role as a socio-economic entity first began to change was the fall of the Bretton Woods system in 1971.[23] From that point forwards, states were rendered incapable of exercising control over the value of their currencies, and thus of

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[20] Ali.Farazmond, "Globalization, The State and Public Administration" (2001): 449.

[21] Kim Moody. Workers in a Lean World: Unions in the International Economy, (New York: Verso, 1997): 135.

[22] Gary Teeple, Capitalism and the Decline of Social Reform: into the Twenty-First Century, (Aurora, Garamond Press, 2000): 190.

[23] "The stable organization of nationally-regulated economies, with fixed exchange rates pegged to the dollar, gave way to an increasingly unstable organization of increasingly transnational economic relations governed by floating exchange rates, offshore money markets and financial speculation (in other words by financial globalization). As national controls on capital movements eased transnational corporate actitivy expanded, and development agencies like the World Bank identified exporting to the global market as the preferred strategy for states and firms." The Bretton Woods system pegged all currencies to the dollar, in effect fixing exchange rates. Philip McMichael. "Global Food Politics," Hungry for Profit: The Agribusiness Threat to Farmers, Food, and the Environment, eds. Fred Magdoff, John Bellamy Foster and Frederick H. Buttel, (New York: Monthly Review Press, 2000): 131.

effectively regulating their economies. In addition to this, the microelectronics revolution that took place around this time period brought forth new technological advancements in communication and information. The result was that capital effectively gained the ability to coordinate itself outside of national boundaries of the state, a development that ultimately proved the catalyst for the final usurpation of the power of national governments.[24]

Describing the emancipation of capital from its national identities and the implications of that for the state, Bonanno et al write:

> The increased significance of financial capital, its incredible mobility, its lack of attachment to national root, its willingness to move production and markets wherever its "bottom line" will improve, in a word, its irresponsibility, will create distinct problems for the nation-state and for regional and local political bodies.[25]

Similarly, McKenzie and Lee make the argument that the sheer speed and magnitude of the transactions involving finance capital and wealth have rendered governments incapable of controlling them or their effects.[26] Adding to this, Bonnano et al write "the current freedom of TNCs – the freedom to relocate, engage new labour forces, shift capital, and so on – will continue to pose dilemmas for national governments."[27] In describing this situation further, Gouveia states that "sustained globalization rests largely on the disproportionate power accruing to transnational corporations by virtue of their newfound mobility and expanded field of investment."[28] Finally, Moody describes the dilemma of the state this way: "its ability to regulate the national economy had to be

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[24] Gary Teeple. Capitalism and the Decline of Social Reform (2000): 65.
[25] Alessandro Bonanno et al, "Introduction' From Columbus to ConAgra: The Globalization of Agriculture and Food, eds. Alessandro Bonanno, Lawrence Busch, William H. Friedland, Lourdes Gouveia, and Enzo Mingione, (University Press of Kansas, 1994): 20.
[26] Richard B. McKenzie and Dwight R. Lee. Quicksilver Capital (1991): xi.
[27] Alessandro Bonanno et al, From Columbus to ConAgra (1994): 20.
[28] Lourdes Gouveia. "Global Strategies and Local Linkages" (1994): 125.

reduced and limited for the TNCs to operate freely on a world-wide level. Multilateralism has become the method of accomplishing this."[29] For these authors, governments were transcended by the new capabilities of capital to transcend state borders.

A fundamental component of the argument put forth by this group of authors is that globalization is characterized by the asymmetrical power relations between TNCs and states. According to Teeple, the forces of globalization have made the powers of the state subordinate to the power of TNCs.[30] For McMichael, TNCs have actually actively seized power from governments: "finance capital has not simply restructured states from within, it has also appropriated power from states themselves."[31] In reference to the overwhelming power of the TNCs, Bonanno and Constance state that "TNCs are certainly the most powerful players in global post-Fordism."[32] Adding to this, McKenzie and Lee write:

> governments are constrained by economic forces that, to a significant degree, exist outside of political systems, regardless of their conservative political stripes. These exogenous economic forces have changed, giving rise to changes in the direction for government policies.[33]

In reference to the supersession of state powers as a consequence of the activities of finance capital, Goodman and Pauly state that "systemic forces are now dominant in the financial area and have dramatically reduced the ability of governments to set

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[29] Kim Moody. Workers in a Lean World (1997): 138.
[30] "This is not to say that the national state apparatus will disappear in the near future – only that it will be subordinate to the demands of an increasingly integrated global system." Gary Teeple. Capitalism and the Decline of Social Reform (2000): 190.
[31] Philip McMichael. "The New Colonialism" (1995), p. 42.
[32] Alessandro Bonanno and Douglas Constance. Caught in the Net: The Global Tuna Industry, Environmentalism, and the State, (University Press of Kansas, 1996): 232.
[33] Richard B. McKenzie and Dwight R. Lee. Quicksilver Capital (1991): xi.

autonomous economic policies."[34] Speaking more explicitly to the condition of the state in this context, Sanderson suggests that "the power of the state has declined, at least insofar as that power might represent the enacted capacity to enhance national autonomy of decision making or to negotiate the terms of national participation in the international division of labour."[35] Also referring to the plight of the state, Strange writes "the general impression left is that the domain of the state is shrinking."[36] Building on this Clark argues that the state is no longer a viable political entity at all; that, in fact, it has relinquished all of its powers to transnational actors: "in effect what has taken place is a massive shift in power, out of the hands of nation-states and democratic governments and into the hands of TNCs and banks. It is now the TNCs that effectively govern the lives of the vast majority of people on Earth…"[37] The conclusion that can be extracted from the statements of these authors is that transnational actors have become the de facto rulers of the global economy.

According to this perspective, international institutions govern the global neo-liberal regime in the interests of TNCs. These international institutions include the WTO, International Monetary Fund (IMF) and World Bank (WB) as well as regional trade regimes including the NAFTA and the European Union (EU). In referring to the power held by the international institutions and the implications for the state, McMichael writes "the centralization of state power in global institutions means, in effect, the ability to

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[34] John B. Goodman and Louis W. Pauly. "Obsolescence of Capital Controls?: Economic Management in an Age of Global Markets," World Politics, 46, 1 (October 1993): 80-81.
[35] Steven E. Sanderson. "A Critical Approach to the Americas in the New International Division of Labour," The Americas in the New International Division of Labor, ed. Steven E. Stevenson, (New York: Holmes and Meier Publishers Inc., 1995): 19.
[36] Susan Strange. The Retreat of the State (1996): 86.
[37] Tony Clarke. "Mechanisms of Corporate Rule," *The* Case Against the Global Economy: and for a Turn Towards the Local, eds. Jerry Mander and Edward Goldsmith, (San Francisco: Sierra Club Books, 1996): 298.

shape state administrative priorities."[38] He expands describing the overwhelming powers of these institutions as coercive: "the power of the IMF to compel state subordination to finance capital thus institutionalizes the trend toward post-national capitalism."[39] Given this, for McMichael no state is able to resist the will of these institutions. The consequence is that the state is rendered largely impotent. Of the WTO McMichael believes "the WTO has the global governing power insofar as its rules are binding on all members, and it has the potential to overrule state and local powers regulating environment, product and food safety."[40] Clearly, McMichael sees international institutions as the de facto rulers of the international economy. In taking this position he is hardly alone.

Farazmand agrees with McMichael and describes the governance of the international institutions on behalf of TNCs:

> since the 1990s with the WTO, WB, and IMF acting as institutional conduits for economic and political policy dictation, the globalizing states and corporations have now been able to bypass states, force them into compliance with rules and regulations they have had no part in the making of, and make governments abandon their long-held traditions of government and society."[41]

Meanwhile, Koc writes of the supersession of national politics by international institutional governance:

> at the global level, suprastate institutions such as IMF, the World Bank, the EC and multilateral or bilateral agreements such as the North American Free Trade Agreement or GATT define and determine the global rules of conduct. These decisions have increasingly been made outside the confines of national politics.[42]

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[38] Philip McMichael, "Globalization: Myths and Realities," Rural Sociology, 61.1 (Spring 1996): 39.
[39] Philip McMichael. "The New Colonialism" (1995): 42.
[40] Philip McMichael,. "Globalization: Myths and Realities" (Spring 1996): 38.
[41] Ali Farazmond, "Globalization, The State and Public Administration" (2001): 449.
[42] Mustafa Koc. "Globalization as a Discourse" (1994): 275.

It is a condition that Nader and Wallach describe in desperate terms. According to these two authors the state, and all human beings for that matter, are prisoners of aggressive global capital forces. The international institutions are merely the mechanisms through which these global capitalist forces achieve their ends. In reference to the WTO and NAFTA, they write:

> approval of these agreements has institutionalized a global economic and political situation that places every government in a virtual hostage situation, at the mercy of a global financial and commercial system run by empowered corporations. This new system is not designed to promote the health and well-being of human beings but to enhance the power of the world's largest corporations and financial institutions.[43]

From the point of view of McMichael, Farazmand, Nader and Wallach, and Kocs the net effect of the rise of these new transnational actors is that all states have been not only been disempowered relatively speaking, but they have been restructured in a common direction.

The ultimate effect of the rise to predominance by the institutions of the global regime of governance and by TNCs is the harmonization of domestic policies. According to this perspective, the harmonization of domestic policies is part of the process of restructuring the state. For Strange, not only are states being reoriented, but they are being redirected simultaneously: "what is new and unusual is that all – or nearly all – states should undergo substantial change of roughly the same kind within the same short period of twenty or thirty years."[44] In terms of the characterization of this reorientation as it involves TNCs, Ohmae argues that given the ability of global capital to transfer its finances and relocate seemingly at will governments must "make their countries an

[43] Ralph Nader and Lori Wallach. "GATT, NAFTA, and the Subversion of the Democratic Process," The Case Against the Global Economy: and for a Turn Towards the Local, eds. Jerry Mander and Edward Goldsmith, (San Francisco: Sierra Club Books, 1996): 93.
[44] Susan Strange, The Retreat of the State (1996): 87.

attractive enough location for the global companies to want to do business and invest and pay taxes there."[45] According to Bonanno and Constance the developed states have complied:

> in response to capital flight, First World states deregulated or reregulated their economies in an attempt to maintain and attract investment and thereby avoid disinvestment and deindustrialization.[46]

For these authors, the mobility of capital has left governments with no choice but to compete against each other in a race to reorient their policy environments in a way that is attractive to business.

In reference the effect of international institutions on the policy options of government McMichael writes that "free trade has a 'harmonizing' effect on policies regarding levels of wages and social services, which means reducing the differential towards the minimal standard, typically found in lower cost regions. This is known as 'downward levelling.'"[47] Expanding on the concept of "downward levelling," Nader and Wallach write:

> As a legal matter, the WTO's rules and powerful enforcement mechanism promote downward harmonization of wages, environmental, worker, and health standards and the undermining of democratic procedures and policies. However, in practise, the race to the bottom set off by the WTO is even more devastating than the sum of the WTOs provisions. Both NAFTA and GATT have actual provisions requiring harmonization of environmental, safety, food, and other standards.[48]

Similarly, with respect to policy harmonization, Teeple writes that "one of the state's key tasks will be to facilitate the harmonization of national with global policies."[49] For

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[45] Kenichi Ohmae. The Borderless World (1990): 195.
[46] Alessandro Bonanno and Douglas Constance. Caught in the Net (1996): 7.
[47] Philip McMichael. "The New Colonialism" (1995): 42.
[48] Ralph Nader and Lori Wallach "GATT, NAFTA, and the Subversion of the Democratic Process" (1996): 105-106.
[49] Gary Teeple. Capitalism and the Decline of Social Reform (2000): 190.

Mander the process of domestic policy harmonization amounts to the creation of a global monoculture:

> The principles also include the idea that all countries – even those whose cultures have been as diverse as, say, Indonesia, Japan, Kenya, Sweden, and Brazil – must sign on to the same global economic model and row their (rising) boats un unison. The net result is monoculture – the global homogenization of culture, life-style, and level of technological immersion, with the corresponding dismantlement of local traditions and economies.[50]

Clearly, for this group, globalization has brought about a situation where the ability of governments to pursue independent policy paths has been eliminated. For these authors, the neo-liberal regime which governs the global economy is harmonizing the policies of independent states. Indeed, according to this perspective, no matter which segment of the economy, the predicament of the state is the same.

In contrast to the perspective outlined above, there is another which makes the argument that there are still significant differences in the domestic policies of states. More specifically, the commentators taking this point of view contend that the effects of globalization – the convergence of domestic policies – have been overstated, and that, in fact, the state still possesses significant room to manoeuvre. These authors also argue that assumptions related to policy convergence outlined above depend on the oversimplification of the state itself.

Krugman makes the argument that the notion of 'competitiveness' is based on unfounded assumptions. In particular Krugman says that those who espouse this concept treat states as though they are the equivalent of corporations, in a zero-sum game contest with other states.[51] In refuting this claim, Krugman asserts that "countries, on the other

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[50] Jerry Mander. "Facing the Rising Tide," The Case Against the Global Economy: and for a Turn Towards the Local, eds. Jerry Mander and Edward Goldsmith, (San Francisco: Sierra Club Books, 1996): 5.
[51] Paul Krugman. Pop Internationalism, (Cambridge Massachusetts, MIT Press, 1996): 6.

hand, do not go out of business. They may be happy or unhappy with their economic performance, but they have no well-defined bottom line."[52] In explaining his position he states that a trade surplus is not necessarily a sign of strength, nor is a deficit necessarily a sign of weakness.[53] Moreover, he states that if states were more like corporations, the world would be much more interdependent than it is![54]

To make his point Krugman cites the example of the US, and the fact that its exports are only 10 percent of the value-added in the economy. According to Krugman, the US is still primarily an economy that that produces goods and services for its own use.[55] In contrast, he points out that even the largest of corporations sells only a very small fraction of its output to its own workers. Also, Krugman argues that countries do not engage in competition the way that corporations do.[56] Competition among corporations is often a zero-sum game where one corporation succeeds at another's expense. In contrast, in addition to selling products that compete with each other, industrial countries are also each other's key export and supplier markets. The oversimplification of the effects of competition, encourage the exaggeration of the effect of globalization on countries.

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[52] Ibid.

[53] The author cites Mexico as a case of a very weak nation running huge trade surpluses during the debt crisis era, in order to pay the interest on its debt in a context where international lenders would not lend it any more money. By the 1990's Mexico began to run large trade deficits once investors had regained confidence and began to lend it money again. Ibid: 8.

[54] Ibid, p. 9 & 212.

[55] According to Krugman 90 percent of the goods and services produced in the US are for its own use. Ibid. Similarly, Waltz notes that economies are in fact still surprisingly local, since countries with the largest economies "do most of their business at home. As an example he states that 88 percent of the goods Americans buy are American made." Kenneth Waltz. "Globalization and Governance," PSOnline, . (December 1999): 696.

[56] Paul Krugman, Pop Internationalism (1996): 9.

Like Krugman, Waltz contends that globalization – the "near uniformity of conditions across countries" – in fact hardly exists.[57] According to Waltz, the past 75 years saw a great variety of political-economic systems which produced impressive and admirable results. He cites such examples as the economy of the Soviet Union in the 1930s and 50s, Western European Welfare states of the 70s, and Japan in the late 70s and 80s. For Waltz, it is hard to believe that economic processes drive the domestic policies of nations, since when one looks closely at Europe that find a whole range of approaches. For example, while France and Germany have become closely intertwined in terms of trade, they still possess very different institutions.[58] According to Waltz "the range of governmental functions and the extent of state control over society and economy has seldom been fuller than it is now."[59] In the view of this author "states still have a wide range of choice."[60] Moreover, "national politics, not international markets, account for many international economic developments."[61] Therefore, Waltz believes states are still the primary drivers of the development of their domestic policies and he takes the position that that globalization is not as advanced as is commonly supposed.

Esping-Anderson writes that "global competition does narrow the field of domestic policy choice."[62] However, in contrast to those arguing that the process of globalization is driving domestic policy development outlined earlier, Esping-Anderson writes that many of the assumptions of that perspective "are exaggerated and risk being

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[57] Kenneth Waltz. "Globalization and Governance" (December 1999): 696.
[58] Ibid.
[59] Ibid: 697.
[60] Ibid.
[61] Ibid.
[62] Gøsta Esping-Anderson. "After the Golden Age? Welfare State Dilemmas in a Global Economy," Welfare States in Transition: National Adaptations in Global Economies, ed. Gøsta Esping-Anderson, (London, SAGE Publications, 1997): 2.

misleading."[63] According to Esping-Anderson, both the diversity in composition and type amongst welfare states and the fact that endogenous factors also put pressure on governments call into the question the accuracy of such generalizations. Moreover, in concluding his analysis, he states "what we see is not radical change, but rather a 'frozen' welfare state landscape."[64] He points out that the institutionalization of the welfare state means that it is vigorously defended in each country by vested interests. Therefore, if reform does take place at all, it tends to be "negotiated and consensual."[65] Indeed, for this author the welfare state is fortified by the domestic institutions of the state in which it is entrenched.

According to Skogstad, both external and international pressures associated with the neoliberal principles will inevitably be mediated by domestic institutional factors. As a result, she states, policy sectors that would otherwise appear to be especially vulnerable to retrenchment might actually be able to resist or accommodate such changes.[66] Building on this, Swank argues that democratic institutions "are as important as ever in shaping the policy trajectories of welfare states" for three reasons.[67] The first is that national institutions provide opportunities for resistance to policy change. These institutions also provide an avenue for seeking compensation by those adversely affected by policy change. Secondly, political institutions play a role in determining the relative political strength of affected groups as well as the relative strength of those social groups and organizations supporting the welfare state. Finally, national institutions promote or

[63] Ibid.
[64] Ibid: 24.
[65] Ibid.
[66] Grace Skogstad,. "Globalization and Public Policy: Situating Canadian Analysis," Canadian Journal of Political Science, 33. 4 (December 2000): 827.
[67] Duane Swank. "Political Institutions and Welfare State Restructuring: The Impact of Institutions on Social Policy Change in Developed Democracies," The New Politics of the Welfare State, ed. Paul Pierson, (New York, Oxford University Press, (2001): 222.

impede certain values that are required for welfare policy change. Supporting these points, Iverson finds in his analysis of various data for fifteen OECD countries over a thirty-five year period, that “there is little evidence that trade, or capital mobility for that matter, has played an important role in the expansion of the welfare state.”[68] Given this, Iverson concludes that there is “little evidence that globalization is a threat to welfare state.”[69] In conclusion, these authors argue that factors related to domestic institutions have prevented the erosion of distinct domestic policy regimes and, thus, the race to the bottom that is said to be underway.

In contrast to the claims that globalization has sparked a race to the bottom in regards to the domestic policies of states, Vogel argues that, in fact, economic interdependence has actually resulted in the upward levelling of domestic policies.[70] In his book, entitled ‘Trading Up,’ he demonstrates how the making of trade and regulatory policy are influencing one another. Specifically, he asserts that regulation is being shaped more and more by exogenous political and economic forces. But, rather than crediting the role of such entities as international environmental agreements and treaties, Vogel sees trade agreements as the principle source in the promotion of the regionalization and globalization of regulatory policy-making.[71] Indeed, for Vogel, trade agreements are akin to transmission belts where nations export and import not only goods and services, but standards as well.

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[68] Torben Iverson. “The Dynamics of Welfare State Expansion: Trade Openness, De-industrialization, and Partisan Politics,” The New Politics of the Welfare State, ed. Paul Pierson, (New York, Oxford University Press, 2001): 76.
[69] Ibid.
[70] David Vogel. Trading Up: Consumer and Environmental Regulation in a Global Economy, (London, Harvard University Press, 1995): x.
[71] Ibid: 2.

Similarly, Garrett argues that "globalization has not prompted a pervasive policy race to the neoliberal bottom among the OECD countries, nor have governments that have persisted with interventionist policies invariably been hamstrung by damaging capital flight."[72] According to Garrett's study, governments still possess room to manoeuvre in terms of expanding their public economies, without suffering negative repercussions such as decreased trade competitiveness or prompting capital flight.[73] The reason for this, says Garrett, is because governments provide economically important collective goods, such as the accumulation of physical and human capital and the securing of social stability in times of high market uncertainty. In terms of the single facet of globalization where Garrett says that one could assert that national policy options are constrained – the integration of financial markets – one must be cautious, even if it is more constraining than either trade or the multinationalization of production. According to Garrett, this is only true if one believes that financial market integration compels governments to peg their exchange rates to external anchors of stability.

Similar arguments have been made with regard to Canada in the continental context. Hoberg et al declare that "despite all the rhetoric about globalization and its impact on domestic policy autonomy, there is still significant room for manoeuvre."[74] In doing so, they make the point that external pressures are but one of many of the factors constraining citizens and policy-makers, in contrast to the perspective outlined previously. They propose that Canada has succeeded in keeping many aspects of its

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[72] Geoffrey Garrett. "Global Markets and National Politics: Collision Course or Virtuous Circle?," International Organization, 52.4 (Autumn 1998): 823.
[73] Ibid.
[74] George Hoberg, Keith G. Banting, and Richard Simeon. "The Scope for Domestic Choice: Policy Autonomy in a Globalizing World," Capacity for Choice: Canada in a New North America, ed. George Hoberg, (Toronto, University of Toronto Press, 2002): 289.

welfare state distinct. In making this assertion, Hoberg et al argue that it will not be globalization or regionalization that constrains Canada's welfare policy. Instead, they say, the ability of Canada to maintain its distinct welfare state will be determined by the "willingness of the Canadian people to pay the taxes to support it."[75] Clearly, for these authors domestic factors pose an equal challenge in maintaining the distinctiveness of Canada's policy regime. Given that distinct domestic institutions result in divergent domestic policies, the authors taking this perspective also argue that it is not surprising that Canada and the United States still possess distinct policy regimes despite the various international institutions to which they both belong.

Building on this, Banting argues that although "globalization and technological change have placed the postwar social contract under enormous strain…, differences in domestic politics, cultures, and policy legacies shape the ways in which countries are adjusting to the global economy."[76] Clearly, in the eyes of Banting "politics within nation states continue to matter."[77] In regards to regionalization as it pertains to Canada and the US, Banting states "Canada continues to chart a different course from the United States."[78] Similarly, in her study entitled 'National Tax Policy for an International Economy', Olewiler finds that "some tax rates have converged, but considerable

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[75] The authors dismiss putting the blame for the alleged inability of states to maintain distinct policy regimes on fiscal pressures and international economic integration. In refuting such claims they point out that while governments that run deficits do pay a penalty, those governments that are big and do not run deficits, pay no penalty at all. Ibid: 290.
[76] Keith G Banting. "The Internationalization of the Social Contract," The Nation-State in a Global/Information Era: Policy Challenges, (Kingston, John Deutsch Institute for the Study of Economic Policy, Queen's University, 1997): 255-256.
[77] Ibid: 256.
[78] Ibid: 280.

divergence still exists."[79] Given this she states that "countries can have different mixes of taxes, different rates, and still retain their mobile inputs. We do not have to look exactly like the United States."[80] For Olewiler, Canada still has room to manoeuvre in regards to its tax policy. According to these authors, Canada has not been overwhelmed and become a powerless entity as a result of the cross border integration associated with NAFTA and the WTO.

[79] Nancy Olewiler. "National Tax Policy for an International Economy: Divergence in a Converging World," Room to Manoeuvre? Globalization and Policy Convergence, ed. Thomas J. Courchene, (Montreal & Kingston, McGill-Queens University Press, 1999): 378.
[80] Ibid: 379.

1.3 Globalization and the Agriculture Sector

A similar division exists in the literature discussing the implications of globalization and regional integration for state governments as it specifically pertains to the agriculture sector. In this literature, one perspective posits that globalization and regional integration has constrained the room to manoeuvre of governments in the agricultural sector. According to this group of analysts, domestic agricultural policies are converging.

A major thrust of the agriculture policy literature argues that external pressures attributed to the process of globalization are causing domestic agriculture policies to converge. In reference to the effects of globalization on the agriculture sector, McMichael describes the particular impact of TNCs when he writes that "the growing power of capital to organize and reorganize agriculture undercuts state policies directing agriculture to national ends, such as food security, articulated development and the preservation of rural/peasant communities."[81] According to Barrry, these huge TNCs own the industrial manufacturing of all of the agricultural inputs that are used in the

[81] Philip McMichael and Harriet Friedmann. "Agriculture and the State System," Sociologia Ruralis, 24. 2 (1989): 95.

direct production process of the raw food products. They also own all of the processing and facilities that transform the raw outputs of the direct production process into food. Finally, they own all of the distribution facilities such as supermarkets. The vast control of the production process from field to shelf means that the small direct raw food producers such as the peasantry and family farmers are reduced to supplying merely the raw food products to agribusiness.[82] This huge concentration of ownership and control that these agribusiness corporations possess over the all of the sectors involved in the agrofood system is so great that their position is described by Barry to be 'oligopolistic.'[83] Thus, according to Warnock, agribusiness is the "nexus of control" in the entire agro-food system,[84] while for Burbach and Flynn it is "the centerpiece of the agrofood system."[85]

According to McMichael the agriculture sector has developed through three 'food regimes.'[86] Briefly, the first food regime operated in the context of the colonial system from 1870-1914, and was characterized by large scale export oriented agricultural production systems intended for metropolitan consumption. The second food regime existed from the end of the first food regime until the collapse of the Bretton Woods system in the early 1970s. It was characterized by its reformulation as a national economic sector in the settler states, which became the basis of the post-war national

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[82] Tom Barry. Zapata's Revenge: Free Trade and the Farm Crisis in Mexico, (Boston: Southend Press, 1995): 58.

[83] This means that these corporations possess the power to dictate the prices of their commodities and output processing services. It also means that they are able to regulate the access to their sectors of the production process of other firms and even governments. Ibid, p. 58.

84 John Warnock. Politics of Hunger, (Toronto: Methuen, 1987): 130.

[85] Roger Burbach and Patricia Flynn. Agribusiness in the Americas, (New York: Monthly Review Press, 1980): 12.

86 The food regime "links international relations of food production and consumption to forms of accumulation broadly distinguishing periods of capitalist transformation since 1870." Philip McMichael and Harriet Friedmann. "Agriculture and the State System" (1989): 95.

regulatory model. Finally, the present food regime began with the collapse of the Bretton Woods system and is characterized by the pre-eminence of transnational economic relations and the demise of nationally oriented agriculture sectors. Thus, for McMichael, "the food regime perspective associates the rise and demise of the nation-state with the rise and demise of commercial agriculture as a coherent national economic sector."[87] As a result, the "restructuring of agriculture in all countries" serves to cast "doubt on the very idea of nations as an organizing principle of the world economy."[88]

In place of the nation-state, MicMichael explains that the new international entities have arisen to control the governance of the agriculture sector:

> the WTO institutionalizes a corporate regime, targeting food self-sufficiency and food safety as restraints on the market and private accumulation; and perhaps most significantly, seeking to control the institutional dimension of the world market – namely the regulatory framework at the international and, by extension, the national levels, since states author and abide by multilateral rules.[89]

This system of organization is then used by agribusiness firms to their own benefit in the interests of economic efficiency and ultimately profit:

> Food companies, grain traders, and the chemical industry favour using the WTO to phase out farm programs, thereby eliminating supply management, reducing prices, and exposing producers to world-wide differential labour costs. By reducing price supports, the corporations maximize their ability to structure comparative advantages in the world market, and to source their inputs from the variety of producing regions incorporated into the "free"world market.[90]

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[87] Philip McMichael. "Tensions Between National and International Control of the World Food Order: Contours of a New Food Regime," Sociological Perspectives, 35. 2 (1992): 345.
[88] Philip McMichael and Harriet Friedmann. "Agriculture and the State System" (1989): 112.
[89] Philip McMichael. "The Power of Food," Agriculture and Human Values, 17 (2000): 26.
[90] Ibid: 24.

For McMichael, the WTO is nothing more than a regulatory apparatus enforcing market rules and rights in the interests of globally dominant corporations.[91] He expands by stating that global agriculture has become "less and less a foundational institution of societies and states, and more and more a tenuous component of global sourcing strategies."[92] It is characterized by specialized export-oriented agriculture sectors at the expense of food self sufficiency at the national level. In this view, agriculture has become an economic sector fully integrated into the greater global economy. In conclusion, according to McMichael, national agricultures are being harmonized towards the common neo-liberal norm.

In making his argument McMichael refers to the fact that the WTO administers the trade rules to which its member countries are subject. These rules include the substantial reduction of agricultural support and protection as it relates to market access, export subsidies and domestic support.[93] Moreover the member countries agreed that "the long-term objective of substantial progressive reductions in support and protection resulting in fundamental reform is on-going…"[94] More specifically, the Agreement on Agriculture included the categorization of domestic policy instruments into green, blue, amber, and red labels.[95] Green box domestic policy instruments are ones that governments can use without limit. This category of policies and programs must be financed by governments

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[91] Ibid: 25. and "agribusiness imperialism is central to the coercive use of institutional mechanisms to monopolize control of world agriculture and flows of food." Philip McMichael. "Global Food Politics" (2000): 127.
[92] Ibid: 134.
[93] Thomas L Sporleder and Larry J. Martin "Economic Perspective on Competitiveness Under WTO, NAFTA, and FTAA," Economic Harmonization in the Canadian/US/Mexican Livestock-Grain Subsector, eds. R.M.A. Loyns, Ronald D. Knutson and Karl Meilke, Proceedings of the Fourth Agricultural and Food Systems Policy Information Workshop, (Univesity of Guelph, December, 1998): 14.
[94] W. M Miner. "Will the WTO Domestic Support Provisions Constrain Domestic Agricultural Policies?," Canadian Journal of Agricultural Economics, 46 (1998): 425.
[95] Sporleder, Thomas L. and Larry J. Martin, "Economic Perspective on Competitiveness Under WTO, NAFTA, and FTAA" (1998): 14.

rather than consumers and cannot involve price support to producers. They involve direct payments to farmers that have no relation to current production decisions or prices.[96] Meanwhile, blue box programs are also allowed.[97] The blue box "is an exemption from the general rule that all subsidies linked to production must be reduced or kept within defined minimal ("de minimis") levels.[98] This category includes direct payments under production-limiting programs, which are allowed if they are based on fixed area or yields made on 85 percent or less of base production, and livestock payments made on a fixed number of head. They involve direct payments to farmers linked to production of specific crops, but which impose offsetting limits on output. Amber policy instruments are those that are considered to "distort production and trade" must be reduced by 25 percent from the late 1980s and that are subject to countervail actions.[99] Finally, those labelled red are policy instruments that are illegal. According to these commentators, the rules outlined above serve to bind member countries into the long term process of the eventual elimination of all market distorting barriers to trade.

For Barry, a fundamental component of the neoliberal framework consisting of the supremacy of TNCs and international institutions is the legal protection of intellectual property rights, institutionalized in both the WTO and NAFTA. Agribusiness firms demand that these private property rights be entrenched in the neoliberal framework in

[96] Such programs and policies include research, extension, inspection, marketing and promotion, infrastructure; food security stocks, domestic food aid, crop insurance, income safety-net schemes, disaster payments, retirement programs, set-asides, structural adjustment programs, environmental programs; decoupled income support. W. M Miner. "Will the WTO Domestic Support Provisions Constrain Domestic Agricultural Policies?" (1998): 427
[97] Ibid.
[98] World Trade Organization.
<http://www.wto.org/english/thewto_e/minist_e/min99_e/english/about_e/07ag_e.htm>
[99] These include market price supports, and output and input subsidies. 'Decoupled Payments: Household Income Transfers in Contemporary US Agriculture' World Trade Organization, <http://www.wto.org/english/thewto_e/minist_e/min99_e/english/about_e/07ag_e.htm>

order to protect their position at the helm of power and control in the world's food system.[100] According to Kneen, one of the ways that this is accomplished is through genetic engineering. The major objective of genetic engineering is to seize complete control over the agricultural production process.[101] Therefore, the major concern of agribusiness in regards to biotechnology in agricultural production is that "ownership and control of the product of biotechnology must not pass into the hands of the farmer but must remain with the commercial provider of the input."[102] The key to achieving this is to have legally binding production contracts negotiated when the seed is purchased. By law, as instituted at both the national and international levels, this prevents the farmer from gaining 'ownership and control' of the genetic information of the seed. Likewise, patents are sought to protect the intellectual property rights of the agribusiness firms who make specific advancements in genetic engineering. Thus, agribusiness firms gain ownership over the genetic information of a life form, and close off that information to farmers, other companies, and public researchers.[103]

For Kneen, the importance of the role of biotechnology in agro-industrialization is its material linking of the system of inputs and outputs in agricultural production.[104] In other words, the entire production chain is integrated by the biological engineering of the living organism inputs to fit into the overall package of the other inputs, as well as the mechanistic tools used in production, and the qualities demanded in the outputs. The

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[100] Tom Barry. Zapata's Revenge (1995): 62.
[101] Ibid: 78-79 & Brewster Kneen. Farmageddon: Food and the Culture of Biotechnology, (Gabriola Island: New Society Publishers, 1999): 29.
[102] R. C. Lewontin. "The Maturing of Capitalist Agriculture: Farmer as Proletarian," Monthly Review: Hungry Profit, eds. Fred Magdoff, Frederick H. Buttel, and John Bellamy Foster 50. 3 (July/August 1998): 79.
[103] Ingeborg Boyens. Unnatural Harvest: How Genetic Engineering Is Altering Our Food, (Toronto: Doubleday Canada, 1999): 66-67.
[104] Ibid: 82.

result is the vertical integration of direct agricultural production into the overall agricultural production process.[105] This vertical integration is secured using the patenting and production contracts alongside the biologically manipulated seed. In conclusion, for this group of authors, the agribusiness-international institutional relation forms the crux of the process of globalization and the diminution of the power of states and citizens. The result is global agricultural policy harmonization.

In reference to the implications of the new international institutions such as the WTO for domestic agricultural policy, Miner writes:

> for the first time governments accepted comprehensive commitments for agriculture that would limit their abilities to erect border restrictions to imports, or to implement internal policy instruments that distort trade, or to apply direct subsidies and support measures that are contingent on export…, the outcome marked a recognition by the key governments involved that domestic agricultural supports must be constrained and reduced...[106]

In contrast to Waltz, Miner contends that political developments, including the establishment of international institutions, respond to developments in the economy. He expands on this by stating that structural changes in production and trade in agriculture and food products were occurring long before the Uruguay Round of the GATT began.[107] Thus, for Miner, structural changes in the agricultural economic sector have driven changes in domestic agriculture policy.

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[105] Vertical integration is when a corporation gains ownership of operations in several sectors of the agrofood system. This allows the firm to control the agrofood process by coordinating and managing the material changes of the commodities in the system from one stage to another. In this way the firm can control the quantity, quality, and price of the operations of the agrofood system at each stage. Ibid: 84. & William D. Heffernan. "Agriculture and Monopoly Capital," Monthly Review: Hungry Profit, eds. Fred Magdoff, Frederick H. Buttel, and John Bellamy Foster, 50. 3 (July/August 1998): 53.
[106] W. M. Miner. "Will the WTO Domestic Support Provisions Constrain Domestic Agricultural Policies?" (1998): 425.
[107] Specifically, these structural changes included the handling and transportation, processing packaging and retail of foods. In addition to this, advancements in technology and information systems were occurring. Finally, global trade in agriculture and food products was expanding and trade was beginning to be comprised of more specialized and higher valued products. Ibid: 426.

Several authors refer to the specific examples of Canada and the US in the context of globalization and regional integration. Expanding on the position Miner takes, Young et al argue that US' agricultural policy has decidedly become more market oriented. According to these authors the 1996 FAIR Act employed non-trade distorting programs [108] in line with WTO rules and disciplines. This shift involved the transition from price sensitive deficiency payments to decoupled income support payments.[109] In agreement with this, Miner writes that "the new domestic support commitments and the US farm policies generally, are clearly moving in a consistent direction, and in the same time frame."[110] Meanwhile, Sporleder and Martin argue that the establishment of CUSTA, NAFTA, and the WTO contributed to the elimination of a multitude of programs deemed to be outside of the boundaries of the market liberal rules and disciplines stipulated by these agreements.[111] According to these authors the removal of these programs meant "the total reconstruction of farm support programs in Canada."[112]

Similar to this, Miner argues that WTO "disciplines have been a factor in Canadian farm policy formulation, and their influence is expected to continue and be strengthened

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[108] The WTO refers to these 'Green Box' Programs. Edwin Young et al. "Policy Development in United States Agriculture Since 1986," Trade Liberalization Under NAFTA: A Report Card on Agriculture, eds. R.M.A. Loyns, Karl Meilke, Ronald D. Knutson and Antonio Yunez-Naude, Proceedings of the Sixth Agricultural and Food Policy Systems Information Workshop, (Winnipeg, Canada: Friesen Printers, (January 2001): 98.
[109] Decoupled payments are predetermined payments not related to current production, prices, or resource use. Ibid.
[110] W. M Miner. "Will the WTO Domestic Support Provisions Constrain Domestic Agricultural Policies?" (1998): 433.
[111] Although CUSTA made no explicit mention of the desire to reduce subsidies, both countries did agree to work together in multilateral negotiations towards this end in all countries. The language in NAFTA is basically the same. These programs included the Western Grain Transportation Subsidy, the Western Grain Stabilization Program WGSP), the Tri-Partite livestock stabilization program, Feed Freight Assistance, the Gross Revenue Insurance Program (GRIP), and the Canadian Dairy Production Subsidy. Thomas L. Sporleder and Larry J. Martin. "Economic Perspective on Competitiveness Under WTO, NAFTA, and FTAA" (December 1998): 14
[112] Ibid: 14-15.

through further trade negotiations."[113] Moreover, he states that "domestic support provisions will prevent governments from retreating from policy reforms that are underway."[114] Finally he states that "there are reasonable grounds to conclude that domestic support provisions will constrain Canadian and other domestic policies. Indeed, there is considerable evidence that this is already occurring."[115] Clearly, for these authors, international institutions have constrained the ability of participating national governments to pursue independent agricultural policies, including those in Canada and the US.

The other perspective prominent in these debates contends that despite the development of international institutions and the rise of TNCs the state still has plenty of room to manoeuvre and that powerful domestic forces are responsible for driving agricultural policy development. According to these authors, domestic forces have successfully resisted neo-liberal harmonization.

According to Moyer and Josling, exogenous political pressures in fact do not play a major role in the domestic agricultural policy process.[116] One reason for this is that foreign nations, and other international interests, have no way of actually directly acting in the domestic bargaining process. Domestic policy makers have little incentive to follow the advice of international interests given that they are not dependent on these external interests for votes. Finally, policy makers have little incentive to introduce foreign concerns to an already complex enough bargaining process where compromise

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[113] W. M. Miner "Will the WTO Domestic Support Provisions Constrain Domestic Agricultural Policies?" (1998): 425.
[114] Ibid: 426.
[115] Ibid.
[116] H. Wayne Moyer and Timothy E. Josling. Agricultural Policy Reform: Politics and Process in the EC and USA, (Toronto: Harvester Wheatsheaf, 1990): 211.

difficult enough to achieve. Therefore, in the view of these authors, the external forces placing pressures on the policy process are all but nullified by the domestic factors which influence it directly, making convergence highly unlikely.

Closely related to this argument, Coleman and Skogstad argue that "even in the presence of strong international and domestic pressures to expand the application of neo-liberal principles, it is by no means axiomatic that domestic policy change will occur."[117] According to these two authors, the impact of neo-liberal ideas on policy outcomes is determined primarily by two domestic factors. The first is the extent to which neo-liberal principles have been adopted by those involved in the agriculture policy debate. The second is the degree to which the state institutions and agencies involved have become convinced of the merits of the new neo-liberal approach. Ultimately the developments and ideas about responses to changes in the international and domestic political economies are filtered through domestic institutions, interests and policy legacies. In this way, these domestic factors will contribute to policy change in their own particular way. Thus, there is no guarantee that individual states will respond to these pressures in a similar fashion.[118]

In adding to this argument, Coleman points out that policy legacies can serve as barriers resisting neo-liberal harmonization.[119] With the implementation of a particular policy regime a distinctive policy repertoire is instilled. Consequently, a distinctive policy repertoire creates unique obstacles to any future attempts to make changes to the

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[117] William Coleman and Grace Skogstad. "Neo-liberalism, Policy Networks, and Policy Change: Agricultural Policy Reform in Australia and Canada," Australian Journal of Political Science, 30 (1995): 243.
[118] Ibid: 246.
[119] William Coleman. "From Protected Development to Market Liberalism: Paradigm Change in Agriculture," Journal of European Public Policy, 5. 4 (December 1998): 643.

policy regime in place. Such policy legacies include corporatist policy networks, where vigorous interest groups work closely with state officials. Policy networks eventually become fortified in the institutional infrastructure of the state, and thus prove to be very ardent supporters of the programs in place. Therefore, according to Coleman, policy paradigms ultimately become embedded in the institutions of the state, making policy change a very difficult enterprise no matter what the external pressures may be.[120]

Developing this line of argument further using Paul Pierson's concept of 'policy feedback,' Coleman argues that policies can create interdependence within a vast social and economic network.[121] This means that policy change requires making changes to the institutional linkages on which the policy regime rests. Moreover, it means breaking the linkages between certain segments of society and their interest in maintaining a specific paradigm. Finally, Coleman states that the specific changes made to agriculture policy instruments directly influence how difficult, or not, it is to make changes to that policy later on.[122] In other words, once a policy instrument is created, created with it are certain segments of society become dependant. Inevitably, this segment of society becomes a major obstacle to altering or eliminating that particular policy instrument at a later date.

[120] In his analysis of the institutionalization of policy paradigms in France, Germany and the United States, Coleman looks at how the 'developmental paradigm' in the agriculture sector was institutionalized differently in each of the three states. Ultimately, the differences in each of these state-assistance policy regimes served to instil distinctive policy repertoires, creating unique obstacles which frustrated the shift to the 'market liberal paradigm.' As a result, Coleman concludes that while all three countries have moved towards the market-liberal paradigm for the governing of their agriculture sectors, albeit to a lesser extend in France and Germany, none have completely abandoned all of the policy instruments of their state assistance paradigms. Ibid.

[121] According to Pierson, "policy feedback refers to the resources and incentives created by policies themselves to group formation and activity, and to the process of social learning that follow from the implementation of policies." William Coleman and Wyn P. Grant. "Policy Convergence and Policy Feedback: Agriculture Finance Policies in a Globalizing Era," European Journal of Political Research, 32. 4 (1999): 226.

[122] Ibid: 243.

This is why Bonnen and Brown state that a change in policy regime will not occur if the transaction costs are too high[123]

While state government infrastructure has proven to be a formidable force resisting neo-liberal harmonization in the agriculture sector as described above, perhaps the most contentious domestic force with similar capabilities is rural ideology. Rural ideology is commonly referred to as 'agrarian fundamentalism' or the 'agrarian myth.' According to Knutson, Penn, and Flinchbaugh the agrarian myth is comprised of "three basic tenets: agriculture is the basic occupation of humankind, rural life is morally superior to urban life, and a nation of small independent farmers is the proper basis for a democratic society."[124] Meanwhile, for Paarlberg this list also includes the ideas that:

> farmers are good citizens, and a high percentage of the population should be on farms, farming is not only a business but a way of life, farming should be a family enterprise, the land should be owned by the person who tills it, it is good to make two blades of grass grow where one grew before, anyone who wants to farm should be able to do so, and a farmer should be his own boss.[125]

Hallberg describes how this value system is commonly associated with Thomas Jefferson. Jefferson, he writes espoused the value of "atomistic, family-oriented, independent-ownership structure for agriculture with limited government interference."[126] Likewise, Bonnen and Brown also describe how this set of values became popularized by

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[123] James T. Bonnen and William P. Brown. "Why is Agricultural Policy So Difficult to Reform?," The Political Economy of U.S. Agriculture: Challenges for the 1990's, ed. Carol S. Kramer, (Washington DC: National Center for Food and Agricultural Policy, 1989): 27 & 8. Transaction costs are measured by the difficulty attributed to the process of obtaining sufficient information about the specific issues, the process of negotiation, and the enforcement the new terms of policy. These authors point out that these difficulties are compounded because of factors specific to the agriculture sector including the wide range of beliefs that exist, the complex sets of property rights belonging to specific and specialized interests, and the reality of unintended and unforeseeable consequences in national and international markets and policy arenas.

[124] Ronald D Knutson, J.B. Penn and Barry L. Flinchbaugh. *Agricultural and Food Policy*, 4thed., (New Jersey: Prentice Hall, 1998): 7.

[125] Paarlberg calls this belief system the agrarian creed. Don Paarlberg. American Farm Policy, (New York: John Wiley & Sons, 1964): 3.

[126] Milton C. Hallberg, Policy for American Agriculture: Choices and Consequences, (Ames: Iowa State Press, 1992): 7.

Jefferson, who made the argument that "the basis for a strong democratic society was its independent, landholding yeomanry."[127] Moreover, they add that "it idealized self-reliant families of farmers struggling against a hostile environment with few resources beyond their own labour" and "it was believed that farmers as a group worked harder and invested more resources in their enterprise for a smaller return than did any other major sector of the economy."[128] In and of itself, this belief system certainly seems to be comprised of a respectable and benign set of principles. However, as these authors explain, it has been used to by agrarian interests to secure very lucrative favours from governments.

According to the authors belonging to this perspective, agrarian fundamentalism has been employed to great effect as an emotional tool in the pleas of agrarian groups to governments for support. For example, Wilson argues that agrarian interests use this value system in an attempt to convey the perception that "farmers are an economic and social minority often under siege." [129] He expands by explaining that agrarian fundamentalism as an ideology holds that farmers are actually entitled to public support: "a corollary belief is that the farm sector has a special virtue that gives society an obligation to support it and to guarantee its preservation through rough times."[130] In describing how the utilization of agrarian fundamentalism on the part of agrarian interests has actually been met with success, Hallberg states that "widespread adoption of agrarian fundamentalism as a moral philosophy has had a decided impact on agricultural policy in

[127] James T Bonnen, and William P. Brown. "Why is Agricultural Policy So Difficult to Reform?" (1989): 11.
[128] Ibid.
[129] Barry Wilson. Farming the System: How Politics and Farmers Shape Agriculture Policy, (Saskatoon: Western Producer Prairie Books, 1990): 83.
[130] Ibid: 82.

America."[131] Likewise, Brown et al write, Jefferson's words have been employed by "untold numbers of politicians and political commentators" in their pleas to the government to provide protection for the sector.[132] Finally, according to Skogstad the reason behind the ability of the US to undertake a fundamental reform in 1996 while the EU could not in 1992 was because this belief system had largely been discredited in the US, while it remained very durable in the EU.[133] While agrarian fundamentalism does provide a nostalgic and romantic image of the farmer, as a lobbying tool for agrarian interests it usually remains dormant until times of hardship stemming from the anomalies inherent in the agricultural production process.

The instability inherent in the agricultural production process has led to the resistance of neo-liberal harmonization. Gardner describes the "sensitivity of farm output to weather, insects, disease, and other natural hazards."[134] The agricultural production process is characterized by a periodicity particular to the rhythms of nature. Moreover, the production process is subject to unpredictable natural anomalies. As a consequence, Gardner says that "agricultural markets are characterized by random shocks which generate short- and long-term quasi-cyclical behaviour of prices and output."[135] Adding to this Houck explains that "the fundamental preconditions for instability in agricultural

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[131] Milton C. Hallberg. Policy for American Agriculture (1992): 7.
[132] William P. Browne, Jerry R. Skeos, Louis E. Swanson, Paul B. Thompson, Laurian J. Unnevehr. Sacred Cows and Hot Potatoes: Agrarian Myths in Agricultural Policy, Annual Policy Review, National Center for Food and Agriculture Policy, (Boulder: Westview Press Inc., 1992): 7.
[133] Skogstad calls this belief system 'agrarian exceptionalism.' This term works better in exemplifying the way in which policy-makers have traditionally made exceptions in regards to their treatment of the agriculture sector as compared with other sectors of the economy. In 1992 the EU passed the McSharry reforms, which were hardly considered to be a departure from the policy regime of the past. In 1996 the US passed the FAIR Act. In contrast to the McSharry reforms, the FAIR Act was considered to be a major departure from the policy approach of the past. Grace. Skogstad. "Ideas, Paradigms and Institutions: Agricultural Exceptionalism in the European Union and the United States," Governance, 11. 4 (October 1998): 466.
[134] Bruce L. Gardner. The Governing of Agriculture, (The International Center for Economic Policy Studies, The Regents Press of Kansas, 1981): 1.
[135] Ibid: 2.

markets have to do with the severe price inelasticity of both demand and supply in the short run."[136] This means that big price changes only bring about small changes in quantities supplied or demanded. On the supply side the reasons for this include the fact that seasonal patterns of nature generate a time lag between planting decisions and the actual harvest of the results of those decisions[137]; the proportionally large fixed production costs; and the fact that some products are highly perishable with limited and expensive storage options. On the demand side the causes of inelasticity are the fact that the actual price realized by farmers is only a small fraction of the actual final product price; in the short run there are few if any agricultural commodities to be used the final product; the inherent price and income inelasticity of the final products; and the products are necessities of life.[138]

These problems are only compounded by the on-going structural transformation of the agriculture sector, which is result of constant technological progress and the competitive context in which agriculture production takes place.[139] According to Bonnen and Brown, these two forces often result in oversupply and thus a downward pressure on prices. The long run downward pressure on prices gives way to a treadmill where only the early adopters of the latest technological advancements prosper. But, to survive these early adopters must continually employ the latest technological advancements. The result of this treadmill is has been the exodus of farmers from the land, resulting in ever decreasing numbers of farms and ever increasing sizes of farms. These authors conclude

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[136] James P. Houck. "Stabilization in Agriculture: An Uncertain Quest," Agriculture Policies in a New Decade, ed. Kristen Allen, (Washington DC: Resources for the Future and National Planning Association, 1990): 184.

[137] This is an example of what is know as 'imperfect knowledge.' Farmers must make planting decisions without knowing what the weather conditions of nature will be during the upcoming seasons.

[138] Ibid

[139] James T. Bonnen and William P. Brown. "Why is Agricultural Policy So Difficult to Reform?" (1989): 14.

that such problems have been the catalyst for the resistance of agrarian group to neo-liberal policies.

Agrarian lobby groups are argued to have proven a potent domestic force capable of resisting neo-liberal harmonization. In fact, it has been argued that the efforts of agrarian groups have led to increases in government assistance made to farmers on many occasions. Orden, Paarlberg, and Roe state that the structural transformation in the agriculture sector is the catalyst for the lobbying efforts on the part of farm groups.[140] According to Schmitz, Furtan, and Baylis, this is known as rent-seeking behaviour.[141] In regards to the potential success of their efforts, Orden, Paarlberg, and Roe argue that ultimately the lifespan of a particular policy instrument depends more on the balance between those who oppose and those who support the programs, than with arguments and ideas.[142] In regards to the lobbying efforts of the agrarian interests, these authors point out that strength of organization is more important than sheer numbers. Given this, Orden, Paarlberg, and Roe argue that the ever-decreasing number of farmers may even be beneficial for these groups. The authors also point out that it is comparatively easier to mobilize the resistance and defence of a program. This is because the beneficiaries of a program tend to become much more aroused at the prospect of the removal of the programs that serve their interests, than do those who are not significantly affected by the program. Thus, according to Orden, Paarlberg, and Roe, policy change will only become

[140] These authors state that this will particularly the case for the groups comprised primarily of farmers who have been slow, or unable, to adjust. David Orden, Robert L. Paarlberg, and Terry L. Roe. Policy Reform in American Agriculture: Analysis and Prognosis, (Chicago: University of Chicago Press, 1999): 47.
[141] Rent-seeking behaviour is conducted by individuals are groups with the aim of securing government transfers, namely direct subsidies or favourable regulations. Andrew Schmitz, Hartley Furtan, and Katherine Baylis. Agriculture Policy, Agribuiness, and Rent Seeking Behaviour, (Toronto: University of Toronto Press, 2002): 64.
[142] David Orden, Robert L. Paarlberg, and Terry L. Roe. Policy Reform in American Agriculture (1999): 47.

more and more difficult the more external forces cause changes in the domestic agriculture sector. In effect, for these authors, external pressures are only as strong as the weakness of domestic forces.

Building on the role of interest groups in the agriculture policy making process, Schmitz and Gray point out that the lobbying efforts of farm groups have proven very effective in securing favourable political outcomes: "policy decisions are clearly influenced by rent seeking behaviour."[143] According to these authors the level of financial support realized by farmers through agriculture policies is directly determined by the success of their lobbying efforts. Meanwhile, the success of the lobbying by farmers and their affiliated organizations is dependant on the degree to which the politician can win votes by adhering to their demands. This implies that agriculture policy outcomes are a function of the political system in place. Thus, for these authors the crux behind the divergence in the agricultural support levels found in Canada and the U.S is the differences in their respective systems of government.

Schmitz and Gray argue that political structures in Canada act to frustrate the attempts of producers and agrarian groups from bringing their concerns to the attention of policy makers. Due to the fact that the power rests with the prime minister, the authors make the point that unless farmers are able to gain access to his or her office their lobbying efforts are in vain[144] Moreover, even if producers and agrarian groups are successful in lobbying the office of the prime minister, there is nothing to guarantee the success of their efforts. Secondly, the authors point out that regional representation is not

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[143] Andrew Schmitz and Richard Gray. "The Divergence in Canada-US Grain and Oilseed Policies" Canadian Journal of Agricultural Economics, 40 (2001): 476.

[144] Andrew Schmitz, Hartley Furtan, and Katherine Baylis. Agriculture Policy, Agribusiness, and Rent Seeking Behaviour (2002): 49.

guaranteed in the Canadian system. This is especially problematic for the agriculture sector, which is so regionally based. Unlike the US system which guarantees two seats in the Senate for each state, the House of Commons in Canada is elected on the basis of population and the Senate is not elected at all. In Canada, the majority of the support for the governing party can be drawn from only one or two very populous regions of the country. Thus, regional representation in the governing party is not always equal, and thus the specific concerns of regions are not always equally heard.[145] In effect, the federal government tends to take on a regional bias, which is one of the reasons for the constant tensions that exist between the federal and provincial governments. As a result, agricultural concerns, which are usually regionally oriented to begin with, get unequal treatment. Finally, Schmitz and Gray argue that government support is often dependant on coalitions for provinces where the agriculture sector comprises a large part of the economy. Such coalitions are comprised of the federal and provincial governments, and most often occur when the ruling party of a province is the same as that of the federal government.[146] According to Schmitz and Gray differences in the structure of government are the major reason for the disparity in the levels of support realized by the prairie farmers of the two countries.[147]

Alongside these obstacles related to the structure of government, are the differences in the laws governing agriculture. Baylis and Rausser underline the significance of systemic differences, and note that "different rules often lead to different policy

[145] Ibid.
[146] Ibid: 50.
[147] Schmitz, Andrew and Richard Gray. "The Divergence in Canada-US Grain and Oilseed Policies" (2001): 493.

outcomes."[148] This is because constitutions affect access to the policy process, define the jurisdiction of the levels of government, and they dictate the scope and composition of the admissible coalition.[149] The US constitution makes no mention of agriculture. Therefore, by default agriculture policy is granted entirely to the jurisdiction of the federal government. The result is the omnibus farm bills which are passed about every five years. Meanwhile, Section 95 of the constitution of Canada stipulates that the agriculture sector is both a federal and a provincial responsibility, with federal paramountcy.[150] Given this, the authors argue that despite the similarities in history and culture between Canada and the US, the differences in their respective constitutions results in the differences in their respective agriculture policies.

For Schmitz et al, the differences in system of government between Canada and the US also result in differences in the presence of uncertainty with respect to government actions between the two countries.[151] As has been mentioned, in the US an omnibus farm bill is passed only once every five to seven years. Given this, only small changes are made to the provisions of these farm bills once they are instituted. The result is that farmers in the US face far less uncertainty due to the actions of government. In contrast to this, the parliamentary system of government in Canada enables each level of government to change policy more or less at will. Therefore, in the context of the joint federal-provincial responsibility for agriculture, either level of government is able to opt out of a program merely with a notification of a letter of intention to withdraw. Such an

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[148] Kathy Baylis and Gordon Rausser. "Rules, Policy and Rent Seeking: A Cross-border Comparison," Canadian Journal of Agricultural Economics, 49 (2001): 493.
[149] Ibid: 502.
[150] Andrew Schmitz, Hartley Furtan, and Katherine Baylis. Agriculture Policy, Agribusiness, and Rent Seeking Behaviour (2002): 51.
[151] Ibid: 197.

incident occurred in 1991 when the government of Saskatchewan declared itself incapable of sustaining its required contributions to the Gross Revenue Insurance Program.[152] For farmers in Canada, this reality clearly increases the uncertainty they face due to the actions of government, actions some of them are already less able to influence. In agreement with the conclusion made by Schmitz and Gray above, for these authors the differences in government lead to the differences in agricultural policy outcomes.

In the view of Baylis and Rausser policy "is a result of the bargaining between interested parties"[153] in which the outcomes of the bargaining process are determined by the constitutional parameters and the institutional settings within which it takes place. The US system of government allows for greater regional input and use of the courts as gateways to the policy process.[154] The division of powers and the guaranteed equal state representation at the federal level means that lobbyists have more opportunities to influence the agriculture policy process. Indeed, in the US prairie farmers are much more able to influence the agricultural policy process by lobbying their senators who represent their state in the federal level of government. Due to the fact that the farm bills usually require a compromise consisting of Presidential, Congressional as well as bipartisan approval, these senators have direct influence in the final product.[155]

In contrast to the situation in the US, Baylis and Rausser point out that the joint jurisdiction of agriculture between the federal government and the provinces has meant

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[152] Ibid.
[153] Kathy Baylis and Gordon Rausser. "Rules, Policy and Rent Seeking: A Cross-border Comparison" (2001): 495.
[154] Ibid.
[155] Thus, US farm bills are more consensus-oriented, requiring the input and approval of a whole range of perspectives and interests. This means that US farm bills are omnibus, including a great variety of titles relating to trade, nutrition, and the environment. The need for majority and often bipartisan consensus on farm bills has meant that lobby groups and agribusiness' representing all a whole range of interests related to the agriculture sector have historically possessed great influence in the creation of the farm bill.

that "Canada has a regional patchwork of agricultural income support programs, as opposed to a national program such as implemented by the US farm bill."[156] In Canada provincial governments can legally implement their own agricultural policies and programs. Therefore, lobbyists in Canada have been able to secure favourable outcomes from the provincial level of government, if that particular provincial government has the capacity to implement its own programs.[157] Due to the fact that the policy process is more accessible to individuals and lobby groups in the US through the Senate and the courts, agriculture policies of the US tend to cater more to the interests of such groups and individuals. Indeed, farm groups and individuals in Canada will have much more difficulty extracting similar benefits from their governments.[158]

Addressing the regional diversity in the agriculture sectors of Canada and the US Luttrell makes the point that in reality the agriculture sector is highly diverse in terms of commodities produced, as well as in terms of the incomes and wealth of its producers. As a result it can hardly be described as a homogeneous industry or policy area. As an example, Luttrell argues that there were many obstacles to the reform of agriculture policy in the US which had to do with this structural diversity in the sector, that ultimately lead to the trifurcated outcome of the 1996 farm bill.[159] Similar to the work done by Luttrell illustrating the diversity in the American agriculture sector, Skogstad

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[156] Ibid: 496.

[157] The more wealthy the province, the more capable it is of implementing its own policies and programs. For example, Saskatchewan and Manitoba have small populations and are much more dependant on farm income than is Alberta, which also has a much bigger population. Therefore, they are much less capable of implementing their own agricultural policies and programs than is Alberta. Andrew Schmitz, Hartley Furtan, and Katherine Baylis. Agriculture Policy, Agribusiness, and Rent Seeking Behaviour (2002): 197.

[158] Baylis, Kathy and Gordon Rausser "Rules, Policy and Rent Seeking: A Cross-border Comparison" (2001): 493.

[159] By 'trifurcated outcome' Luttrel means that import competing commodities saw little in the way of reform, whereas significant reform took place in the export crops sector towards a cash-out of support payments, and finally there were commodities that went entirely unsupported. Clifton B. Luttrell. The High Cost of Farm Welfare, (Washington: CATO Institute, 1989): 330.

outlines how the agriculture sub-sectors of Canada are regionally concentrated. Specifically, Skogstad argues that because each region is dependant on only a few commodities, important differences exist in the interests of producers both within and across sectors. She builds on this in a later work by describing agriculture policy in Canada as an "…overtible potpourri of bilateral agreements and arrangements designed to tailor national programs to provincial fiscal capacity and local conditions." [160] According to Skogstad, these differences lead to intra-provincial and intra-governmental tensions. Given this, compromises and tradeoffs are a necessity in agricultural policy formation in Canada. In conclusion, for Skogstad, a homogeneous policy regime in the agriculture sector is not possible.

While institutional differences generate expectations of differences in agricultural policies, so too do differences in political culture. The most notable author who argues that there are differences in political cultures are responsible for differences in political outcomes in Canada and the US is Seymour Martin Lipset. With respect to these differences Lipset states that:

> despite the development of both countries into industrialized, wealthy, urbanized, and ethnically heterogeneous societies, the dissimilarities, particularly the cultural differences, of the past continue. To reiterate an analogy, the two are like trains that have moved thousands of miles along parallel railway tracks. They are far from where they started, but they are still separated."[161]

For Lipset, the particular domestic factors found in Canada and the US have proven to be powerful forces, which have served to maintain the distinctiveness of the policies found in each country. He describes it this way: "their basic myths vary considerably, and

[160] Grace Skogstad. "Canadian Federalism, Internationalization and Quebec Agriculture: Disengagement and Reintegration,' in Canadian Public Policy, 24.1 (1998): 40.
[161] Seymour Martin Lipset. Continental Divide: the Values and Institutions of the United States and Canada, (New York: Routledge Inc., 1990): 212.

national ethoses and structures are determined in large part by such images."[162] Thus, for Lipset, the domestic factors particular to each country serve to thwart the convergence of their domestic policies despite the influence of the forces of globalization.

In regards to the particular character of the differences between the two countries, Lipset argues that "Canada has been more class-aware, elitist, law-abiding, statist, collectively oriented, and particularistic (group-oriented) society than the United States."[163] He suggests that, Canadians are "more supportive of state intervention than Americans."[164] Lipset further states that Canadians are much more supportive of using an activist welfare state to deal with the inequalities found in their society. Moreover, he explains that Canadians are far more willing to tolerate redistributive polices for the purposes of aiding the most disadvantaged groups in their society: "the evidence clearly indicates that Canadians are more supportive than Americans of redistributive equalitarianism."[165] Thus, the conclusions Lipset makes are twofold. The first is that Canada is more likely to employ policy instruments involving redistributive transfers of a higher level than those that might be found in the US. The second is that the domestic policies of Canada and the US have always, and will always, diverge to some extent.

[162] Ibid: 225.
[163] Ibid: 8.
[164] Ibid: 140.
[165] Ibid: 219..

1.4 Divergent Views

The literature is divided as to the effects of globalization and regional integration on domestic agricultural policy. On the one hand are analyses suggesting that domestic agricultural policies are converging. The establishment of the rules and disciplines associated with the WTO are argued to have spurred the reorientation of agricultural policy in the two countries towards neo-liberal principles. On the other hand, there are various analyses suggesting that agricultural policies are not converging. Domestic forces such as systems of government and domestic political institutions are argued to have proven capable of resisting neo-liberal harmonization. Therefore, the expectations generated by the literature as to whether or not the levels of government payments made to farmers in Canada and the US have been converging under pressures related to globalization and continental integration remain ambiguous.

Chapter 2

Methodology & Analysis

2.1 Introduction

The agricultural sectors of the six sub-units to be examined in this thesis are similar in terms of the particular mix of commodities produced and the environmental and exogenous forces acting on them. Therefore, the farmers in these sub-units experience similar income swings in terms of their frequency, magnitude and direction. With respect to the time period in which this analysis will be based, the 1990-2001 interval provides sufficient space both before and after the establishment of NAFTA and the WTO to consider their effects on the levels of government assistance provided to farmers in each sub-unit. It also allows for an examination of the trends in the levels of agricultural assistance provided over time, which is the only way that policy convergence can be tested.

Prior to beginning the analysis, it is necessary to outline the particulars of the indicators to be employed and the sub-units to be compared. Therefore, the details of the government payments ratio and the PSE used in the comparative analysis of the sub-units will be outlined, in terms of the data they represent and their relevance to the investigation. This will include an explanation of how these two indicators relate to each, as well as how they relate to the specific sub-units being compared. Following this, the profiles of the agricultural sectors of Manitoba, Saskatchewan, Alberta, North Dakota, South Dakota, and Montana will be detailed in terms of the particular mix of agricultural commodity production found in each in the 1990-2001 time period. This will be done in order to demonstrate the similarities and differences in the mix of agricultural commodity production in all of the six sub-units and thus their usefulness in relation to the investigation undertaken in this study.

2.2 Government Payments Ratio and the PSE

Making comparisons of the total levels of government support made to farmers in the provinces and states of Canada and the US is problematic because of the absence of comparable comprehensive indicators. The only such indicator available, the Producer Support Estimate (PSE), is calculated exclusively at the country and commodity level by the Organization for Economic Cooperation and Development (OECD). The PSE represents the total amount of government payments and market price support (MPS) provided to farmers. Government payments include all direct payments derived from consumers and taxpayers made by governments to farmers through programs, while MPS is designed to increase the domestic market price of a commodity above its border price.[166] Canada and the US do produce similar data on the total amount of government program payments made to farmers in their respective provinces and states. But, this data is only useful for comparisons of similar jurisdictions. This is because the total value of government support and the policy instruments used to deliver it to farmers varies by region and commodity produced, since the agricultural sectors of the two countries are so diverse. As a result, analyses of the levels of government payments made to farmers are only useful for comparisons of similar sub-units where the provision of MPS is low.

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[166] Consumer and Producer Support Estimates OECD Database 1986-2002: User's Guide, Directorate for Food, Agriculture and Fisheries, Agricultural Electronic Data Products: 6-7 <http://www.oecd.org/dataoecd/47/20/4351287.pdf>

The PSE is defined by the OECD as "an annual indicator of the gross transfers from consumers and taxpayers to support agricultural producers, measured at the farm gate level, arising from policy measures which support agriculture, regardless of their nature, objectives or impacts on farm production or income."[167] The OECD divides the PSE into eight categories. The various types of government payments make up seven of these eight categories. The OECD defines the categories of government payments as Payments Based on Output, Payments Based on Area Planted/Animal Numbers, Payments Based on Historical Entitlements, Payments Based on Input Use, Payments Based on Input Constraints, Payments Based on Overall Farming Income, and Miscellaneous Payments. The final category of the PSE is defined as MPS.

By far the most significant single category in terms of its share of the total PSE is the MPS. Although the proportion of the PSE that is comprised of MPS can vary depending on the country, MPS has historically made up a high percentage of the overall PSE for Canada and the US. For example, as shown in Figure B-3, MPS made up 61.7 percent of Canada's overall PSE in 1990 and 47.7 percent of its overall PSE in 2001. Meanwhile, as shown in Figure B-4, MPS made up 54.4 percent of the US' overall PSE in 1990 and 38.3 percent of its overall PSE for 2001.[168] Similarly, the proportion of MPS that has made up the total PSE has also varied depending on the commodity and time period, for each country. For example, as shown in Figures B-15 and B-7, MPS made up 80.3 percent of Canada's PSE for milk and 64.5 percent of its PSE for wheat in 1990, but it averaged 96.6 percent of its PSE for milk and 0 percent of its PSE for wheat in 2001.

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[167] Ibid: 6

[168] Agriculture Policies in OECD Countries: Monitoring and Evaluation 2003, OECD Publications Service, Paris France, 2003. <http://www1.oecd.org/publications/e-book/5103081E.PDF>

Meanwhile, as shown in Figures B-16 and B-8, MPS made up 93 percent of the US' PSE for milk and 27.3 percent of its PSE for wheat in 1990, but it made up 85.6 percent of its PSE for milk and 0 percent of its PSE for wheat in 2001. From these data it is clear that there can be very wide disparities in the levels of MPS between commodities, as was the case with the MPS levels for milk and wheat in both Canada and the US. It is also clear that the levels of MPS for each commodity can differ greatly depending on the time period, as was the case with wheat in both Canada in the US. Therefore, measuring both the composition and the total amount of assistance given to farmers not only depends on the country or sub-unit being considered, but the commodity type and time period as well.

In addition to the variation in the proportions of MPS that comprise the total PSE by commodity over time for each country, is the variation in the share of the overall MPS by commodity for each country. The proportion of Canada's overall MPS by each commodity is shown in Figure B-25. As can be seen, the percentage share of Canada's overall MPS that was comprised of the MPS for milk climbed from nearly 40 percent in 1990 and 1991 to over 50 percent in 1993 and 1994, before rising to 70 percent from 1995-01. Meanwhile, the percentage share of the MPS level for wheat dropped from just over 30 percent in 1990 to 10.9 percent in 1994, before dropping to 0 percent from 1995 onwards. Of the other commodities, not one had a percentage share above 7.7 percent after 1990. Thus, the majority of the overall MPS for Canada throughout the time period covered in this study was comprised of its MPS for milk. Meanwhile, the situation is similar for the US as can be seen in Figure B-26, showing the proportion of its overall MPS by commodity. The share of the US' overall MPS that was comprised of the MPS for milk, with the exception of 1994, remained above 50 percent throughout the time period covered in this study and averaged 59 percent from 1994-2001. Also, while the share for wheat averaged 7.8 percent from 1991-1994 before disappearing completely when it dropped to 0 percent from 1996 onwards, the percentage share for no other commodity ever rose above 3 percent. Thus, the majority of the overall MPS for the US from 1990-2001 consisted of its MPS for milk. Just as the composition of the total MPS for each country varies by commodity, the composition of the total overall assistance provided to the farmers of each country varies by commodity.

Given that MPS makes up such a high proportion of the total PSE for both Canada and the US, the proportion of the total PSE for each country varies greatly by commodity. For example, the proportion of the total PSE for each country that is comprised of the PSE for milk is very high. This can be seen in Figures B-5 and B-6, which show the share of the total PSE for Canada and the US by commodity respectively from 1990-2001. As can be seen, milk producers received a disproportionate amount of the total government support provided to all agricultural producers in Canada and the US respectively, relative to the producers of other commodities such as wheat. Also, as described above, most of this support provided to milk producers is comprised of MPS. Therefore, because the share of the overall MPS and composition of total overall government assistance provided to agricultural producers varies by commodity and time period for each country, the share of the overall MPS and the composition of the total support provided to farmers must also vary by region.

The regional composition of the agriculture sector of a country is shaped by historical and political factors. Historically, government policies have been used to encourage different types of agricultural production in different regions. One such example is John A. MacDonald's National Policy, where fixed railroad rates and a tariff policy were used to both settle the West and develop a nationally oriented economy. The fixed freight rates ensured the viable transportation of low value bulk agricultural commodities from the prairies to central Canada where they would be processed and/or exported. Meanwhile, the tariff policy ensured that the manufacturing sectors of central Canada, rather than the United States, would be able to ship their agricultural inputs for purchase on the prairies.[169] In addition to this, agricultural production is very sensitive to geographic and climatic conditions. Therefore, the successful production of each agricultural commodity is highly dependant on the proper geographic and climactic setting. This means that the agriculture sectors of countries are typically quite diverse since the type of commodity production varies greatly by geographic region.

For these reasons the agriculture sectors of Canada and the US are very regionally oriented. For, example, while Ontario and Quebec specialize in dairy production, Manitoba, Saskatchewan and Alberta specialize in the production of grains, oilseeds and beef. The situation is similar in the US where Florida and California specialize in the production of fruits and vegetables, while North Dakota, South Dakota and Montana specialize in the production of grains, oilseeds and beef. The implication of this is that governments must use different a different mix of policy instruments for each agricultural sub-sector. The result is that agricultural policy is just as diverse as is the sector itself in terms of the types of policy instruments used. Thus, the composition and total amount of government support provided to farmers varies by region and commodity produced.

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[169] Andrew Schmitz, Hartley Furtan, and Katherine Baylis. Agriculture Policy, Agribusiness, and Rent Seeking Behaviour (2002): 35.

Given the relation between the composition of the overall MPS for each country and the variation in the amount of MPS provided depending on the type of commodity produced, there is also a variation in the levels of MPS provided to the farmers of different sub-units. In taking another look at Figures B-25 and B-26, it is readily apparent that the MPS for milk producers is relatively very high. This means that the share of MPS as a proportion of the total assistance provided to farmers in such places as Ontario, Quebec, California, Wisconsin, New York, Pennsylvania, Idaho, Michigan, Washington, New Mexico and Texas is very high, since these sub-units turn out a significant proportion of the total value of milk production in their respective countries.[170] Conversely, in the sub-units where the share of MPS that makes up the total amount of assistance provided to farmers is very low, the total amount of assistance provided to the farmers of these sub-units is mostly comprised of government payments. Returning to Figures B-25 and B-26, it can be seen that the MPS for wheat, grains, oilseeds and cattle producers is relatively low, particularly after 1995. This means that the total assistance provided to farmers in such places as Manitoba, Saskatchewan, Alberta, Kansas, North Dakota, Washington, Montana, Oklahoma, Idaho, Texas, Minnesota, South Dakota and Colorado is mostly comprised of government payments, since these sub-units turn out a significant proportion of the total value of wheat, grain, oilseed, and cattle production for their respective countries.[171]

[170] These two provinces and nine states produced 70 percent of the value of all milk production in their respective countries in 2001. CANSIM II, Statistics Canada, and Statistics and Highlights of US Agriculture 2002 & 2003, United States Department Agriculture, <http://www.usda.gov/nass/pubs/stathigh/content.htm>
[171] These three provinces produced 96 percent of the total value of all wheat production in Canada, while these nine states produced 73.4 percent of the total value of all wheat production in the US, in 2001.

In the provinces and states where the share of MPS as a proportion of the total assistance received by farmers is low, the levels of government payments are more indicative of the overall level of government assistance provided to farmers than in the provinces and states where the share of MPS is high. This can be seen when comparing the levels of government payments made in the provinces shown in Figure A-3, to the levels of government payments for the overall PSE for Canada shown in Figure B-27. Likewise, it can be seen when comparing the levels of government payments made in the states shown in Figure A-4, to the levels of government payments for the overall PSE of the US shown in Figure B-28. Recognizing the similarity in the patterns of the levels of government payments made in the sub-units with the corresponding government payment levels for the overall PSE of each country helps to demonstrate the fact that a high proportion of the total government payments made in Canada and the US went to these sub-units. Therefore, as stated earlier, most of the assistance provided to the producers of the six sub-units featured in this study consisted of government payments.

It is possible to use the data produced by the governments of Canada and the US on government payments and the PSE data produced by the OECD to undertake a comparative analysis of the total government support provided to farmers of different sub-units. As discussed above, the relevance of such an analysis is dependant on the types of commodity production found in the sub-units to be compared. An analysis of government payments cannot offer a perfect representation of the developments in the levels of total support provided to farmers. However, in the case of the six sub-units examined in this study, a reasonably accurate representation of the developments in the levels of the total assistance provided to producers by governments is achieved. This is because the vast majority of the value of the total commodity returns for each province and state throughout the time period being studied is derived from commodities whose producers received, either very little MPS, or none at all; not one had a dairy sub-sector which averaged over 6.1 percent of the total value of its commodity returns during the 1990-2001 time period.

The PSE does not account for the costs of production.[172] Therefore, it is "fundamentally a gross concept." The percentage PSE, shown in Figure B-1, is a ratio of the total value of gross farm cash receipts to the total value of all commodity production plus budgetary support.[173] In order to create a comparable measure to the PSE, government payments must also be expressed as a ratio of gross farm receipts. Therefore, for this study total government payments are divided by total farm cash receipts to create a ratio: total government payments to total farm cash income. This indicator will henceforth be referred to as the government payments ratio in this study. The government payments ratios for each province and state are included in Appendix A.

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[172] Consumer and Producer Support Estimates OECD Database 1986-2002: User's Guide: 6 <http://www.oecd.org/dataoecd/47/20/4351287.pdf >

[173] Ibid: 14.

2.3 Province/State Profiles

With the indicators to be employed described above, it is now necessary to profile the agriculture sector of each sub-unit for the time period covered by this study. Following that, it will be necessary to compare and contrast the agricultural sectors of the six sub-units. This will be done in order to demonstrate their usefulness as empirical examples for this investigation.

As can be seen in Figure C-1 the percentage share of the total commodity returns for the province of Manitoba were largely made up of wheat, oilseeds, beef and hogs from 1990-2001. Of these four, the most important commodity in Manitoba's agriculture sector was wheat, which averaged almost 23 percent of the total commodity returns for the province over this time period. However, after 1997 its percentage share dropped to under 20 percent as it was overtaken, or equalled, by oilseeds, beef and hogs. While oilseeds averaged 17.8 percent for this time period, from 1994-1998 its percentage share was never below 20 percent and reached as high as 28.3 percent in 1998. Meanwhile, although the percentage share for beef reached as high as 18.2 percent in 1993, for the most part it stayed steady at around its average of just over 15 percent for the entire time period. Completing the quartet of the most important commodities for the agriculture sector of Manitoba was hogs, which averaged almost 16 percent for the time period studied, but rose from at or just over 13 percent from 1990-1995 before rising to as high as 23.4 percent in 2000. Of the remaining commodities corn and other grains combined to average 5.6 percent and poultry and eggs combined to average almost 5 percent. Finally, while the dairy sector reached as high as 6.7 percent of the total value of all commodity returns in 1991, it averaged 5.6 percent for the entire time period.

In contrast to Manitoba, the percentage share of the total commodity returns for Saskatchewan was dominated by a single commodity, wheat, which averaged 41 percent of the total value of all commodity returns from 1990-2001. However, despite this dominance, as reflected in Figure C-2 the percentage share for wheat steadily declined throughout this time period. For example, while wheat made up over 49 percent of the total value of all commodity returns in 1991, it dropped to 46.2 percent by 1994 and then declined still further to just under 33 percent by 2001. After wheat, the next most important commodity in the agriculture sector of Saskatchewan is oilseeds, which averaged 23.3 percent of the total commodity returns for the time period studied. Just as steady as the relative decline in the share of wheat throughout this time period was the relative increase of the percentage share of oilseeds from just under 15 percent in 1990, to above 23 percent from 1994 onwards; reaching as high as almost 32 percent in 1998. The third most significant commodity in the agriculture sector of Saskatchewan was beef, which reached as high as 20.6 percent in 1993, and averaged 17.1 percent throughout. Of the remaining commodities, other grains averaged 7.8 percent, while poultry, eggs and hogs combined to average just 5.1 percent. Finally, the dairy sector remained steady at 2.2 percent from 1990-2001.

Just as wheat was the predominant commodity produced in the agriculture sector of Saskatchewan, beef was the chief commodity produced in the agriculture sector of Alberta. In Alberta beef averaged 43.7 percent of the total value of all commodity returns from 1990-2001. But, not only was beef the most important commodity on average, as is evident in Figure C-3 its share of total commodity returns for the province increased overall throughout the time period covered in this study. For example, while the percentage share for beef stood at just under 40 percent in 1990 it increased to just over 47 percent in 1993, before rising to almost 53 percent in 2001. After beef, the next most important commodity in Alberta's agriculture sector has been wheat, which averaged just under 16 percent of the total value of all commodity returns for the province in the time period studied. However, while its share peaked at 19.5 percent in 1996, it dropped rapidly thereafter ending up at 12.4 percent by 2001. The commodity which averaged the third highest share of total commodity returns from 1990-2001 was oilseeds, at 12.1 percent. Despite reaching as high as 16.6 percent in 1994, just as was the case with wheat, its share dropped dramatically to just 9.2 percent by 2001. Of the remaining commodities hogs averaged almost 7 percent, other grains averaged almost 6 percent, and poultry and eggs combined to average just 3 percent. Finally, while the dairy sector reached as high as 6.6 percent of all commodity returns in 1991, it averaged just 5.3 percent from 1990-2001.

As can be seen in Figure C-4 the most important commodity in North Dakota's agricultural sector was wheat, which averaged 37.1 percent of the state's total commodity returns from 1990-2001. While the percentage share for this commodity stood at just above and just below the 30 percent mark at the beginning and end of the time period studied respectively, it reached as high as 45 percent of the total value of its commodity returns in 1995. The second most important commodity in the agriculture sector of North Dakota was beef, which made up as much as 18.1 percent of the total commodity returns for the state in 1990 and averaged 14.5 percent for the entire time period. In addition to this, oilseeds averaged 8.6 percent, other grains averaged 7.2 percent and corn averaged 3.6 percent. By far the smallest sub-sector of North Dakota's agriculture sector was livestock, as hogs, poultry and eggs combined to average just 2 percent. Finally, while the dairy comprised as much as 5.5 percent in 1990, it averaged just 3.5 percent for the entire time period.

Almost identical in importance to the agriculture sector of South Dakota as was wheat to that of North Dakota, was beef which averaged 34.5 percent of the total value of the commodity returns for the state from 1990-2001. However, as can be seen in Figure C-5 over the time period studied, its percentage share did fluctuate from a high of just under 43 percent in 1990 to a low of 27.5 percent in 1996 and 1997, before ending up at 38.1 percent in 2001. The second most important commodity was oilseeds, which averaged just over 22 percent for the entire time period and made up over 29 percent of the total value of all commodity returns when it overtook beef in 1996 and 1997. Of the other crops, while corn averaged 14.2 percent and reached as high as 19.1 percent in 1997, wheat averaged 10 percent. In regards to other livestock, hogs averaged just over 9 percent, while poultry and eggs combined to average just under 2 percent. Finally, while the dairy sector comprised as much as 7.5 percent in 1990, it averaged just 6.1 percent of the total value of all commodity returns for the entire time period studied.

More important to the agriculture sector of Montana than any single commodity was to any other province or state included in this study from 1990-2001, was beef. As can be seen be seen in Figure C-6, this commodity averaged 43.4 percent of the total value of all commodity returns for this state throughout the time period studied, making up as much as 54.8 percent in 2001. The second most important commodity was wheat, which averaged just over 30 percent of the total value of all commodity returns for the entire time period and comprised as much 41.5 percent in 1996, when it briefly overtook beef. As for the remaining commodities produced in the agriculture sector of Montana, not one ever made up more than 10 percent of the total value of all commodity returns. Given this, it is clear that the agriculture sector of Montana is less balanced than those of the other five sub-units. Of the remaining crop production, corn, oilseeds and other grains combined to average 7.6 percent. Meanwhile, of the remaining livestock production, eggs and hogs combined to average just over 2 percent. Finally, while the dairy sector comprised as much as 2.89 percent in 2001, it averaged just 2.3 percent for the entire time period studied.

As is evident from these profiles, the major similarity in terms of the agricultural sectors of the sub-units to be compared lies in the fact that the predominate sub-sectors in all six subunits received very little, if any, MPS. As just mentioned in the previous section, of the six sub-units compared in this study not one had a dairy sector that averaged over 6.1 percent of the total value of its commodity returns for the 1990-2001 time period.[174] The major commodity groups produced in each between 1990 and 2001 were wheat, oilseeds, other grains and beef.[175] These four commodity groups averaged close to 90 percent of the total value of all commodities produced in Saskatchewan in 1990-2001, over 80 percent in Montana, just below 80 percent in Alberta, more or less 70

[174] As already mentioned, the great majority of the total value of the overall MPS for Canada and the US was directed towards milk production, as demonstrated in Figures B-24 and B-25.

[175] 'Wheat includes all types of wheat including durum. 'Oilseeds' includes flax, canola, soybeans, mustard, sunflower, lentils, canary seed, dry beans, and dry peas. 'Other grains' includes oats, barley, and rye. 'Beef' includes cattle and calves.

percent in North Dakota and South Dakota, and just over 60 percent in Manitoba.[176] While the particular mix of commodity production in terms of commodities receiving MPS and those not receiving MPS is similar across all six sub-units, there is no correlation between the particular mix of commodity production in each sub-unit and the country that it belongs to.

If one were to attempt to group the six sub-units into their most similar pairs it would be found that each province is more similar to a state than it is to either of its provincial counterparts, and vice versa. For example, Manitoba is more similar to South Dakota than it is either Saskatchewan or Alberta. As demonstrated in Figures C-1 and C-4, the agriculture sectors of these two sub-units were the most diversified of the six included in this study. While wheat and maize production combined to average just over 23 percent of the total value of all commodity returns in Manitoba, these commodities averaged just over 24 percent in South Dakota. Also, while grains and oilseeds averaged 24 percent in Manitoba, they averaged almost 26 percent in South Dakota. As for the other four sub-units, as seen in Figures C-2, C-3, C-5, and C-6 Saskatchewan is most similar to North Dakota and Alberta is most similar to Montana. For example, just as wheat production averaged 41 percent of the total value of all commodity returns in Saskatchewan it totalled just over 37 percent in North Dakota. Also, while beef production averaged just over 17 percent in Saskatchewan, it averaged almost 15 percent in North Dakota. Meanwhile, beef production averaged almost 44 percent in both Alberta and Montana. As well, just as crop production averaged almost 34 percent in Alberta it averaged almost 38 percent in Montana. Given this, it can be safely assumed

[176] If hog production is included, this total reaches 78 percent for Manitoba. Combined, the three sub-sectors receiving MPS throughout the time period studied - milk, poultry, and egg production – averaged just 10 percent of the total value of all commodities produced in Manitoba from 1990-2001.

that the levels of payments made in the provinces and states, was not driven by the particular structure of the agricultural industries in Canada and the US.

In summary, the agriculture sector of each sub-unit profiled above is unique to some extent. However, they are all similar in terms of the proportion of their agricultural commodity production that does not receive MPS. Also, there was no correlation regarding the similarities in the particular mix of agricultural production found in certain pairs of the sub-units and the country that they belonged to. Given this, it can be assumed that the particular climactic and market conditions found in each during the time period studied were similar and that the problems faced by governments in relation to these conditions were also similar. Therefore, the six sub-units included in this study serve as credible empirical examples in regards to the particular questions to be investigated.

2.4 Government Payments Ratios Compared

The overall trends reported here contradict the expectation that the levels of government payments made to farmers in the six sub-units would be found to have converged in a downward direction in the 1990-2001 time period. In fact, as demonstrated in Figure A-1 although the government payments ratios for the six sub-units did converge in the mid-1990s, they diverged thereafter. Indeed, while only about 6 percentage points separated the sub-unit that had the highest government payments ratio and the one that had the lowest in 1994 and 1995, over 20 percentage points separated them in 1999 and 2000. In addition, Figures A-1 and A-2 reveal that the government payments ratios of all six sub-units actually increased in the late 1990s. For example, the government payments ratios for each of the provinces were at least twice as high in 2001 as they were in 1998, while those for three states were at least twice as high in 2001 as they were in 1996. Therefore, while the government payments ratios of the six sub-units did not converge over the time period studied, they did move in a similar direction.

The divergence seen in Figure A-1 is characterized by the evidence of clustering along national lines. For example, the disparity between the provinces started out at 8.9 percentage points in 1990, closed to just 1.2 percentage points in 1997 and 1998, and then opened up again to 5.7 percentage points in 2001. The disparity between the states stood at 8.0 percentage points in 1990, closed to just 2.1 percentage points in 1995, and opened up again to 13 percentage points in 2000. In contrast, the disparity between all six sub-units began at 10.7 percentage points in 1990, closed to just 5.8 percentage points in 1995, and opened back up to 20.8 percentage points in 2000. Indeed, national orientation played a major factor in determining the government payments ratio level for each sub-unit.

With respect to the trends evident in Figure A-2, the average government payments ratio for the states was higher and more consistent in the time period covered than those for the provinces, which were lower and much more erratic. For example, the average government payments ratio for the states never dipped below 7.9 percent and averaged 14.2 percent, while that for the provinces fell below 6.5 percent five times and averaged 9.5 percent between 1990 and 2001. As well, the percentage change from one year to the next between the average government payments ratio for the provinces was greater than 4.3 six times, while that for the average of the states was greater than 3.3 only twice in the time period covered. Finally, the average of the government payments ratios for the three provinces and for the three states seen in Figure A-2 moved apart in opposite directions in 1992 and from 1996-1998. Even more than could be seen in Figure A-1, Figure A-2 reveals the important role that the national orientation of each sub-unit played in determining the movements in its government payments ratio.

The analysis of the year to year changes begins as the government payments ratios in all six sub-units are decreasing from the record high levels that they had reached in the years 1986-88. The interval 1990-1992 is characterized by the overall decrease in the government payments ratios in all three states and the fact that states make up two of the three sub-units in which the highest government payments ratios are found, in those years. In 1990, the government payments ratio for both North Dakota and Montana increased from the level they had been at in 1989 by 2.5 and 0.9 percentage points respectively, while that for South Dakota decreased by 0.8 percentage points. As a result, the average government payments ratio for the states increased by 0.9 percentage points in that year. Then, in 1991 the government payments ratios for North Dakota and South Dakota decreased from the level they had been at in 1990 by 1.2 and 1.8 percentage points, while that for Montana increased by 1.6 percentage points. This caused the average government payments ratio for the states to decrease by 0.5 percentage points.

The 1990-1992 interval is also characterized by the drastic reduction in the government payments ratios of the three provinces in 1990 and their subsequent overall increase in 1992. With respect to the absolute drop in the government payments ratios for the provinces in 1990, that for Manitoba plunged by 12.8 percentage points from the level it had been at in 1989. This was the biggest drop in the government payments ratio of any of the sub-units in the three decades shown in Figure A-1. The government payments ratios for Saskatchewan and Alberta also dropped in 1990 from the levels they had been at in 1989 by 10.4 and 4.8 percentage points respectively. As a result the average of the government payments ratios for the provinces moved in the opposite direction to that of the states and fell by 9.4 percentage points. Then in 1991 the government payments ratios for both Manitoba and Alberta increased from the levels they had been at in 1990 by 3.0 percentage points, while that for Saskatchewan increased by 0.9 percentage points. Similarly, the average government payments ratio for the provinces increased by2.3 percentage points in 1991. Once again, the average government payments ratio for the provinces moved in the opposite direction to that of the states. Given the reduction in the government payments ratios for the provinces described above and the increase in the those for North Dakota and Montana in 1990 and 1991, this interval marked the first time that the states outnumbered the provinces in the top half of the sub-units in the time period covered in terms of their respective government payments ratio levels. It also marked the first instance found in this study where the government payments ratios for all six sub-units fell below 18 percent.

The year 1992 is the first occasion in the time period covered that the government payments ratios of the farmers of all three sub-units of one country stood at a higher level than those of all three sub-units of the other country. While the government payments ratios in all three provinces reached above the 15 percent mark, the government payments ratios in all three states fell below it. In fact, a full 4.4 percentage points separated the province that saw the highest level government payments ratio, Manitoba, and the state that had the lowest, Montana. Moreover, the disparity between the sub-unit that had the highest government payments ratio, Saskatchewan, and the sub-unit that had the lowest, South Dakota, was some 16.9 percentage points. In addition, the government payments ratios for not only the province and state averages, but also the individual provinces and states, moved in opposite directions. Finally, the increase in the government payments ratio for Saskatchewan from the level found in the previous year amounted to 7.8 percentage points, the second-highest increase of any sub-unit in the time period studied.

The situation evident in 1993 is the complete reverse of the one evident in 1992, in terms of the direction of the government payments ratios in the provinces and states. Whereas in 1992 there was an increase in the government payments ratios of the farmers in all three provinces from the previous year, in 1993 there was a decrease. Similarly, whereas there was a decrease in the government payments ratios for the states in 1992, in 1993 there was an increase. As a result of these movements, the disparity in the range of government payments ratios of the farmers in all six sub-units closed dramatically to just

7 percentage points, from the 16.9 percentage point spread that existed the year before. Likewise, the disparity between the average government payments ratio for the provinces and for the states closed to just 1.2 percentage points. Also, this year is the last time that the farmers of two provinces realized higher government payments ratios than did the farmers of any of the states. Finally, the decrease in the government payments ratios for the three provinces foreshadows the trend that is evident into the mid-1990s.

The next two years of this interval, 1994 and 1995, are characterized by the congruency and the downward direction of the government payments ratio levels from one year to the next for all six sub-units. In the first instance, the disparity in the range of government payments ratios between the sub-units in these two years is the smallest of any other interval examined in this study. In 1994 the government payments ratios of the farmers in the six sub-units all fell within 6.1 percentage points and in 1995 they all fell within 5.7 percentage points. Likewise the disparity in the average government payments ratios for the provinces and states closed to just 2.0 and 3.4 percentage points in 1994 and 1995 respectively. The other major characteristic shared by these two years is that the government payments ratios for each of the six sub-units decreased from the year before. By 1995 the government payments ratios for all six sub-units had been nearly halved from where they stood in 1993.[177] These movements are best demonstrated in the fact that the average government payments ratio for the provinces dropped from 15.3 in 1993 to just 4.5 percent in 1995, while the state average dropped from 14.1 to just 7.9 percent in those same years. Thus, in these years the average government payments ratios for

[177] The government payments ratio for Manitoba dropped from 16.2 to just 4.8 percent between 1993 and 1995; that for Saskatchewan dropped from 18.4 to 5.8 percent; that for Alberta dropped from 11.4 to 3 percent; that for North Dakota dropped from 15.4 to 8.2, that for South Dakota dropped from 11.9 to 6.7; and that for Montana dropped from 15.1 to 8.8 percent in that same interval.

the provinces and the states moved in the same direction. Finally, these two years mark the end the interval where at least two provinces had government payments ratios of a higher level than any of the states.[178] From 1995 onwards the farmers of at least two states had government payments ratios of a higher level than did the farmers of any of the provinces.

The year 1996 marks the end of the downward trend seen in the 1994-95 interval. It is characterized as a period of transition, foreshadowing the upward trend in the government payments ratios of all six sub-units that characterizes the developments of the later half of the 1990s. In 1996 farmers in three of the sub-units saw their government payments ratios increase from the year before, while farmers in the three other sub-units saw their ratios decrease from the year before. This parting of directions between the sub-units into two groups of three resulted in an increase in the disparity of government payments ratios, between the sub-unit that had the highest and the one that had the lowest, to 9.1 percentage points. Finally, 1996 also marks the resumption of the movement in opposite directions of the average government payments ratios for the provinces and the states. The average government payments ratios for the provinces and the states continued to move in opposite directions, with the average for the states increasing at the same time as the average for the provinces decreased, until 1999 when they both began to increase.

The interval comprising the years 1997-01 is characterized by the general upward trend in the direction of the government payments ratios for the farmers in the six sub-units, the fact that the farmers in all three states realized higher ratio levels than all three provinces, and the disparity in the government payments ratios between the sub-unit that

[178] Of course, there was an exception to this trend in 1990-91, as was pointed out earlier.

had the highest and the one that had the lowest. By 1997 all of the sub-units, with the exception of Saskatchewan and South Dakota, had realized higher government payments ratios from the year before. This upward trend continued until 2000, with no less than four of the sub-units studied experiencing an increase in their government payments ratios from the year before, each year. For example, while the average government payments ratio for the states stood at 9.3 percent in 1997, it jumped to 22.7 percent by 2000. Likewise, while the average government payments ratio for the provinces stood at 3.6 percent in 1998, it rose to 12 percent by 2001.

In regards to the national trends, 1997 was the first of four consecutive years when the farmers of all three states experienced higher government payments ratios of a higher level than the farmers of all three provinces. Thus, there was evidence of national clustering in this time period. Finally, this interval saw the range of government payments ratios jump from a modest 7.2 percentage points in 1997 up to over 20 percentage points in 1999 and 2000. In fact, the 22.2 and 20.7 percentage point gaps between the sub-unit that had the highest government payments ratio and the one that had the lowest, in 1999 and 2000 respectively, marked the period of the greatest disparity in the ratio levels in the entire period of this study. Thus, while there was a general upward trend in the government payments ratios in all of the six sub-units, there was a great discrepancy in the ratio levels for the states as compared to the provinces. For example, the average government payments ratio in the states doubled that of the provinces in 1997, quadrupled them in 1998, tripled them in 1999, and doubled the government payments ratio of the provinces again in 2000.[179] However, while the developments of

[179] In these four years the average government payments ratios for the states stood at 8.8, 14.4, 21.1 and 22.2 percent, while the averages for the provinces were 4.4, 3.6, 6.4 and 10.7 percent.

this interval seem to point towards a real divergence in the government payments ratios between the provinces and states, the movements evident in 2001 seem to suggest that the ratio levels for these six-subunits may come together once again in the near future.

The year 2001 was characterized by the discontinuity in the relative directions of the government payments ratios for the farmers in the provinces as compared with those in the states. The farmers in all three provinces saw their government payments ratios continue to increase from the previous year, just as they had the year before. Meanwhile, in this same year the farmers in all three states saw their government payments ratios decrease from the year before. The result was that the disparity in the government payments ratios for the sub-unit that had the highest, North Dakota, and the sub-unit that had the lowest, Alberta, closed to 14.1 percentage points from 20.7 the year before.

2.5 Policy and Program Changes

With the movements in the government payments ratios for the six sub-units described above, it is now necessary to describe the programs that drove these movements and created the patterns seen in Figures A-1 and A-2. As will be shown, although Alberta stood alone as the only sub-unit capable of implementing its own programs, the federal government in Canada ultimately always ensured that farmers in Manitoba, Saskatchewan and Alberta were equally supported. Therefore, the patterns evident in Figures A-1 and A-2 were the responsibility of both federal and provincial governments, since the initiation of programs by Alberta compelled the federal government to provide similar programs in Manitoba and Saskatchewan. This was the reason for the strong national clustering that was found in the previous section. It will also be shown that as programs were eliminated and replaced in both Canada and the US, there was a migration from certain types of programs to others with the establishment of the WTO in the mid-1990s. The change that occurred involved a transition from policy instruments classified by the OECD as MPS and Payments Based on Area Planted/Animal Numbers to ones classified as Payments Based on Historical Entitlements, Payments Based on Output, and Payments Based on Input Use. Although there was a change in means, ultimately there was not a change in ends. After all, the government payments ratios in all six sub-units increased towards the end of the decade.

2.5.1 Canada

The first year of this study, 1990, marked a transition between agricultural policy regimes in Canada. The three components of the previous regime, the Agricultural Stabilization Act, the Western Grains Stabilization Program (WGSP) and the Crop Insurance Act had previously combined to serve farmers of all commodities in every region of Canada. In its place, the Farm Income Protection Act was established in the context of record low grain prices.[180] By 1990 the WGSP had been all but exhausted thanks to a series of huge pay outs made to prairie farmers from 1985-1986, as evidenced by the increase in government payments ratios for the three provinces seen in Figures A-1 and A-2.[181] The WGSP had been implemented in 1976 after it was deemed by prairie grain farmers that the more general Agricultural Stabilization Act could not attend to their specific income problems.[182] The WGSP was borne out of the Federal task Force on Agriculture and was specially designed to stabilize aggregate net cash flow of Western

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[180] Andrew Schmitz, Hartley Furtan, and Katherine Baylis. Agriculture Policy, Agribusiness, and Rent Seeking Behaviour (2002): 329

[181] The payments made out of the WGSP drove the surge in total payments made in all three of the provinces studied, accounting for over 50 percent of the total value of all payments made in Saskatchewan and Manitoba in 1986 and 1987. In each of these years this program made payments totalling $151 and $260 million in Manitoba and $477 and $759 million in Saskatchewan. The sheer magnitude of this increase can be grasped when placed in the context of the last three decades of the century, as is evident in Figure A-3. This was certainly the period of the highest pay outs ever made to prairie farmers. The result was that the total payments made to farmers in Saskatchewan and Manitoba comprised some 30 percent of their total cash receipts for these two years, as seen in Figure A-3.

[182] The Agriculture Stabilization Act had been in operation since 1958 and was a fully federally funded program. It was designed to provide farmers of all crops and livestock in all provinces with per-unit subsidies when the price of any given commodity dropped below 90 percent of the previous three-year, then later five-year, average. However, these three and five-year average periods were too short to account for long-term price swings. Moreover, prairie farmers found the quotas of the Canadian Wheat Board to be too constraining, disabling them from delivering all of their production. Thus, they could not receive all of their potential stabilization payments since these payments were driven by the quantity of production delivered. Ibid: 46.

farmers derived from crops.[183] The WGSP was funded equally by participating producers and the federal government. It was to work in conjunction with the prairie crop insurance program, which was designed to stabilize yields. Together, these two programs were intended to stabilize the incomes of prairie farmers.

The first payouts of the WGSP went out in 1978 and 1979, as is evidenced by the surge in the government payments ratios for the three provinces in Figures A-1 and A-2. However, thereafter, only minimal payments were made until 1986. The series of payments made out of the WGSP from 1985-1988 simultaneously decreased dramatically due to the declining world grain prices and bankrupted the program. In the first instance, the rolling three-year average for market returns on which the pay outs of the program were based had dropped significantly due to the declining world grain prices. This meant that the levels of payments dropped with them. In the second instance, the flurry of huge pay outs triggered by the initial drop in prices in 1985 sent the program into the red. The result was the end of the WGSP, the Agricultural Stabilization Act and the Crop Insurance Act and the creation of the Farm Income Protection Act in 1990.

The year 1990 was the first year that WGSP payments were not made and is the reason for the drop in the government payments ratios for the three provinces in 1990, as seen in Figures A-1 and A-2. As described in the previous section, this fall was among the most drastic ever. However, as also described above, the year 1992 marks the beginning of a big increase in the payments made to farmers in the provinces. This increase is driven by the initiation of the Gross Revenue Insurance Program (GRIP), the Net Income Stabilization Account (NISA) and crop insurance, which combined to make

[183] The Federal Task Force on Agriculture was reported in 1969 and recommended that a price stabilization program be established for the prairies in place of the existing set of ad hoc programs which were in operation alongside the Agriculture Stabilization Act. Ibid: 198.

up the three components of the Farm Income Protection Act. In contrast to the policies that preceded it, the Farm Income Protection Act "forced the provinces to fund a portion of farm income support programs."[184] In other words, the federal government created the programs on the condition that the provinces help to fund them.

The GRIP was designed to complement the crop insurance program. The payouts made from this program were based on a 15 year moving average of historical market prices for each product and a producer's long term average yield. Given that the payments made from the GRIP were based on crop yields and livestock numbers the OECD placed the GRIP under the category Payments Based on Area Planted/Animal Numbers. The program operated through a tripartite funding scheme with the federal government, provincial governments and producers contributing 42 percent, 25 percent and 33 percent shares respectively. The GRIP picked up where the WGSP left off and made enormous payments to farmers in the three provinces from 1991 to 1994 as the chronically low grain prices continued. This was because some very high prices from the 1970s were included in the moving average.[185] During this time the GRIP contributed on average fully one half of the total value of all payments made in each of the three provinces, and made up as much as 70 percent of all payments made to farmers in Manitoba and Alberta in 1993. In Manitoba payments from the GRIP totalled $112, $170, $275 and $162 million in the years 1991, 1992, 1993 and 1994 respectively. Meanwhile, in Saskatchewan, payments from this program totalled $367, $518, $467 and

[184] The authors indicate that was done in order to limit the ability of the provinces to lobby the federal government for more income support for their producers. Kathy Baylis and Gordon Rausser. "Rules, Policy and Rent Seeking: A Cross-border Comparison" (2001): 496.

[185] K. K. Klein and G. G. Story. "Structural Developments in the Canadian Grains and Oilseeds Sector," Economic Harmonization in the Canadian/US/Mexican Livestock-Grain Subsector, eds. R.M.A. Loyns, Ronald D. Knutson and Karl Meilke, Proceedings of the Fourth Agricultural and Food Systems Policy Information Workshop (Univesity of Guelph, , December 1998): 76.

$4 million, in 1991, 1992, 1993 and 1994 respectively. Finally, in Alberta they reached $218, $357, $351 and $218 million, in these same years. These developments are demonstrated in Figures D-1, D-2, and D-3 where it can be seen that GRIP was clearly most responsible for the movements in the levels of payments made between 1991 and 1994. The contributions the GRIP made to the total value of all payments made to producers in the provinces can also be seen in the overall PSE for Canada as well as its PSE for wheat, maize, other grains and oilseeds.[186] However, like the WGSP before it, this flurry of pay outs effectively contributed to the demise of the program.

One problem with the viability of the GRIP was that Saskatchewan and Manitoba were incapable of sustaining their contribution towards the pay outs, as designated by the funding formula outlined above. These two provinces are heavily dependant on farm incomes and are comprised of small populations.[187] The other problem was that as the low prices of the early 1990s were incorporated in the 15 year moving average and the high prices of the 1970s dropped, the levels of payments made from the program began to decrease dramatically.[188] Thus, the GRIP was a paradox in that not only had the high pay outs made upon its initiation left two of the provinces incapable of sustaining it, but in the opinion of some the drop in payment levels thereafter made the program hardly worth preserving either.

In addition to these problems, the GRIP represented the first instance in which the provinces had been held responsible to some degree for contributing support payments to

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[186] The contributions made by the GRIP to the total value of all assistance provided to farmers in Canada can be seen in Figures B-2, B-6, B-8, B-10, and B-12. This program is represented in category C for the PSE entitled Payments Based on Area Planted/Animal Numbers.

[187] Andrew Schmitz, Hartley Furtan, and Katherine Baylis. *Agriculture* Policy, Agribusiness, and Rent Seeking Behaviour (2002): 197.

[188] K. K. Klein and G. G. Story. "Structural Developments in the Canadian Grains and Oilseeds Sector" (December 1998): 76.

farmers in order to shield them from adverse conditions generated in the international political economy.[189] In each such instance prior to 1991 the federal government had considered itself entirely responsible for providing such support since the problem was fundamentally an international one. Given that it had cost the governments of Manitoba and Saskatchewan so much, this program was cause for tension between some of the provinces and the federal government. As a result of the multitude of problems that had built up in association with it, the GRIP was effectively brought to an end by 1998. To sum up, the GRIP was largely responsible for the increases in the government payments ratios for the provinces in the years 1991 and 1992, and was equally responsible for the decreases in the government payments ratios for the provinces in the years 1993, 1994, and 1995, as seen in Figures A-1 and A-2.

Escaping the fate of its counterpart, NISA is still a major stabilization program of the Canadian government. It covers all agricultural commodities except for those which are part of the supply management system.[190] The program is cost shared on the 50/50 basis between farmers and the provincial and federal governments.[191] Farmers are permitted to deposit a maximum of 3 percent of their eligible net farm sales into their accounts. The exact equal amount deposited by the farmer is matched by the provincial and federal governments. The farmer's accounts are held in commercial banks or credit unions, depending on his/her choice. A positive balance earns the prime rate of interest on short-term deposits, plus three-percent. This additional three percent is cost shared by

[189] The chronically low grain prices that were the catalyst for the huge pay outs from the WGSP and the GRIP, were caused by the international grain trade war being fought out between the United States and Europe. Andrew Schmitz, Hartley Furtan, and Katherine Baylis. Agriculture Policy, Agribusiness, and Rent Seeking Behaviour (2002): 196 and 198.
[190] Supply management systems exist for milk, poultry and eggs in Canada.
[191] The Federal and Provincial governments split there share 50%. Ibid: 204.

the provincial and federal governments. Farmers are allowed to withdraw money from their NISA accounts once their income falls below a predetermined minimum level, in order to stabilize their incomes. These payouts have two triggers. The first trigger is pegged to a three-year moving average of net farm income. If farm income falls below 70 percent of the previous three-year average, farmers may withdraw funds from their NISA accounts. The second trigger allows farmers to make with-drawls if their income falls below Cdn $10,000.[192] Given that the program's triggers are mostly based on historical overall income levels, the OECD categorizes NISA under the Payments Based on Overall Farming Income for the PSE.[193]

As is demonstrated in Figures D-1, D-2, and D-3, the payments made from NISA have been modest but stable since its inception in 1991, more or less hovering between 2 and 10 percent of the total value of all payments made to farmers in the three provinces. Of course, there have been some exceptions, as in 1999 when this program accounted for 27, 39 and 30 percent of the total value of all payments made to farmers in Manitoba, Saskatchewan and Alberta respectively. In that year payments from this program totalled $58, $189, and $66 million in Alberta, Saskatchewan and Manitoba respectively. However, overall, it can be concluded that NISA has not driven any significant difference in the composition of the government payments ratios between the three provinces. Also, it can be concluded that NISA has never been responsible for any significant fluctuations in the government payments ratios for the three provinces seen in Figures A-1 and A-2, as had been the case with the WGSP and the GRIP.

[192] This amount was increased to Cdn $20,000 in 1999 per farm, or Cdn $30,000 for partnerships. Ibid.
[193] NISA is included in category G of the PSE entitled Payments Based on Overall Farming Income. Its contribution to the total value of all assistance provided to producers in Canada can be seen in Figures B2, B-6, B-8, B-10, B-12, B-16, and B-18.

The final component of the Farm Income Protection Act is crop insurance, which along with the GRIP replaced the Crop Insurance Act of 1960. This program was funded 25 percent by each level of government and 50 percent by producers. The great majority of the payments made to farmers from crop insurance in Canada were made to farmers located in Manitoba, Saskatchewan and Alberta.[194] This is because the less variable yields enjoyed in other regions result in less land enrolled in the program and trigger far fewer payouts for the land that is enrolled. Given that crop insurance payments are made when a farmer's yield falls below 70-80 percent of his/her average historical yield it is categorized by the OECD under Payments Based on Area Planted/Animal Numbers for the PSE by the OECD.[195] Thus, according to Schmitz, Furtan, and Baylis crop insurance is seen to be primarily a prairie program.[196]

As is demonstrated in Figures D-1, D-2, and D-3, crop insurance had been accessed by the farmers of the three prairie farmers consistently throughout the time period covered in this study. However, the biggest pay outs made from this program have been made to farmers in Saskatchewan. The farmers in that province received at least 35 percent of all crop insurance payments made in Canada throughout the time period studied, and over 50 percent in the years 1990, 1994, 1995 and 1999.[197] In all but three of the twelve years covered in this study, farmers in Saskatchewan have been heavily reliant on this program, deriving over 30 percent of the total value of all payments received from

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[194] Payments made from crop insurance to farmers in Manitoba, Saskatchewan and Alberta accounted for at least 65 percent of all payments made from this program to farmers in Canada in each year between 1990-2001.

[195] Crop insurance is included in category C of the PSE entitled Payments Based on Area Planted/Animal Numbers. The contributions made by crop insurance to the total value of all assistance provided to farmers in Canada can be seen in Figures B-2, B-6, B-8, B-10, and B-12.

[196] Ibid: 312.

[197] Payments made from this program to farmers in Saskatchewan totalled \$347, \$307, \$274, and \$160 million in each of these years respectively. However, the highest pay out in dollar terms from this program took place in 2001 when a total of \$384 million in payments were made to Saskatchewan farmers.

crop insurance.[198] Even still, there is no evidence that the payments made from this program were behind movements in the government payments ratio levels for the three provinces seen in Figures A-1 and A-2.

In addition to the triage of programs comprising the Farm Income Protection Act, the National Tripartite Stabilization Program (NTSP) has also made contributions to the total value of all government payments made to beef, pork, beans, sheep, and honey farmers in the three provinces.[199] The commodity programs that were a part of the NTSP were developed by the provinces and equally funded by the federal government, provincial governments and producers on a one-third cost share basis. Given that payments were made from these programs depending on commodity returns, the OECD placed these programs under Payments Based on Output for the PSE.[200] Due to the fact that the livestock sector is a far more significant part of the composition of Alberta's agriculture sector, a higher and more consistent level of payments was made from tripartite programs in Alberta than in the other two provinces.

As can be seen in Figure D-3 between 1990 and 1994 payments made from tripartite programs in Alberta averaged just below 10 percent of the total value of all cash receipts and totalled as much as $116 million in 1992. Although the levels of payments made from this program were less consistent than in Alberta, farmers in Manitoba also received a significant proportion of the total value of their payments from tripartite programs in 1990 and 1992. Payments from these programs amounted to just below 10

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[198] The years 1991, 1992 and 2000 were the three years in which the payments derived from crop insurance did not exceed 35 percent of the total value of all payments made to farmers in Saskatchewan. However, in those years these farmers were receiving big pay outs from GRIP and AIDA.
[199] Ibid: 203.
[200] Tripartite programs are included in category B of the PSE entitled Payments Based on Output. The contributions made by tripartite programs to the total value of all assistance provided to farmers in Canada can be seen in Figures B-2, B-16, and B-18.

percent and totalled $16 and $38 million in each of these years respectively. However, even if the proportion of the total value of all payments received by farmers in Alberta and Manitoba was similar in 1990 and 1992, the absolute dollar value of payments made in Alberta amounted to 2.25 times those made in Manitoba in 1990 and 3 times the amount made in that province in 1992. Due to the relative minimal contribution of the payments made from this program to the overall levels of payments made in these Manitoba and Alberta, tripartite programs played a very minimal role in driving changes in the government payments ratios for these two provinces seen in Figure A-1.

Throughout the time period covered in this study various ad hoc programs came into effect for a year or two at a time each. As mentioned earlier ad hoc programs have always been a unique feature of Canadian agriculture policy because Canada's agricultural policy making process is fragmented between the federal and various provincial governments.[201] As demonstrated in Figures D-1, D-2, and D-3,[202] ad hoc programs made significant contributions to the total value of all payments made to farmers at various intervals between the years 1990 and 2001. In 1990, ad hoc programs made up roughly 40 percent of the total value of all payments received in Saskatchewan and Alberta, and just over 30 percent in Manitoba. The two programs that contributed to the boost in payments made by ad hoc programs from 1990-92 were the Canadian Farm Income Assistance Program (CFIP) and the Farm Support and Adjustment Measures II. The CFIP provided funds to farmers who suffered "a sudden and severe drop income for

[201] Baylis, Kathy and Gordon Rausser "Rules, Policy and Rent Seeking: A Cross-border Comparison" (2001): 496.
[202] All ad hoc programs are represented in these graphs under the category entitled Other.

reasons beyond their control."[203] Both programs are categorized by the OECD under Payments Based on Area Planted/Animal Numbers for the PSE because they made payments depending on yields and animal numbers.[204]

Payments made from the CFIP to farmers totalled $47, $275, and $99 million in Manitoba, Saskatchewan, and Alberta respectively in 1990. In this year these payouts accounted for 28, 44, and 25 percent of the total value of all payments made in Manitoba, Saskatchewan and Alberta respectively. Then, in 1992 the Farm Support and Adjustment Measures II program made payments to farmers totalling $77, $223, and $166 million in Manitoba, Saskatchewan, and Alberta respectively. These payments contributed 20, 21 and 18 percent of the total value of all payments made in Manitoba, Saskatchewan and Alberta respectively in this year. Although there was no significant difference in either in the proportion or the timing of the payments made from these programs to the three provinces, these programs did make significant contributions to the movements in the government payments ratio levels for all three provinces seen in Figures A-1 and A-2.

Another ad hoc program to make significant contributions to the total value of payments made to farmers was Alberta's Farm Income Disaster Program (FIDP). This program represents the only difference of any significance between the provinces in the time period studied. While it does not represent a significant difference in the patterns of the levels of payments made between Alberta and the two other provinces featured in this study, it does represent a significant difference in the ability of the three individual

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[203] Canadian Farm Income Program, Agriculture and Agri-food Canada, <http://www.agr.gc.ca/cfip/welcome.html>

[204] The Farm Income Assistance Program and Farm Support and Adjustment Measured II are included in category C of the PSE entitled Payments Based on Area Planted/Animal Numbers. The contributions made by these two programs to the total value of all assistance provided to farmers in Canada can be seen in Figures B-2, B-6, B-8, B-10, and B-12.

provinces to establish their own programs without a federal partnership. As noted earlier, that is because these two provinces are comparatively far more reliant on farm incomes and are comprised of much smaller populations.[205] This means that they are less capable of establishing farm assistance programs without the aid of the federal government. Thus, not only have Manitoba and Saskatchewan proven incapable of maintaining their share of the contributions towards cost-share programs, as was the case with the GRIP, these two provinces have been unable to even consider developing agricultural assistance programs of their own. Conversely, Alberta has historically possessed a much stronger budget, which has ultimately allowed it to develop its own assistance program for its farmers.

The FIDP was a whole farm assistance program designed to provide support when farm income drops below 70 percent of a farmer's reference margin, as a result of factors beyond his/her control.[206] Given that payments from this program are triggered by a measure of income the OECD has placed this program under the Payments Based on Overall Farming Income category for its PSE.[207] The first payments from the FIDP were made in 1996, and the program has remained in operation ever since. In that year, the FIDP contributed some 30 percent of the total value of all payments made to Alberta farmers. To put this into perspective, consider that the $45.6 million paid out from the FIDP in 1996 was just five thousand dollars less than the total amount of payments made to farmers in Manitoba that same year. In 2000, the payments made from this program

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[205] Andrew Schmitz, Hartley Furtan, and Katherine Baylis. Agriculture Policy, Agribusiness, and Rent Seeking Behaviour (2002): 127.

[206] Ministry of Agriculture, Government of Alberta, <http://www.agric.gov.ab.ca/ministry/afsc/fidp.html>

[207] FIDP is included in category G of the PSE entitled Payments Based on Overall Farming Income. The contributions made by the FIDP to the total value of all assistance provided to farmers in Alberta can be seen in Figures B-2, B-6, B-8, B-10, B-12, and B-16.

had climbed to some $309.4 million, which amounted to $42 million more than the total value of all payments received by the farmers of Manitoba that same year. After 1996 the FIDP accounted for 26, 29, 46, and 34 percent of the total value of all payments made to farmers in Alberta in the years 1997, 1998, 2000 and 2001 respectively. The contribution of the payments made from the FIDP to the total value of all payments made in Alberta can be seen in Figure D-3.[208] While Alberta was able to provide assistance to its producers by itself, this capability did not lead to any difference in the patterns of the government payments ratio levels for the three provinces seen in Figure A-1.

The Western Grain Transportation Act (WGTA) came into effect in November 1983 with the purpose of limiting government subsidies on transportation so that freight rates would reflect the changing cost of grain transportation. The WGTA replaced the fixed rates that had previously been in place.[209] The subsidies were paid directly to the railroads. In effect, the WGTA was an MPS because these subsidies kept on-farm prices for grains and oilseeds artificially high. For example, at the time of the program's elimination in August of 1995, prairie grains and oilseeds producers were paying about half of the estimated total transportation costs.[210] Given that the WGTA was a subsidy for transporting agricultural commodities to export terminals, it was considered an export subsidy. The signing of the WTO bound all member countries to eliminate such subsidies within a six year period of its implementation. Rather than reduce it gradually,

[208] The FIDP is represented in the category entitled Other from 1996-1998 and is represented in the category Income Disaster thereafter.

[209] The WGTA was a legacy of the Crow Rate Benefit, which was a fixed transportation subsidy paid to the railway companies for the shipment of agricultural commodities in Western Canada. It was instituted in 1897 as part of Sir John A. MacDonald's National Policy, to ease the financial burden of constructing the Crows Nest Pass and to encourage the settlement of the West. Barichello, Richard R. (April 1995), p. 47.

[210] [210] K. K. Klein and G. G. Story. "Structural Developments in the Canadian Grains and Oilseeds Sector" (December 1998): 80.

the government of Canada decided to eliminate it immediately.[211] The removal of MPS for grains and oilseeds producers is demonstrated in Figures B-7, B-11, B-13, and B-25. Since 1995 prairie grain farmers have been responsible for paying the entire cost of moving their products to export terminals.

A series of ad hoc payments were also made after of the elimination of the WGTA. In recognition of the removal of this transportation subsidy, the federal government made a series of one-time pay outs to farmers affected by the subsequent increase in freight rates. The programs out of which these payments were made included the Western Grain Transition Payment Program, the Freight Cost Pooling Assistance Program and the Freight Cost Pooling Assistance Program II. While the Western Grains Transition Payment Program and the Freight Cost Pooling Assistance Program II were categorized by the OECD under Payments Based on Historical Entitlement, the Freight Cost Pooling Assistance Program was categorized under Payments Based on Output for the PSE.[212] Although the loss of the WGTA amounted to a huge net loss in the long term for farmers in Manitoba and Saskatchewan, the payments they received from these programs as compensation were very significant. For example, in 1997 the payments made from the Freight Cost Pooling Assistance Program accounted for 39 and 19.5 percent of the total value of all payments made to farmers in Manitoba and Saskatchewan respectively. Moreover, the $53.4 million paid out to farmers in Manitoba and the $49.6 million paid out to farmers in Saskatchewan by this program almost equalled the $56.3 million paid

[211] Ibid: 82.

[212] The Western Grains Transition Payment Program and the Freight Cost Pooling Assistance Program II are included in category D entitled Payments Based on Historical Entitlements in the PSE. Meanwhile, the Freight Cost Pooling Assistance Program is included in category B entitled Payments Based on Output in the PSE. The contributions made by these programs to the total value of all assistance provided to farmers in the prairie provinces can be seen in Figures B-2, B-6, B-8, B-10, and B-12 for the years 1995-1997.

out to farmers in Alberta from the FIDP. Despite the fact that farmers in Alberta would benefit from the FIDP throughout the rest of the period studied, such payments as the ones described above made by the federal government to farmers in Manitoba and Saskatchewan ensured that they would be no worse off. Therefore, the payouts made from the Western Grain Transition Payment Program, the Freight Cost Pooling Assistance Program and the Freight Cost Pooling Assistance Program II did not result in any significant differences in the changes of the government payments ratios between the three provinces, as seen in Figure A-1.

In 2000 and 2001 several more ad hoc programs made significant pay outs to prairie farmers. These programs made payments to grain, oilseed and special crops farmers to compensate them for economic hardships incurred in the 2000 and 2001 crop years. These programs operated under a 60:40 federal-provincial funding scheme and the provinces were responsible for making the payouts to their farmers from this program.[213] The OECD categorized each of these three programs under Payments Based on Historical Entitlements for the PSE.[214] The Canada-Saskatchewan Assistance Program (C-SAP) and C-SAPP II made payments to farmers totalling $260 and $200 million to farmers in Saskatchewan in 2000 and 2001 respectively. These payments made up 36 and 20 percent of the total value of all payments made in Saskatchewan in 2000 and 2001 respectively. Meanwhile, the Canada-Manitoba Assistance Program (C-MAP) and C-

[213] Canada-Manitoba Agricultural Safety Net Programs, Agriculture and Agri-food Canada, <http://www.agr.gc.ca/progser/cmbasnp_e.phtml>
Canada-Saskatchewan Agricultural Safety Net Programs, Agriculture and Agri-food Canada, <http://www.agr.gc.ca/progser/csasnp_e.phtml>
Canada-Alberta Agricultural Safety Net Programs, Agriculture and Agri-food Canada, <http://www.agr.gc.ca/progser/caasnp_e.phtml>

[214] C-SAP, C-SAP II, C-MAP, C-MAPII, and the Canada-Alberta Farm Income Assistance Program are included in category D entitled Payments Based on Historical Entitlements in the PSE. The contributions made by these programs to the total value of all assistance provided to farmers in the prairie provinces can be seen in Figures B-2, B-6, B-8, B-10, and B-12.

MAP II made payments to farmers in Manitoba amounting to $100 and $92 million in 2000 and 2001 respectively. These payments comprised 37 and 25 percent of the total value of all payments made in Manitoba in these two years. Finally, the Canada-Alberta Farm Income Assistance Program made its first payments to the farmers of Alberta in 2001. In that year the payments made from this program amounted to $276 million, which accounted for 34 percent of the total value of all payments made to farmers in that province in 2001. The contributions to the total value of all payments made to the farmers in the three provinces is demonstrated in Figures D-1, D-2 and D-3 where these programs are all represented in the category entitled 'Other.' From these graphs it can be seen that ad hoc programs played a very significant role in driving the increases in the government payments ratios for all three provinces at various intervals shown in Figures A-1 and A-2.

The final program that made significant contributions to the total value of all payments made to farmers during the time period under covered was the Agriculture Income Disaster Assistance (AIDA) program. AIDA was put into effect in 1998 in response to the low incomes being realized by grains, oilseeds, and livestock farmers in Manitoba and Saskatchewan.[215] Although farmers in Alberta were also suffering from low incomes during this period of time, they did not receive any assistance from AIDA. This was another example of the ability of that province to pursue its own course in terms of agricultural assistance to producers. Albertan farmers were already receiving payments from the FIDP, as described above. As a result the province of Alberta was forwarded its share of the total support available as long as the program was in operation.

[215] Andrew Schmitz, Hartley Furtan, and Katherine Baylis. Agriculture Policy, Agribusiness, and Rent Seeking Behaviour (2002): 205.

Thus, in the absence of similar provincial assistance programs, farmers in Manitoba and Saskatchewan had to rely on the federal government to provide a solution to their latest income woes.

AIDA was a temporary farm income support program structured according to WTO guidelines. Producers became eligible for pay outs once their net income, not including depreciation, fell below 70 percent of their three-year moving average net income.[216] Given that the pay out trigger for the program was based on historical income levels the OECD placed it under Payments Based on Overall Farming Income for the PSE.[217] The first pay outs were made to farmers in Manitoba and Saskatchewan in 1999 and continued in 2000 and 2001.[218] In Manitoba these pay outs totalled $42, $45, and $100 million and accounted for 20, 17, and 30 percent of the total value of all payments made in these years respectively. Meanwhile, in Saskatchewan AIDA added up to $114, $109, and $184 million and accounted for 24, 15 and 18 percent of the total value of all payments made to the farmers of that province in those three years respectively.[219] These developments are demonstrated in Figures D-1 and D-2, and are partly responsible for the contribution to the increase in the government payments ratios for Manitoba and Saskatchewan seen in Figure A-1 by the category 'Income Disaster' in the years 1999, 2000 and 2001.

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[217] AIDA is included in category G entitled Payments Based on Overall Farming Income in the PSE. The contributions made by these programs to the total value of all assistance provided to farmers in the prairie provinces can be seen in Figures B-2, B-6, B-8, B-10, B-12, B-16, and B-18.
[218] No payments were made from AIDA to farmers in Alberta. That is because these farmers were already benefiting from the FIDP.
[219] AIDA is included in the Income Disaster category in these two graphs.

2.5.2 United States

In 1990 the US government enacted the Food, Agriculture, Conservation, and Trade Act of 1990 (FACT Act), which replaced the Food Security Act of 1985. The FACT Act was mostly made up of programs that had been introduced in earlier farm bills dating back to the Agricultural Adjustment Act of 1933.[220] The major mechanisms designed to provide assistance to farmers in the new farm bill were the target price and non-recourse loans programs. The target price was set for such program commodities as wheat, corn and cotton and was based on a national average estimate of the cost of production. Well above market prices in most years, the target price was designed to determine the size of the deficiency payment to be made to farmers who participated in commodity programs.[221] The amount for each deficiency payment was the difference between the target price and the national average market price for a crop.[222] The one major alteration that was made to the target price mechanism is that the quantity of production for which a farmer could receive payments was reduced for all commodities from the previous farm bill. This meant that each farm possessed what was known as 'payment acreage' or a 'payment yield.'[223]

The other major pay out mechanism retained in the FACT Act was the market assistance loan program. The market assistance loan program offered the farmer the option of taking either a non-recourse loan payment or a loan deficiency payment (LDP).

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[220] Schmitz, Andrew and Richard Gray. "The Divergence in Canada-US Grain and Oilseed Policies" (2001): 460.
[221] Bruce L. Gardner. American Agriculture in the Twentieth Century: How It Flourished and What It Cost, (London: Harvard University Press, 2002): 220.
[222] The national average market price for a crop was determined after each marketing year.
[223] Ibid: 220.

If the farmers chose to take a non-recourse loan payment he/she had to forfeit his/her commodity as collateral. However, the size of such a payment, otherwise known as 'the loan rate,' could be reduced from the level it was at in the previous farm bill given certain circumstances.[224] Upon repayment of the loan, the farmer paid a rate lower than the original loan payment level. Thus, an implicit direct payment was made to the producer, which was called a 'marketing loan gain.' If, on the other hand, the farmer was unable to repay his/her loan, the Commodity Credit Corporation (CCC) had no recourse but to take ownership of the crop. Alternatively, the farmer could forgo the loan payment and instead choose to take an LDP. The amount of the LDP equalled the amount that would otherwise have been received as a marketing loan grain had the farmer chosen to take the loan.[225] In effect, the marketing assistance loans program gave farmers the chance to realize the greatest possible returns for their commodities.[226] At a minimum, the farmer would receive the loan rate as payment for their commodity. However, if the market price for the commodity rose above the loan rate, the farmer could pay off the loan and redeem the commodity for commercial sale at the market price. The main commodities supported by the CCC's loan rate were grains, cotton, and storable dairy products.

In addition to the two pay out mechanisms described in the previous paragraph, the FACT Act also retained the Conservation Reserve Program (CRP), which had been established by the Food Security Act of 1985. The central objective of the CRP was to decrease soil erosion by taking some 40 to 45 million acres out of crop production. A

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[224] If a crop's stocks-to-use ratio was high loan rates were reduced. The definition of 'high' was to be determined by the Secretary of Agriculture. The loan rate could also be reduced at the Secretary of Agriculture's discretion.

[225] Farm Commodity Policy Questions and Answers, Briefing Room, Economic Research Service, United States Department of Agriculture, <http://www.ers.usda.gov/briefing/farmpolicy/questions/>

[226] Bruce L. Gardner. American Agriculture in the Twentieth Century: How It Flourished and What It Cost (2002): 218.

secondary objective was to increase farm gate prices and thus improve farm income by reducing the supply of certain program commodities. The program made per-acre payments to farmers for their land that was enrolled in the CRP and left out of production, each year. The CRP paid farmers up to a limit of $50,000 and each county was limited to removing 25 percent of its total crop land from production. After the introduction of this program it was found that most of the crop land taken out of production was located in the Great Plains region. In the attempt to attract farmers from other regions such as the mid-west, the CRP was changed slightly by the FACT Act towards a focus on water quality.

The majority of the payments made to farmers in North Dakota, South Dakota and Montana under the FACT Act were target price deficiency payments for wheat and feed grains. As demonstrated in Figures D-4, D-6, and D-8, target price deficiency payments accounted for well over 50 percent of the total value of all payments made for majority of the years that the FACT Act was in effect in each of the three states.[227] This program is categorized by the OECD under Payments Based on Area Planted/Animal Numbers for the PSE, due to the fact that payments are dependant on yield; hence the term 'payment yield' mentioned above.[228] In regards to the breakdown of the payments made in this category, a greater amount was paid out for wheat production in North Dakota and

[227] In North Dakota target price deficiency payments totalled $353, $384, $279, $392, $238, and $136 million in each year between 1990 and 1995. These payments made up 65, 72, 63, 70, 52, and 46 percent of the total value of all payments made to farmers in North Dakota each of these years respectively. Meanwhile, in South Dakota target price deficiency payments amounted to $182, $189, $146, $248, $105, $133 million in each year from 1990-1995. These payments made up 55, 66, 55, 57, 37, and 55 percent of the total value of all payments made to farmers in South Dakota in these years. Finally, in Montana, target price deficiency payments added up to $164, $197, $141, $193, $125, and $65 million in each year between 1990 and 1995. These payments comprised 55, 62, 47, 57, 49, and 35 percent of the total value of all payments made to farmers in Montana in each of these years respectively.

[228] Target price deficiency payments are included in category C entitled Payments Based on Area Planted/Animal Numbers in the PSE. The contributions made by these programs to the total value of all assistance provided to the farmers in the US for the years 1990-1995 can be seen in Figures B-3, B-7, B-9, B-11, and B-13.

Montana, while in South Dakota the majority was made for feed grains. As seen in Figures C-4, C-5 and C-6, this is simply because wheat made up a much higher proportion of the total value of all agricultural commodity returns in North Dakota and Montana than it did in South Dakota in the time period covered.[229]

With respect to the effect of this program on the movements in the overall levels of payments made, consider that when the total amount of target price deficiency payments dropped by 65 percent in 1993 from 1995 in North Dakota, the overall level of payments dropped by 48 percent between those same years. The situation was the same in the other two states. For example, in South Dakota, the total amount of target deficiency payments dropped by 58 percent in 1995 from 1993, while the overall level of payments made dropped by 43 percent between those same years. Also, in Montana, the total amount of target deficiency payments dropped by 67 percent in 1995 from 1991, while the overall level of payments made dropped by 41 percent between those same years. Therefore, due to the sheer relative magnitude of the levels of payments made from this program, it was clearly most responsible for driving the movements in the government payments ratios for the three states under the FACT Act, as seen in Figures A-1 and A-2.

After target price deficiency payments, the next most important program in terms of total value of all payments made to farmers in the three states under the FACT Act was the CRP. Given that CRP payments could only be accessed by taking land out of production, the OECD placed it under the category Payments Based on Input Constraints

[229] From 1990-2001 wheat production made up an average of 37 and 30 percent of the total value of all agricultural commodity returns, in North Dakota and Montana respectively. In contrast, wheat only made up an average of 10 percent of the total value of all agricultural commodity returns in South Dakota in the same time period.

for the PSE.[230] As can be seen in Figures D-4, D-6 and D-8, from 1990 to 1995, the payouts from this program averaged just over 25 percent of the total value of all payments made in North Dakota and South Dakota, and fully 40 percent in Montana. In contrast to the other programs providing assistance to farmers, the CRP also provided the most stable and consistent level of payments of all the out of which payments were derived in this time period. For example, the payments made from the CRP never differed by more than 13 percent in the years of the highest and lowest levels of payments made from this program in each of the three states; always remaining between $121 and $111 million in North Dakota, between $84 and $74 million in South Dakota, and between $111 and $109 million in Montana. In contrast to this, the levels of target price deficiency payments made in North Dakota reached $392 million in 1993 before dropping by more than half to $136 million in 1995, in South Dakota they reached $248 million in 1993 before dropping by more than half to $105 million in 1995, and in Montana they reached $197 million in 1991 before dropping by more than half to $65 million by 1995. In conclusion, because the levels of payments made out of the CRP never differed greatly from one year to the next in any of the states included in this study, this program was not responsible for differences the movements of the government payments ratios for the three states seen in Figures A-1 and A-2.

The only other source of payments made under the FACT Act of any significance represented in Figures D-4, D-6 and D-8, are the payments made from the programs included in the Miscellaneous category. This is the collection of ad hoc programs similar to those found in Canada, as discussed earlier. Many of the programs included in this

[230] The CRP is included in category F entitled Payments Based on Input Constraints in the PSE. The contributions made by this program to the total value of all assistance provided to the farmers in the US for the years 1990-1995 can be seen in Figures B-3, B-7, B-9, B-11, and B-13.

category are related to the production of commodities not prevalent in the states covered in this study, such as the Milk Marketing Fee, the Dairy Indemnity Program, and the Rice Marketing Program. However, other programs included in this category are directly related to the types of commodity production and environmental conservation found in the three states covered, such as the Rural Clean Water Program, Emergency Feed Program, and Livestock Emergency Payments. The conservation oriented programs such as the Rural Clean Water Program are categorized in the same category as the CRP by the OECD, Payments Based on Input Constraints, for the PSE.[231] Meanwhile, the emergency and disaster related programs attending to production losses such as the Livestock Emergency Payments are categorized by the OECD under Payments Based on Area Planted/Animal Numbers.[232] Finally, the programs related to inputs such as the Emergency Feed Program are categorized by the OECD as Payments Based on Input Use.[233]

Unfortunately the data available is not precise enough to allow for detailed a description and analysis of the levels of payments made by each individual program included in this category. However, Figures C-4, C-5, and C-6 do allow for a reasonable best guess as to which programs made payments to the farmers of these three states, based on the types and proportion of commodity production that made up their

[231] The ad hoc conservation programs are included in category F entitled Payments Based on Input Constraints in the PSE. The contributions made by these programs to the total value of all assistance provided to the farmers in the US for the years 1990-1995 can be seen in Figures B-3, B-7, B-9, B-11, and B-13.

[232] The ad hoc programs related to emergency assistance are included in category C entitled Payments Based on Area Planted/Animal Numbers in the PSE. The contributions made by these programs to the total value of all assistance provided to the farmers in the US for the years 1990-1995 can be seen in Figures B-3, B-7, B-9, B-11, and B-13.

[233] The ad hoc programs related to inputs are included in category E entitled Payments Based on Input Use in the PSE. The contributions made by these programs to the total value of all assistance provided to the farmers in the US for the years 1990-1995 can be seen in Figures B-3, B-7, B-9, B-11, B-13, B-15, B-17, B-19, B-21, and B-23.

agriculture sectors from 1990-2001. This category of programs accounted for an average of 18 percent of the total value of all payments made in South Dakota, 12 percent in North Dakota, and 6 percent in Montana from 1990-1995. However, as significant in value as these period averages are, in reality, from year-to-year, the levels of the payments made from these programs actually fluctuated greatly. This is simply a consequence of their reactive, short-term nature. For example, while payments from these programs totalled $102 million in North Dakota in 1994, they added up to only $10 million in 1991. Meanwhile, in South Dakota while they added up to some $100 million in 1993, they amounted to only $10milllion in 1991. Finally, while this category of payments amounted to $38 million in Montana in 1992, it totalled only $5 million the year before. Unlike the payments made out of the CRP, these programs are responsible for differences in the movements of the government payments ratios for the three states seen in Figures A-1 and A-2, albeit to a much lesser extent than the payments derived from the target price mechanism.

In 1996 the FAIR Act replaced the FACT Act as the farm bill governing agricultural policy in the US. It marked a major change in the direction of US farm policy.[234] The major objective behind the FAIR Act was not only to reduce the levels of payments made to farmers but to de-couple the payments made to farmers from prices and production decisions, and thus bring US agricultural policy more in line with the principles of the WTO.[235] The programs that were eliminated included the target price program, the land set-aside program, and the farmer owned reserve program (FOR). The elimination of the target price mechanism not only eliminated the deficiency payments,

[234] Andrew Schmitz and Richard Gray. "The Divergence in Canada-US Grain and Oilseed Policies" (2001): 461.
[235] Edwin Young et al, "Policy Development in United States Agriculture Since 1986" (January 2001): 98.

but also brought to an end the MPS earned by farmers that was derived from the elevated prices paid by consumers. The removal of MPS for wheat and other grains in 1995 can be seen in Figures B-8 and B-12. Also, the introduction of the FAIR Act meant that price supports for cattle and pigmeat were removed that same year, while the price supports for eggs were removed in 1997, as seen in Figures B-18, B-20, B-24, and B-26. In place of these programs Production Flexibility Contract (PFC) payments, market assistance payments, LDPs, CRPs, and Emergency Assistance (market-loss assistance) were introduced.

Under the FAIR Act farmers could take out what was called a Production Flexibility Contract (PFC). Farmers holding PFCs received scheduled income subsidies for the years 1996-2002 called market transition payments. Market transition payments were made in recognition of the elimination of market price supports, the target price mechanism, and other commodity-specific programs. These lump-sum payments were to decline in value as they were paid out in each of the years between 1996 and 2002. They were also completely separated from market prices and market conditions, and were made to landowners that participated in the 1990 farm program and were calculated based on yield history and the number of program acres for each farmer.

PFCs also gave farmers the option of either taking a marketing assistance loan[236] or an LDP after harvest. As described above, the marketing assistance loan was a non-recourse loan on a commodity offered as collateral. They are called marketing loans because in the event that the market price exceeds the loan rate the producer repays the

[236] Marketing assistance loans were also known as production flexibility payments.

loan at the lower of the 1) principle plus interest 2) or the posted county price (PCP)[237] on the date of repayment, and sells the crop. If any portion of the principle is waived when a loan is repaid, that amount known as a 'marketing loan gain' for the producer.[238] Alternatively, in the event that a farmer taking a marketing assistance loan could not repay it, the commodity could be forfeited to cover the principal of the loan and the accrued interest. Meanwhile, LDPs were calculated daily as the amount, if at all, that the posted county price is below the designated county loan rate. According to Schmitz et al, farmers tended to take LDPs soon after harvest, in the hope that the market price would increase throughout the crop year. If it did, the farmer sold the commodity at the higher price. In effect, the sum of his/her LDP plus the market sales price would exceed the loan rate.[239]

The other two programs from which farmers received payments were the Conservation Reserve Program (CRP) and Emergency Assistance. The CRP operated just as it did with the FACT Act, paying farmers for land enrolled in conservation programs. However, despite the efforts of the US government to reduce the amount of assistance provided to farmers, when the price of grains fell in 1998-99 it provided a huge Emergency Assistance bail-out. These programs were introduced with the Omnibus Supplemental Appropriations Act of 1999 and the Emergency Assistance Provisions of the Agriculture, Rural Development, Food and Drug Administration and Related Agencies Appropriation of 2000.

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[237] Interest is not added into the PCP.
[238] Loan Deficiency Payments (LDPs), Grain Service Corporation, <http://www.grainservice.com/ldp.htm>
[239] Andrew Schmitz, Hartley Furtan, and Katherine Baylis. Agriculture Policy, Agribusiness, and Rent Seeking Behaviour (2002): 233.

As has been mentioned, the FAIR Act represented a major shift in the agricultural policy regime of the US. Not only were the overall level of payments to be reduced, but no longer were payments to be linked to commodity prices and production decisions. Consequently, the target price mechanism was phased out dramatically under the FAIR Act, as demonstrated in Figures D-5, D-7 and D-9. In terms of dollar value, \$136 million in target price deficiency payments were made to farmers in North Dakota in 1995, the final year of the FACT Act. However, already by the very next year in 1996, that figure had been reduced to \$89 million, only to decline even further by the final year of this study in 2001 to just \$23 thousand.[240] Likewise, in South Dakota the levels of target price deficiency payments declined from \$132 million in 1995, to \$15 million in 1996, ending up at just \$4 thousand by 2001.[241] The situation was the same in Montana where the level of target price deficiency payments stood at \$65 million in 1995, dropped to \$44 million in 1996, and ended up at just \$3 thousand in 2001.[242] Just as was the case under the FACT Act, the target price mechanism is categorized by the OECD under Payments Based on Area Planted/Animal Numbers for the PSE. This is because deficiency payments are dependant on yield.[243] Given that this program did not contribute a significant level of payments to farmers in the US under the FAIR Act, it is safe to say that it did not contribute to any meaningful variations in the patterns of the government payments ratios for the states seen in Figures A-1 and A-2.

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[240] In terms of percentage share of the total value of all payments made in North Dakota, target price deficiency payments made up 46 percent in 1995, 25 percent in 1996 and less than 1 percent by 2001.

[241] In terms of percentage share of total payments made in South Dakota, target price deficiency payments made up 55 percent in 1995, 7 percent in 1996 and 1997, and ended up at less than 1 percent by 2001.

[242] In terms of percentage share of total payments made in Montana, target price deficiency payments made up 35 percent in 1995, 18 percent in 1996, and ended up at less than 1 percent by 2001.

[243] Target price deficiency payments are included in category C entitled Payments Based on Area Planted/Animal Numbers in the PSE. The contributions made by these programs to the total value of all assistance provided to the farmers in the US for the years 1996-2001 can be seen in Figures B-3, B-7, B-9, B-11, and B-13.

PFC payments represented the move to a more market oriented agricultural policy regime in the United States, closely following WTO guidelines. Therefore, the payments made from this program were completely decoupled from commodity prices and production decisions. Moreover, as described earlier, they were one-time payments designed to compensate farmers for the elimination of other assistance programs, and they declined steadily from year to year over the time period in which they were paid out in order to allow farmers time to adapt to the contours of the new policy regime. Both access to and the size of PFC payments was dependant on historical production records. Consequently, the OECD categorized the program under Payments Based on Historical Entitlements for the PSE.[244] As is evident in Figures D-5, D-7 and D-9, while the total value of all payments made actually increased under the FAIR Act, PFC payments steadily declined in value as they were paid out, each year, between 1996-2001. For example, while farmers in North Dakota received a total of $335.5 million in PFC payments in 1996, that value had declined to just $179.8 million by 2001. Similarly, while PFC payments amounted to some $175 and $182 million in South Dakota and Montana respectively in 1996, their value declined to just $117 and $91 million in those two states by 2001.[245]

While the size of PFC payments in each state were certainly significant, their steady decline in value in fact moved opposite to the trend of increasing levels of payments made that occurred under the FAIR Act. Thus, while the absolute levels of PFC payments did decrease between 1996 and 2001, their share of the total value of all

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[244] PFC payments are included in category C entitled Payments Based on Area Planted/Animal Numbers in the PSE. The contributions made from this program to the total value of all assistance provided to the farmers in the US for the years 1996-2001 can be seen in Figures B-3, B-7, B-9, and B-11.

[245] This amounted to 46, 33, and 50 percent decreases from 1996 to 2001 in North Dakota, South Dakota and Montana respectively.

payments made in each state dropped even more drastically. As demonstrated in Figures D-5, D-7, and D-9, while PFC payments made up 95 percent of the total value of all payments made in North Dakota and over 75 percent in South Dakota and Montana in 1996, they comprised less than 20 percent in all three states by 2001.[246] Therefore, it is clear that while PFC payments were responsible for movements in the government payments ratios for the states in 1996 as evident in Figures A-1 and A-2, they were hardly behind any changes in the government payments ratios for the states by 2001.

Opposite to the situation with the PFC, the levels of LDPs increased dramatically each year until 2000 under the FAIR Act. As described above, farmers who held PFC contracts had the option of taking out marketing assistance loans or taking an LDP payment. Given that the size of LDP payments made was based on the amount of production the OECD placed the LDP in the Payments Based on Output category for the PSE.[247] As demonstrated in Figures D-5, D-7, and D-9, most farmers opted for the LDP payment.[248] While LDPs were not made in 1996 and 1997, once they began in 1998 they increased each year until they topped out in 2000 in each state. For example, LDPs amounted to $91 million and made up 25 percent of the total value of all payments made in North Dakota in 1998. However, by 2000 they had more than quadrupled, totalling some $412 million and comprising over 35 percent of the total value of all payments made. Likewise, in South Dakota where in 1998 LDPs totalled $93 million and made up 21 percent of the total value of all payments made, and then increased to $292 million

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[246] This amounted to 79, 73 and 73 percent decreases from 1996 to 2001 in North Dakota, South Dakota and Montana respectively.

[247] The LDP is included in category B entitled Payments Based on Output in the PSE. The contributions made from this program to the total value of all assistance provided to the farmers in the US for the years 1996-2001 can be seen in Figures B-3, B-7, B-9, B-11, B-13, and B-15.

[248] If more farmers had chosen to take out a marketing assistance loan the level of marketing loan gains (MLGs), seen in Figures D-5, D-7 and D-9, would have been higher.

and 37 percent of the total value of all payments made in 2000. Finally, the situation was no different in Montana where LDPs totalled $42 million and made up 12 percent of the total value of all payments made in 1998, and increased to $86 million and 18 percent in 2000.

The changes in the levels of LDPs made in the three states partly drove the dramatic increase in the overall value of all payments made between 1998 and 2000 and were completely behind the overall decrease in payments made in 2001. While the increases in the levels of LDPs made were just over 55 percent responsible for the overall increase in the levels of payments made in North Dakota and South Dakota, they were 35 percent responsible in Montana. For example, the level of LDPs made increased by $321 million from 1998 to 2000 in North Dakota and the overall level of payments made increased by $561 million in the same time period. Then, in 2001, the levels of LDPs decreased by $211 million while the overall levels of payments made decreased by $245 million. Similarly, the level of LDPs made increased by $199 million from 1990 to 2000 and the overall level of payments increased by $353 million. Following that, in 2001, the levels of LDPs decreased by $67 million while the overall level of payments decreased by $75 million. Finally, in Montana the level of LDPs made increased by $44 million from 1998 to 2000 and the overall level of payments made increased by $129 million. Then, in 2001, the levels of LDPs decreased by $78 million while the overall level of payments decreased by $14 million. In conclusion, LDPs played a very significant role in driving the movements in the government payments ratio levels for the states under the FAIR Act seen in Figures A-1 and A-2.

The counterpart of the LDP for farmers possessing a PFC contract under the FAIR Act was the marketing assistance loan. As described above, if a farmer chose to take out a marketing assistance loan they could collect an MLG upon repayment of the loan. Due to the fact that the size of MLG is dependant on the amount of production, the OECD categorized it as Payments Based on Output for the PSE.[249] As seen in Figures D5, D7 and D9, the influence of MLGs on the overall value of payments made was very minimal in all three states. To be precise, payments made from this mechanism never amounted to more than 2.5, 6.7 and 0.9 percent of the total value of all payments made in North Dakota, South Dakota and Montana, respectively. However, while the levels of MLGs were relatively insignificant in all three states, they were more significant in South Dakota than in either of the other two states. In fact, the MLGs realized by farmers in South Dakota almost doubled those received by farmers in North Dakota in 1999, and then more than doubled those received by the farmers in that same state, in 2000.[250] Despite this, the marketing assistance loan was not responsible for changes in the patterns of the government payments ratio levels for the three states seen in Figures A-1 and A-2.

Emergency Assistance payments were the other category of payments to have the most impact on the overall value of payments made to farmers in the three states. Unlike LDPs, as can be seen in Figures D-5, D-7 and D-9, Emergency Assistance increased from the first year that it was made until the last year of this study in 2001. These programs created to assist farmers with commodity production disasters included Crop Loss

[249] The MLG is included in category B entitled Payments Based on Output in the PSE. The contributions made from this program to the total value of all assistance provided to the farmers in the US for the years 1996-2001 can be seen in Figures B-3, B-7, B-9, B-11, B-13, and B-15.
[250] The MLGs realized in North Dakota were the next highest after South Dakota. In 1999 MLGs amounted to $46 million in South Dakota, while they totalled just $24 million in North Dakota that same year. In 2000, MLGs increased to some $53million in South Dakota, while they remained at just $24million in North Dakota.

Disaster Assistance, Tobacco Loss Assistance, and Dairy Disaster Assistance. Given that these pay outs were determined by output levels the OECD placed these programs under the Payments Based on Output category.[251] Just as was the case with LDPs, increases in the total value of Emergency Assistance helped to drive the increase in the overall level of payments made in all three states. For example, the level Emergency Assistance payments made in North Dakota increased by $294 million from 1998 to 2001 while the overall level of payments made increased by $336 million in the same time period. While these payments made up over 34 percent of the total value of all payments made in North Dakota in 1999 and 2000, they comprised 44 percent in 2001. Similarly, in South Dakota the level of Emergency Assistance provided to farmers increased by $171 million between 1990 and 2001 and the overall level of payments increased by $278 million. While the payments made from these programs made up almost 30 percent of the total value of all payments made in South Dakota in 1999 and 2000, they made up 35 percent in 2001. Finally, the pay outs from this category of programs in Montana increased by $182 million from 1998 to 2001, while the overall level of payments made increased by $115 million in that same time period. While the payments made from these programs comprised 37 and 33 percent of the total value of all payments made in Montana in 1999 and 2000 respectively, they made up almost 52 percent in 2001. Clearly, it can be seen that changes in the levels of pay outs derived from Emergency Assistance programs helped to drive changes in the movements of the government payments ratio levels for all three states, as evident in Figures A-1 and A-2.

[251] The programs that make up the Emergency Assistance category are included in category B entitled Payments Based on Output in the PSE. The contributions made from these programs to the total value of all assistance provided to the farmers in the US for the years 1996-2001 can be seen in Figures B-3, B-7, B-9, B-11, B-13, and B-15.

The CRP continued to made significant levels of payments to farmers in the three states under the FAIR Act. As mentioned earlier, the OECD placed the CRP under the category Payments Based on Input Constraints for the PSE, since payments could only be received by taking land out of production.[252] As demonstrated in Figures D-5, D-7 and D-9, the levels of payments made by the CRP remained very stable and consistent throughout the duration of the FAIR Act, just as was the case with the previous farm bill. For example, between 1996 and 2001 CRP payments remained between $106 and $125 million in North Dakota, between $61 and $81 million in South Dakota, and between $101 and $118 million in Montana. However, because the levels of payments made from the CRP remained so stable at the same time as the overall levels of payments increased, the program's share of the total value of all payments made to farmers steadily decreased in each state throughout the duration of the FAIR Act. For example, while the CRP made up 30 percent of the total value of all payments made in North Dakota in 1996, it only made up 12 percent by 2001. Similarly, while the CRP comprised 30 percent of the total value of all payments made in South Dakota in 1996, it dropped to just below 10 percent by 2001. Finally, while the payments made from this program made up almost 43 percent of the total value of all payments made in Montana in 1996, it dropped to just below 25 percent by 2001. To put this into context further, this occurred even as the absolute value of the CRP payments increased by $15 million in Montana, by $8million in North Dakota, and stayed the same in South Dakota from 1996-2001. Thus, the CRP was not responsible for any changes in the government payments ratios for three states seen in Figures A-1 and A-2.

[252] The CRP is included in category F entitled Payments Based on Input Constraints in the PSE. The contributions made by this program to the total value of all assistance provided to the farmers in the US for the years 1996-2001 can be seen in Figures B-3, B-7, B-9, B-11, and B-13.

The final group of programs to make payment to farmers under the FAIR Act are included in the category entitled Miscellaneous in Figures D-5, D-7, and D-9. As discussed earlier with respect to the Miscellaneous programs under the FACT Act, this group of programs includes a whole range of payments directed towards such things as conservation and emergency assistance. These programs include The Environmental Quality Incentive Program, the Wetlands Reserve Program, the Livestock Emergency Program and the Emergency Feed Program. Meanwhile, other programs, such as the Dairy Termination Program, the Milk Marketing Fee and the Fresh Market Peaches Program, are related to commodities not produced to any significant degree in any of the three states included in this study. Just as was the case with similar programs under the FACT Act the conservation oriented programs are categorized in the same category as the CRP by the OECD, Payments Based on Input Constraints, for the PSE.[253] Meanwhile, the emergency and disaster related programs attending to production losses are categorized by the OECD under Payments Based on Area Planted/Animal Numbers.[254] Finally, the programs related to inputs such as the Emergency Feed Program are categorized by the OECD as Payments Based on Input Use.[255] Although this group of programs contributed a significant proportion of the total value of all payments made in the three states under the FACT Act, their levels had almost no significance under the

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[253] The minor conservation programs are included in category F entitled Payments Based on Input Constraints in the PSE. The contributions made by these programs to the total value of all assistance provided to the farmers in the US for the years 1996-2001 can be seen in Figures B-3, B-7, B-9, B-11, and B-13.

[254] The minor emergency assistance programs are included in category C entitled 'Payments Based on Area Planted/Animal Numbers' in the PSE. The contributions made by these programs to the total value of all assistance provided to the farmers in the US for the years 1996-2001 can be seen in Figures B3, B7, B9, B11, and B13.

[255] The minor programs related to inputs are included in category E entitled 'Payments Based on Input Use' in the PSE. The contributions made by these programs to the total value of all assistance provided to the farmers in the US for the years 1996-2001 can be seen in Figures B3, B7, B9, B11, B13, B15, B17, B19, B21, and B23.

FAIR Act. For example, the Miscellaneous programs never amounted to more than 3.5 percent of the total value of all payments made in any of the states in any year of the FAIR Act included in this study. Therefore, it can be concluded that this category of payments had no impact on the movements of the government payments ratios for any of the three states, as evident in Figures A-1 and A-2.

Chapter 3

Discussion

3.1 Introduction

There was evidence of convergence towards the mid-1990s, as was demonstrated in the analysis of the government payments ratios for the sub-units in the previous chapter. However, this situation was fleeting at best, since the government payments ratios of the six sub-units diverged thereafter. Governments in one country had the ability to increase or decrease payment levels even when governments in the other country did the opposite. It was also found that the government payments ratios of all six sub-units increased towards the end of the turn of the decade. As revealed in the analysis above, this increase took place even as the migration from certain types of programs to others occurred in Canada and the US with the establishment of the WTO. Finally, the analysis of the government payments ratios also established that there was strong evidence of national clustering, with the government payments ratios for the states higher and more consistent than those for the provinces. From the evidence detailed in the previous analysis of the government programs, it can be seen that the strong role of the federal government in the agricultural sector of each country was the reason for the strong similarities in the government payments ratios for the provinces and for the states. Of the six sub-units, Alberta was the only one able to provide subsidies to its producers. However, when it did so, the federal government was always compelled to make similar commitments to farmers Manitoba and Saskatchewan to ensure that they would be no worse off.

3.2 Room to Manoeuvre

The increases in the government payments ratios for the provinces were behind the movement apart of the government payments ratios levels between the provinces and the states in 1992 seen in Figures A-1 and A-2. As demonstrated in Figures D-1, D-2, and D-3, the increase in the government payments ratios for the three provinces in that year was driven mostly by payments made out of the GRIP. However, as is also evident in these figures the increase was also driven by payments derived from Canadian Farm Income Assistance Program and the Farm Support and Adjustment Measures II, although to a lesser extent. It will be recalled that the huge payments made from the GRIP were the result both of the formula for triggering payments and the low incomes being experienced by farmers in the three provinces. Meanwhile, the payments made from the Canadian Farm Income Assistance Program and the Farm Support and Adjustment Measures II were made specifically to assist farmers with the sudden drop in incomes they had experienced. In this case, contrary to the contention that the state had lost its autonomy in the agricultural policy arena, governments in Canada were able to increase producer subsidy levels even when governments in the US did not.

The reduction in payments made from the GRIP, the reduction in target price deficiency payments, and the removal of MPS in both Canada and the US resulted in the convergence of the government payments ratios for all six sub-units in a downward direction in 1994 and 1995. As mentioned previously, the government payments ratios of all six sub-units fell within 6 percentage points at the same time as they simultaneously dropped in these two years, as seen in Figures A-1 and A-2. The downward movement in the government payments ratios for the provinces in 1994 was the result of the initial reduction in GRIP payments, seen in Figures D-1, D-2, and D-3. Likewise, the downward pattern evident in the government payments ratios for the states in 1994 was the result of the initial reduction in target price deficiency payments, seen in D-4, D-6, and D-8. Both target price deficiency payments and GRIP payments were reduced again in 1995 in the states and provinces respectively. In addition, the MPS for wheat, other grains, and oilseeds was removed in Canada in this same year, as demonstrated in Figures B-7, B-11, and B-13. This was due to the elimination of the WGTA. Likewise, as seen in Figures B-8 and B-12, MPS for wheat and other grains was removed in the US in 1995. This was the result of the elimination of the target price mechanism and other price supports for such commodities as cattle and eggs. It is notable that this is the only example of a simultaneous reduction in payments and elimination of programs in Canada and the US. It will be recalled that the removal of target price deficiency payments and MPS was undertaken in order to adhere to WTO guidelines. Therefore, globalization and regional integration did have an impact on the levels of government assistance in the six sub-units in these two years. However, any signs of convergence in this respect were short-lived.

The movement apart in different directions between the government payments ratios for provinces and those for the states between 1996 and 1998 seen in Figure A-2 is the direct result of the different actions taken by governments in Canada and the US in the aftermath of their simultaneous elimination of MPS. In the US, the establishment of the FAIR Act brought substantial, long-term compensatory PFC payments that began in 1996, as seen in Figures D-5, D-7, and D-9. In contrast, farmers in Manitoba and

Saskatchewan received relatively meagre, one-time compensatory payments from the Western Grain Transportation Payment Program, the Freight Cost Pooling Assistance Program, and the Freight Cost Pooling Assistance Program II, as shown in Figures D-1 and D-2. Meanwhile, farmers in Alberta also received less significant but long-term payments from the FDIP, as shown in Figure D-3. The differences in the compensatory program payments made from 1996 onwards are revealed in the government payments ratios and levels of government payments for the six sub-units shown in Figures A-1, A-2, A-3, and A-4. As was the case in 1992 governments certainly had the ability to take action different to those taken by others during the time period considered.

In contrast the situation just described, greater increases in the government payments ratios for the states were the major reason for the divergence between the provinces and states evident from 1998 onwards in Figures A-1 and A-2. As demonstrated in Figures D-5, D-7, and D-9, the increase in the government payments ratios for the states were driven by Emergency Assistance payments and LDPs. The analysis of government programs for the states under the FAIR Act showed that LDPs contributed greatly to the increases in the levels of government payments made in 1999 and 2000 in North Dakota, South Dakota and Montana. Likewise, as explained earlier, Emergency Assistance payments were almost equally responsible for the increases in payments in North Dakota and South Dakota in 1999 and 2000, and most responsible for the increase in payments made in Montana in these same years. Meanwhile, the analysis of the government payments ratios for Manitoba, Saskatchewan, and Alberta demonstrated that they also increased towards the end of the time period covered. However, the pay outs made from such ad hoc programs as C-SAP, C-MAP, the Canada-

Alberta Farm Income Assistance Program, and AIDA in 2000 and 2001, evident in Figures D-1, D-2, and D-3, were not enough to boost the government payments ratios of the provinces to the level reached by the states. In this instance, governments in Canada and the US clearly had the ability to initiate programs and increase the levels of government payments when it was deemed necessary.

Although the establishment of the WTO did not do much to reduce the levels of government payments made to farmers, it did have a lasting impact on the types of policy instruments used by governments to deliver assistance to producers. To recall, it was discovered that there was a migration from certain types of policy instruments used to deliver support to producers, to others. This migration involved the removal of MPS in both countries described above. In the mid-1990s governments in Canada and the US shifted from programs classified by the OECD as MPS and Payments Based on Area Planted/Animal Numbers to ones classified as Payments Based on Historical Entitlements, Payments Based on Output, and for cattle and calves Payments Based on Input Use.[256] These changes are evident in Figures B-7 and B-8 for wheat, Figures B-11 and B-12 for other grains, Figures B-13 and B-14 for oilseeds, and Figures B-17 and B-18 for cattle and calves.

The shift in program types did signal adherence to the rules of the WTO by governments in Canada and the US, in the sense that they both shifted to more acceptable policy instruments. One of the major objectives of the transition was to divorce producer subsidies from production decisions. However, with respect to the levels of assistance provided to farmers, nothing changed. In fact, as already stated numerous times, the levels of payments made to farmers in all six sub-units actually increased after this transition. The convergence in means is not as significant is the divergence in ends because the increase in the levels of payments made to farmers actually meant that a major stated purpose of the WTO rules with respect to producer subsidies was not served. With farmers receiving as much, or more, assistance than they had previously, they were still effectively shielded from market signals, governments were still making high budget transfers for agricultural assistance, and the playing field between the developed and the developing countries was not levelled. Insofar as governments remained able to increase the levels of assistance payments made to farmers, they in effect retained the room to manoeuvre necessary to intervene in the market and keep farmers in business.

Given the arguments made by some commentators with respect to the relationship between the national orientation of each sub-unit and its government payments ratios, it could be expected that there would be evidence of clustering along national lines. However, among them, there was a division with respect to the cause and nature of the clustering. One the one hand, Lipset makes the argument that Canada would be more likely to tolerate government intervention in the economy in order to alleviate the negative effects of markets. In comparing the political outcomes in terms of government transfers made from one segment of society to another in Canada and the US, Lipset also stated that "the two are like trains that have moved thousands of miles along parallel railway tracks. They are far from where they started, but they are still separated."[257] Certainly, the findings in this study demonstrated in Figures A-1 and A-2 contradict the first part of Lipset's argument: with the exception of 1992, it was in the states where the higher government payments ratios were found. However, the evidence examined in this study does support the second part of his argument. As seen in Figure A-1, for most of

[257] Seymour Martin Lipset. Continental Divide (1990): 212.

the period there was strong evidence of national clustering. For example, the disparity between the province with the highest government payments ratio and the province with the lowest was lower than the disparity for all six sub-units in every year except 1991 and 1993. The situation was exactly the same for the states. The provinces as a group and the states as a group both followed similar patterns. Therefore, while there was evidence of national clustering, it occurred in a way exactly opposite to that anticipated by Lipset.

On the other hand, authors such as Schmitz and Baylis argue that the political system found in Canada makes it more difficult for farm groups to influence policy development and secure assistance payments. Moreover, Schmitz contends that in Canada's political system prairie farm groups have much more difficulty securing favourable outcomes from their lobbying efforts since the region is unequally represented in government and possesses far less voting power. Finally, these authors make the argument that Canada's system of government means that its policy growth and retrenchment is more erratic. From these arguments it could be expected that there would be evidence of national clustering, with higher and more stable levels of support found in the states. As demonstrated in Figures A-1 and A-2 the findings in this study are consistent with each of these expectations. Indeed, the government payments ratios of the provinces and states did diverge, with those for the provinces lower and more variable than those for the provinces. While governments in both Canada and the US sought to address the incomes problems that emerged in the final years of the time period covered in this study, the pay outs made from the programs developed in the US were much higher.

Chapter 4

Conclusion

4.1 The Latitude of the State

Although the government payments ratios for the six sub-units did converge in the mid-1990s, they diverged thereafter. It is clear that the governments in Canada and the US possessed the latitude to control the levels of payments made to farmers in the 1990-2001 time period. This finding runs in stark contrast to the contention of some commentators that governments have lost their ability to pursue an independent policy course. The government payment ratios for the provinces moved in the opposite direction to those for the states with the dramatic increase in payments made from the GRIP program in 1992. Government payments ratios also moved in opposite directions when farmers in the states began receiving PFC payments at the same time as their existed no comparable counterpart programs in the provinces between 1996 and 1998. However, the fact that the levels of payments made to farmers in Canada and the US moved in the same direction thereafter – even if upwards – suggests that some constraints did exist.

Governments in both Canada and the US ended the provision of MPS for the major commodities produced in the six sub-units in the mid-1990s. This was done in order to satisfy the rules and disciplines of the WTO. Consequently, the total assistance levels in all six sub-units were reduced at this junction, albeit temporarily. This had the effect of exacerbating the income problems that farmers in all six sub-units experienced towards the end of the decade. Given that MPS was not an option, the only recourse available to governments in Canada and the US when these income problems did arise was to increase the levels of payments made to farmers through new programs. Thus, there was evidence of convergence in terms of the types of policy instruments used in Canada and the US over the time period studied. But, insofar as governments remained capable of increasing the magnitude of payments to farmers, farmers remained shielded from market signals.

These findings are suggestive regarding the literature focusing on the effects of institutional differences and differences in political culture on the policies of the two countries. The level of similarity among American states as a group and among Canadian provinces as a group is notable. Congruent with the expectations of such authors as Schmitz and Baylis and contradicting the expectations of Lipset, the US states tended to provide more generous and stable producer subsidies than their Canadian counterparts. These findings suggest that the assumptions of Schmitz and Baylis with respect to institutional differences were correct. Institutional differences do matter. It might be easier to retrench support in the Canadian provinces as a result of the parliamentary system, which offers fewer veto points for relevant interest groups such as farmers to block policy changes. These findings also suggest that Lipset's assumptions about the distinct political cultures of Canada and the US are incorrect. From this analysis there was no evidence to suggest that Canada was more predisposed to undertaking market intervention in the agriculture sector. If the political cultures of the two countries are as distinct as Lipset describes, there was no evidence that it affected the agricultural policy outcomes examined in this thesis.

Governments do matter in the agricultural policy making arena. Policy outcomes are driven by political decisions. While international institutions do constrain governments, their very existence is dependant on governments. Therefore, governments are only constrained by globalization and regional integration to the degree that they allow themselves to be. If and when further international agreements affecting the agriculture sector are made, it seems unlikely that such developments will automatically lead to policy convergence. The incomes of farmers will always fluctuate. Ultimately, the extent to which governments in Canada and the US respond to the income problems of farmers, and the methods used, will be determined by the political forces within them. Agricultural policy harmonization may one day take place, however if it does, it will the result of the decisions that governments make.

Appendix A

The Government Payments Ratio

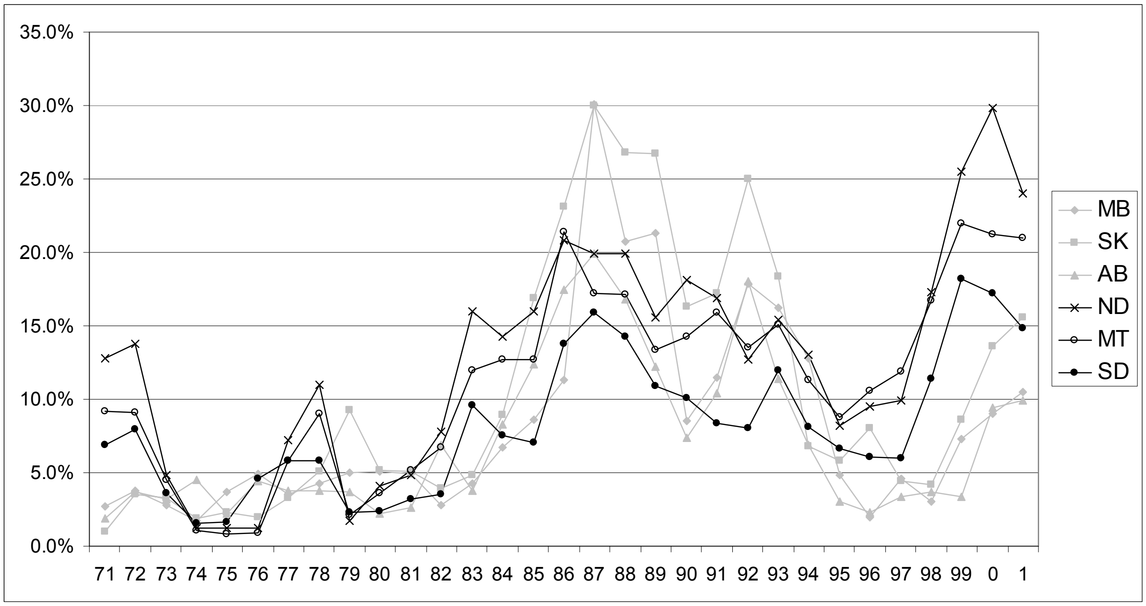

Figure A. 1. Total government payments as a percentage of total cash receipts, 1971-2001.

Source: Economic Research Service, United States Department of Agriculture and Statistics Canada

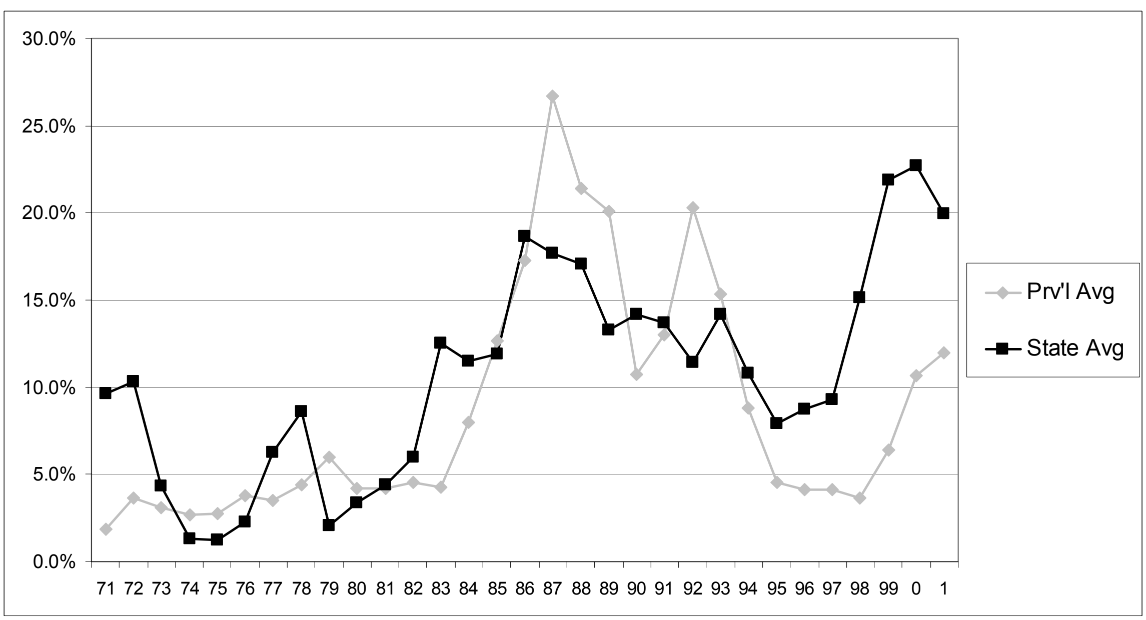

Figure A. 2. Total government payments as a percentage of total cash receipts, 1971-2001, state and province averages.

Source: Economic Research Service, United States Department of Agriculture and Statistics Canada

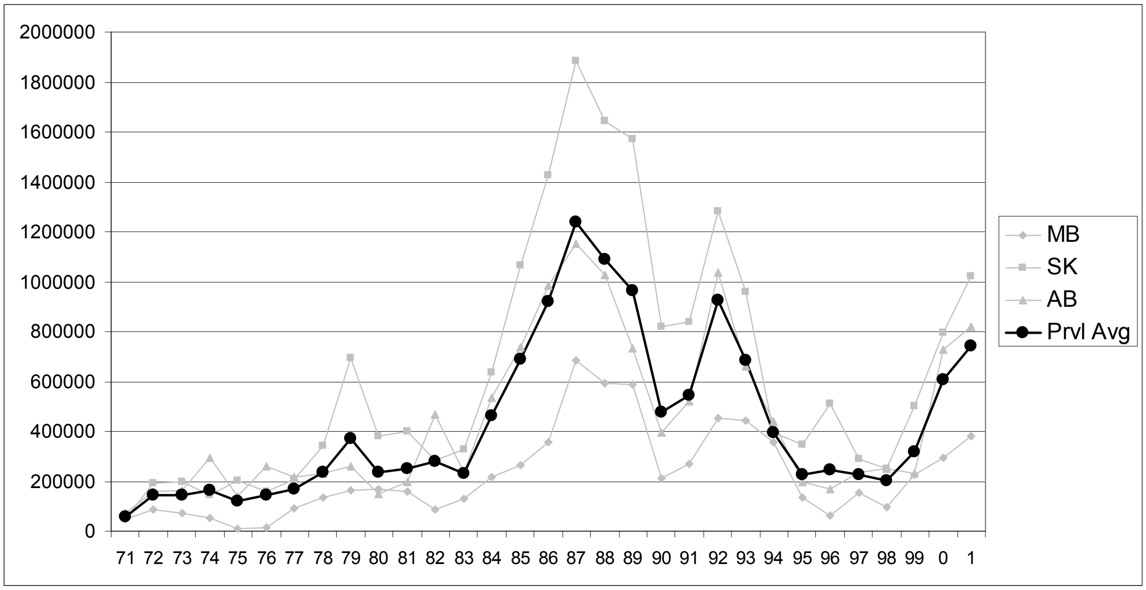

Figure A. 3. Total value of government payments by province. (Expressed in constant 2001 Cdn thousands).

Source: Statistics Canada

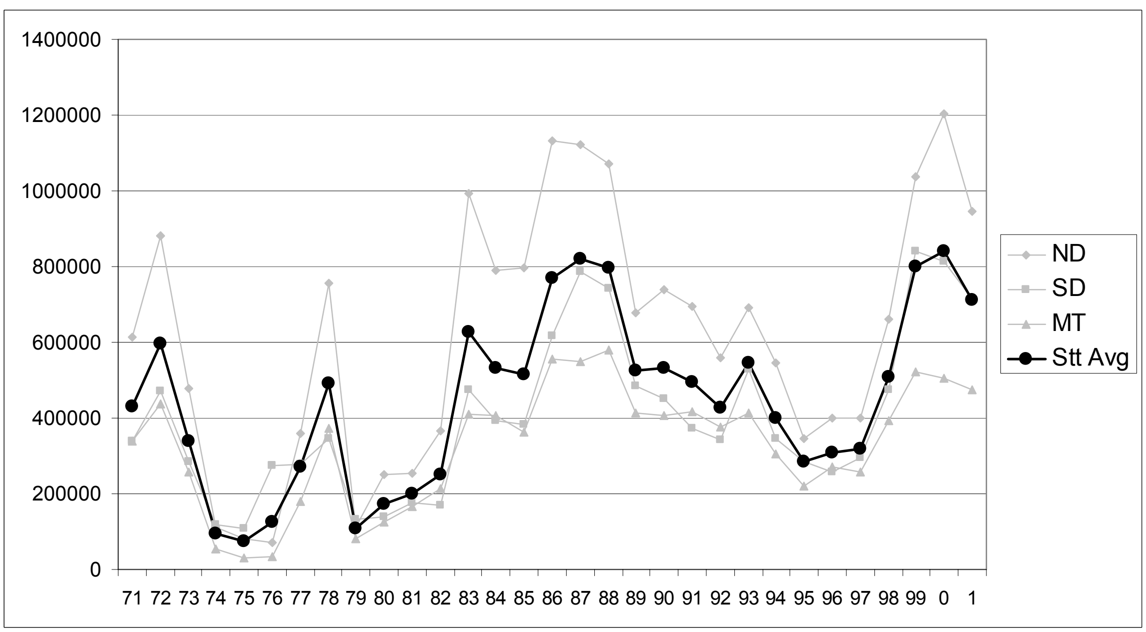

Figure A. 4. Total value of government payments by state. (Expressed in constant 2001 American thousands)

Source: Economic Research Service, United States Department of Agriculture

Appendix B

The Producer Support Estimate

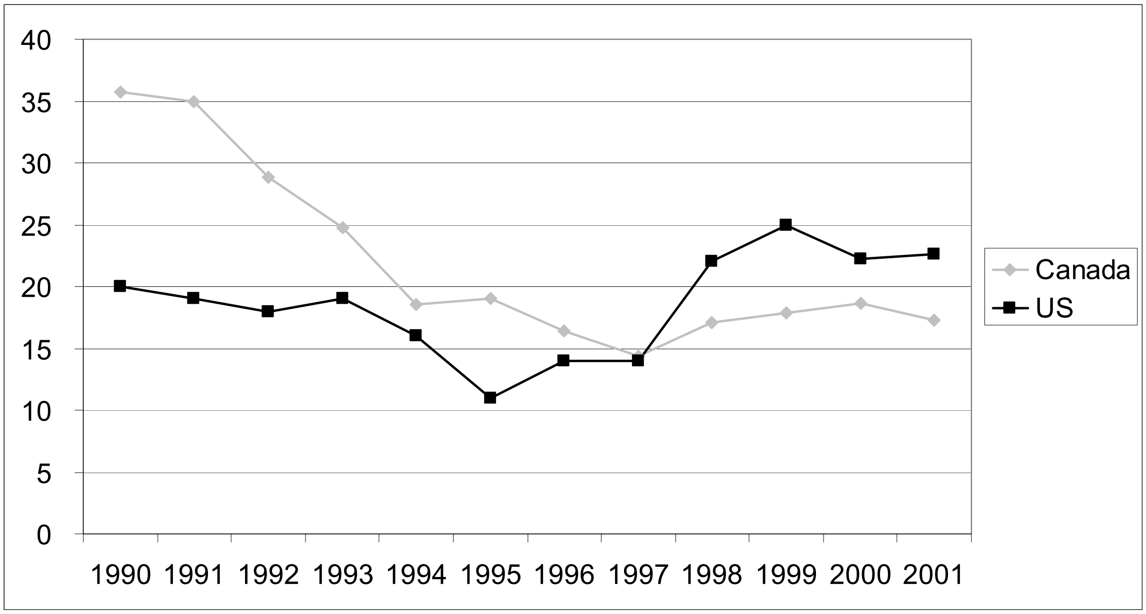

Figure B. 1. Overall percentage PSE for Canada and the US, 1990-01
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

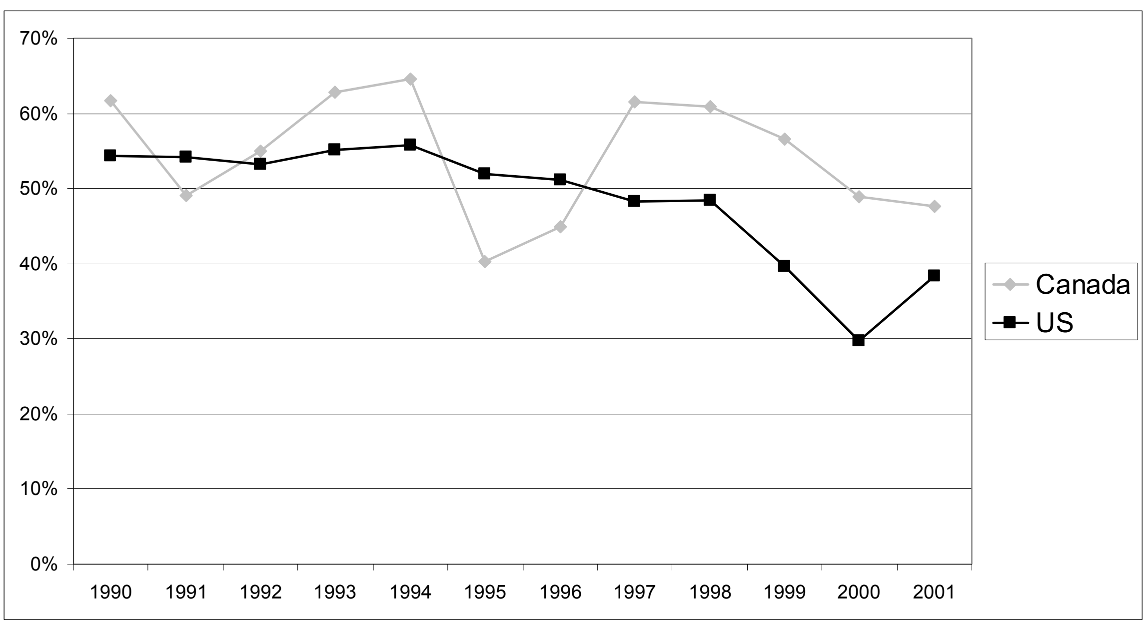

Figure B. 2. Percentage share MPS of overall PSE for Canada and the US, 1990-01.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

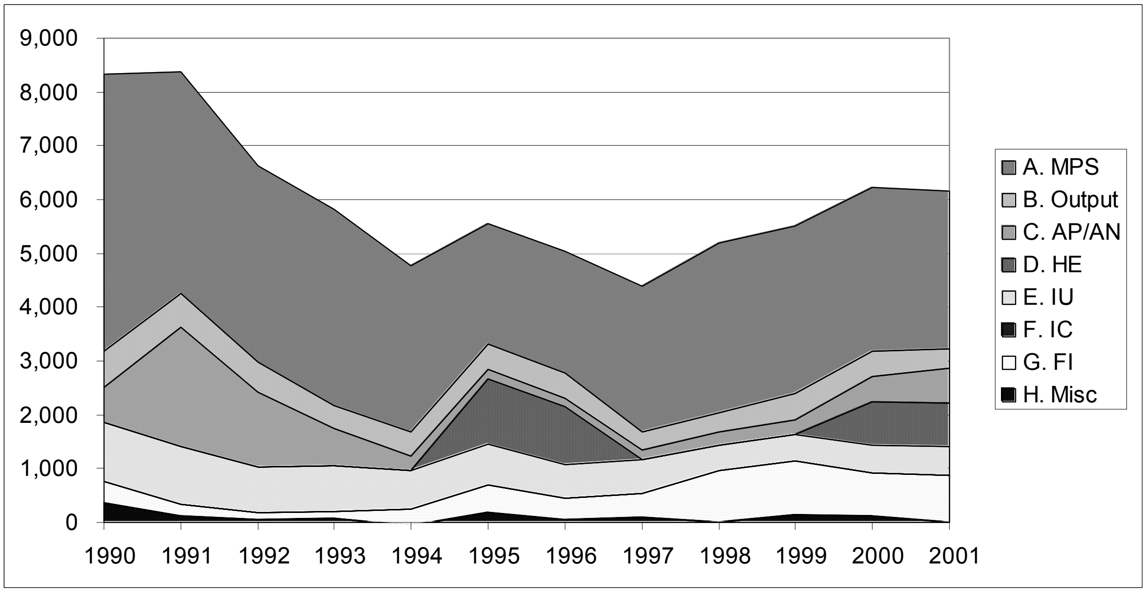

Figure B. 3. Canada: total value overall PSE by program type, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

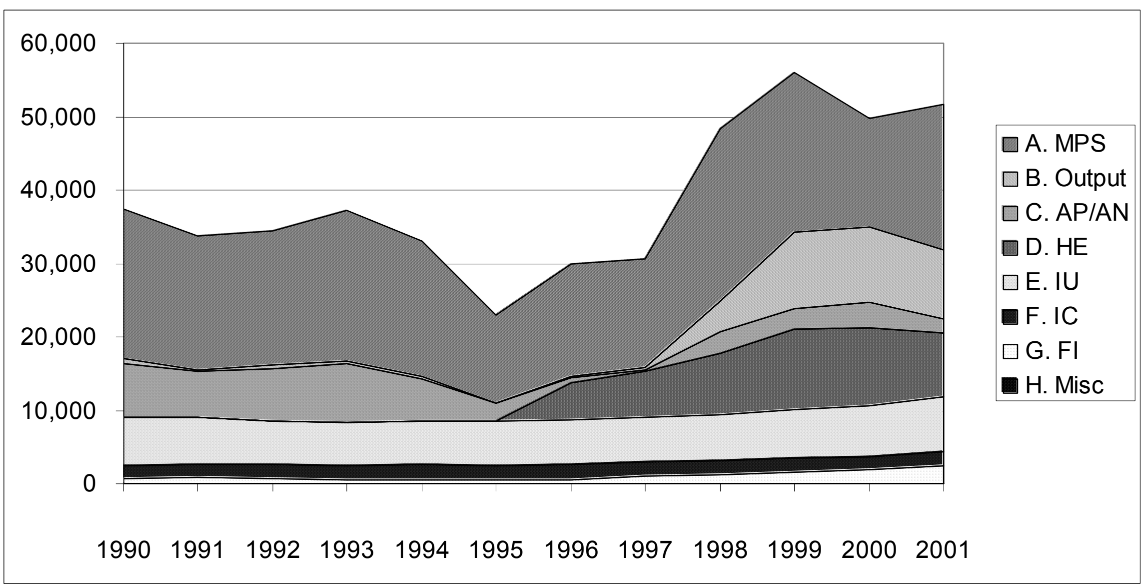

Figure B. 4. US: total value overall PSE by program type, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

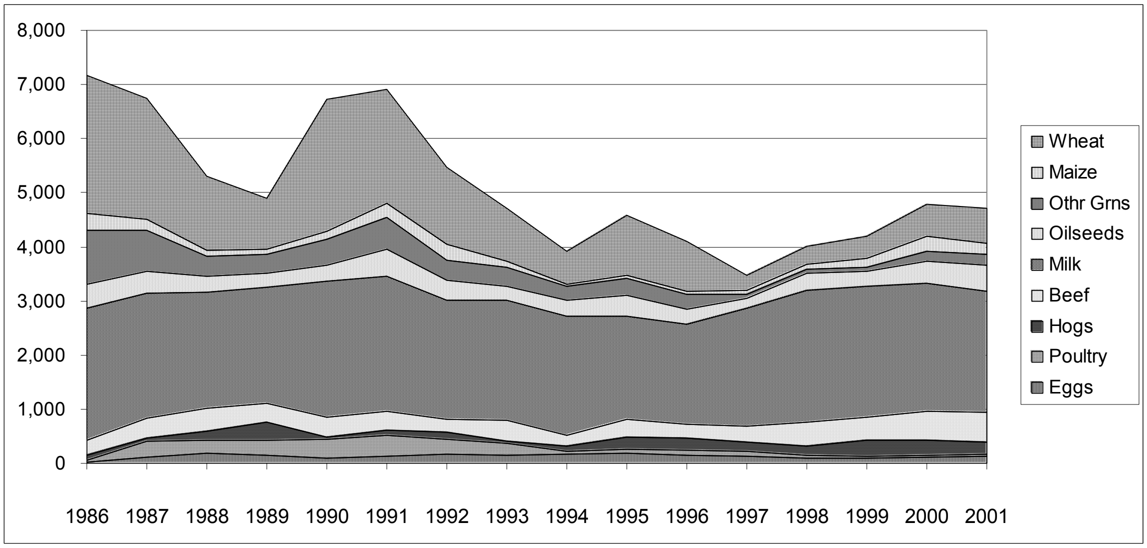

Figure B. 5. Canada: total value overall PSE by commodity.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

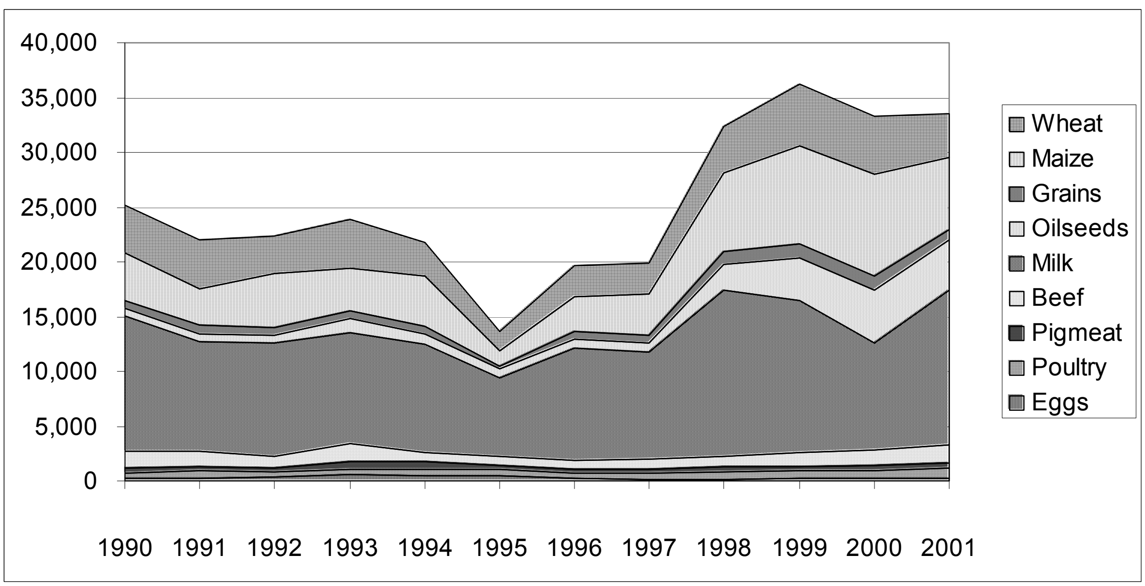

Figure B. 6. US: total value overall PSE by commodity.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

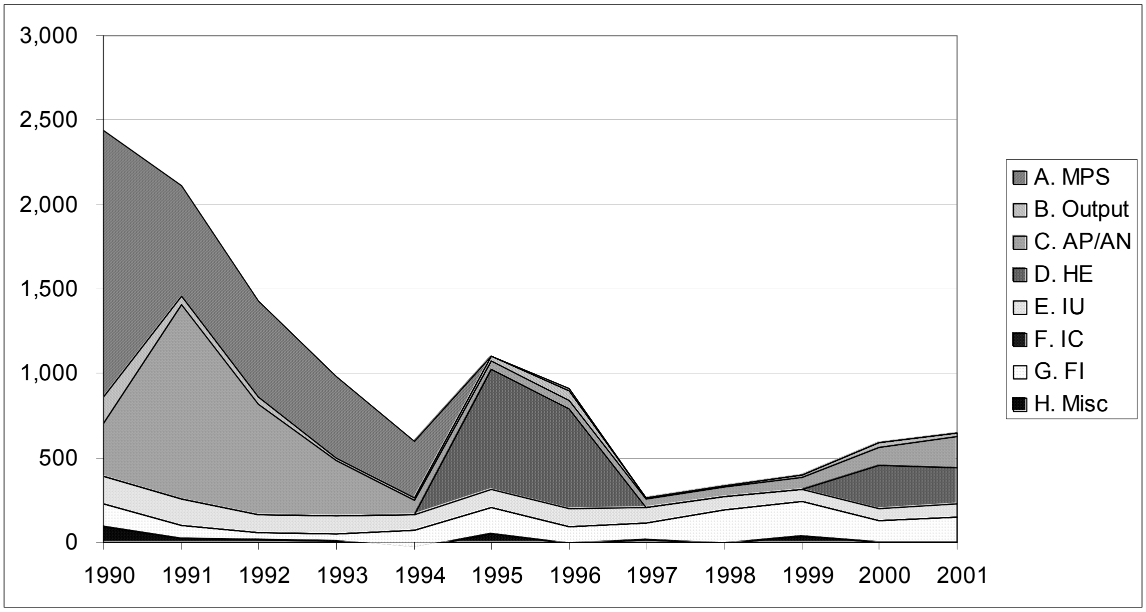

Figure B. 7. Canada: total value PSE for wheat by program type, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

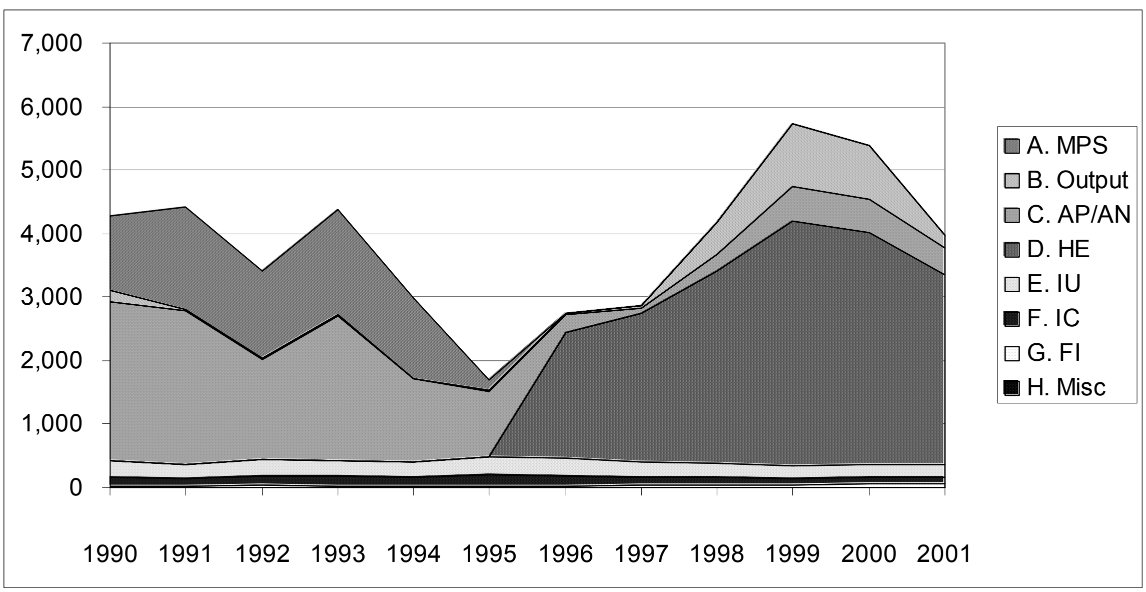

Figure B. 8. US: total value PSE for wheat by program type, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

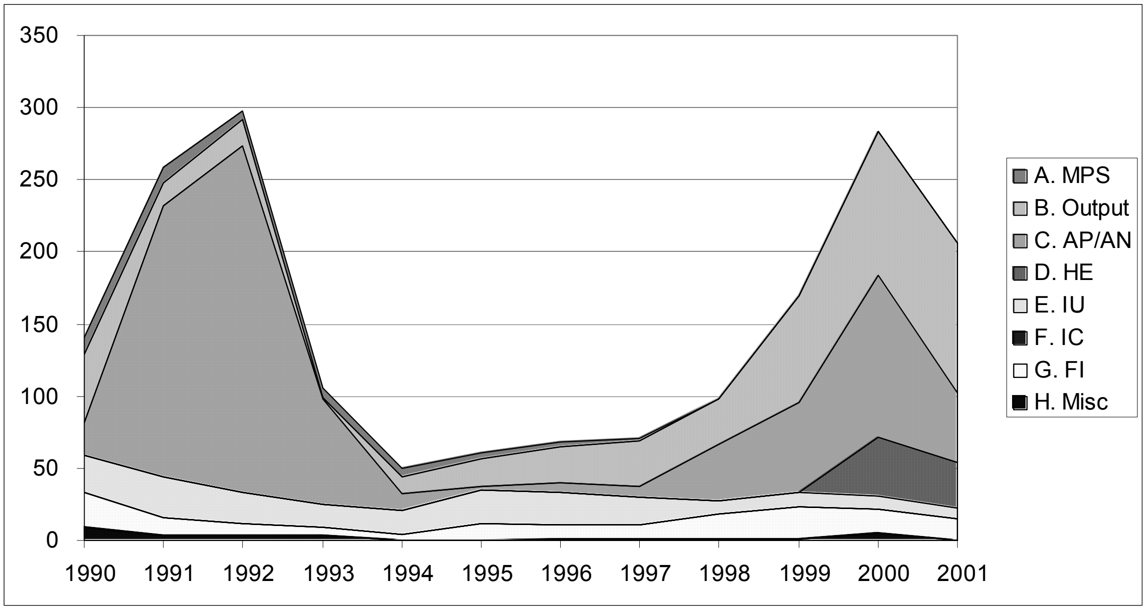

Figure B. 9. Canada: total value PSE for maize by program type, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

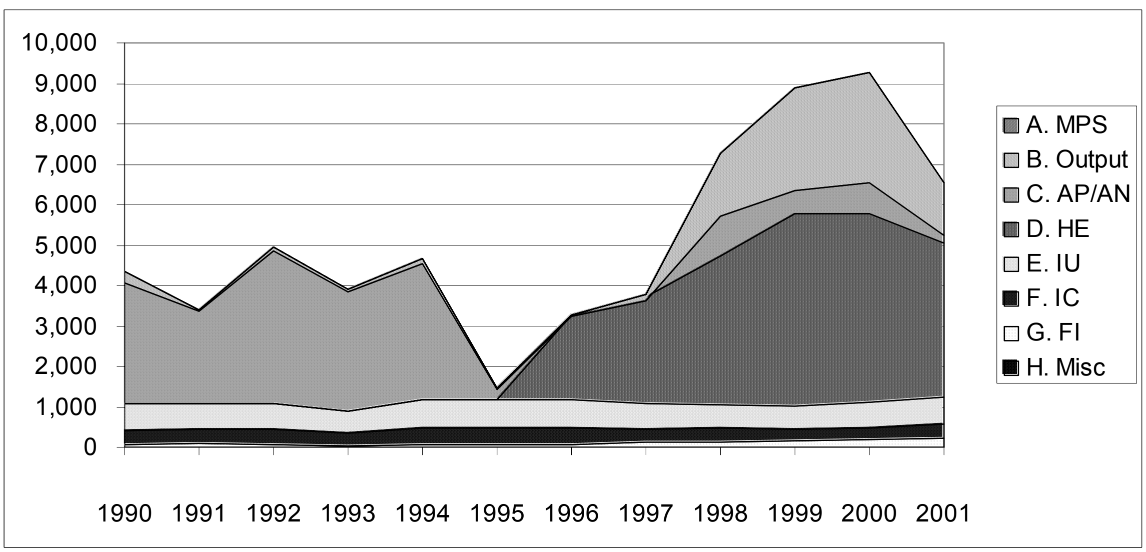

Figure B. 10. US: total value PSE for maize by program type, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

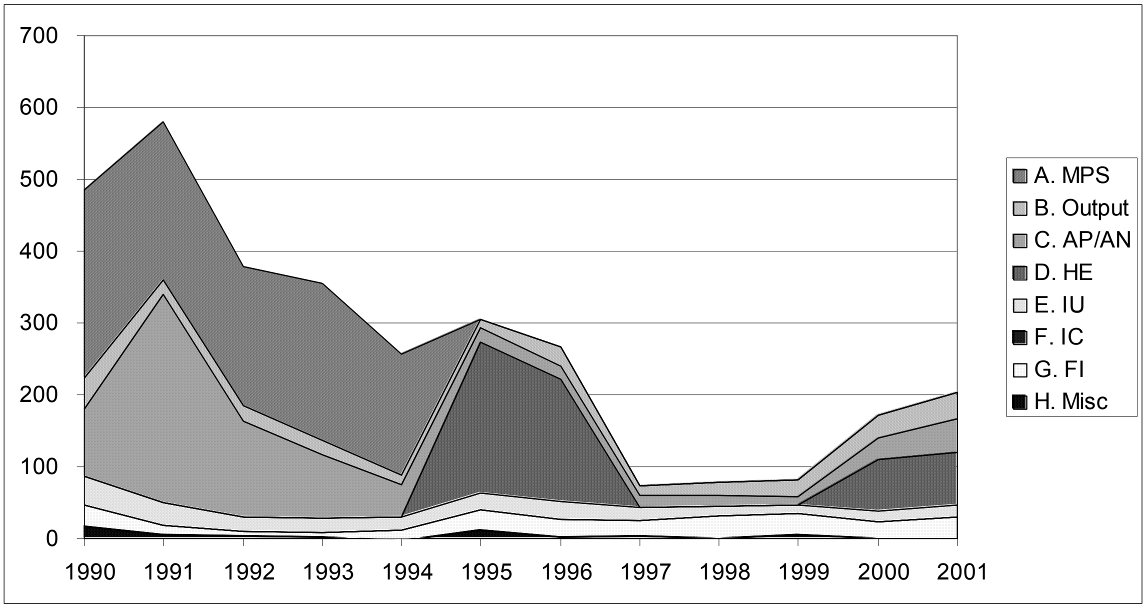

Figure B. 11. Canada: total value PSE for other grains by program type, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

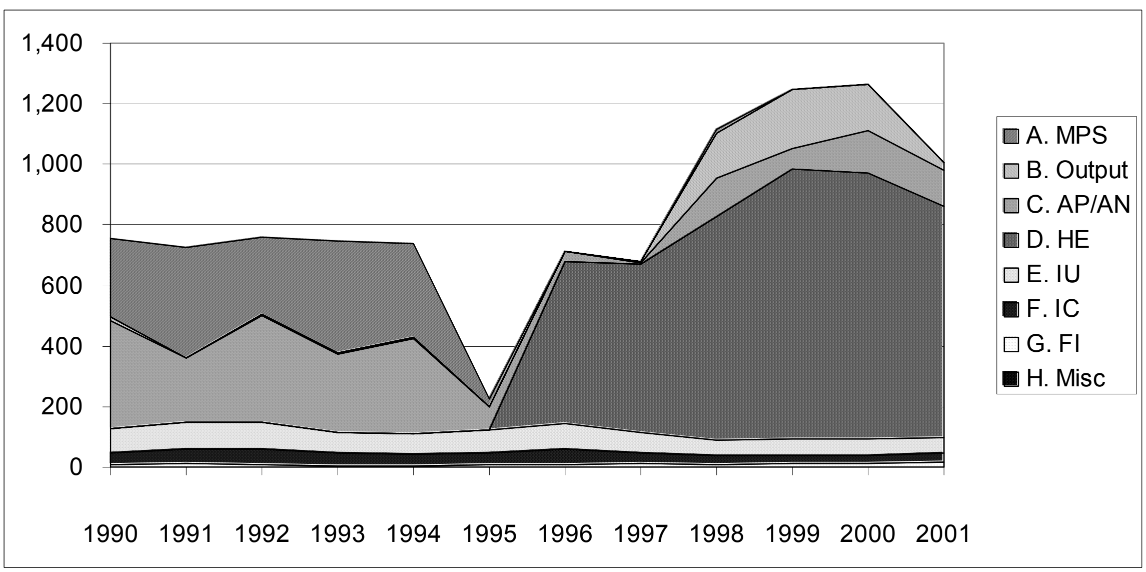

Figure B. 12. US: total value PSE for other grains by program type, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

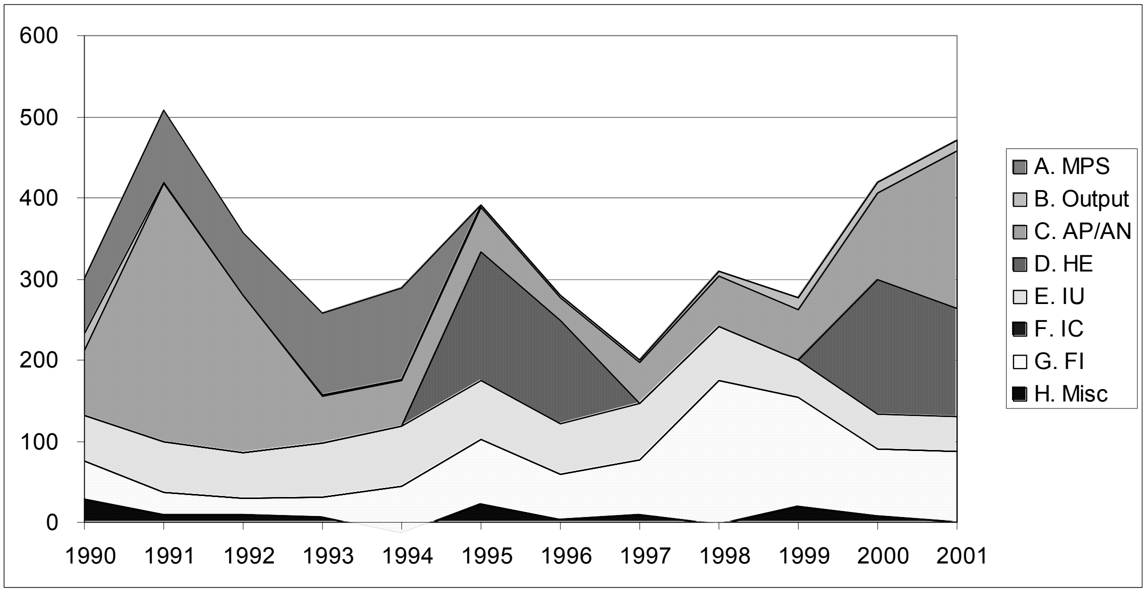

Figure B. 13. Canada: total value PSE for oilseeds by program type, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

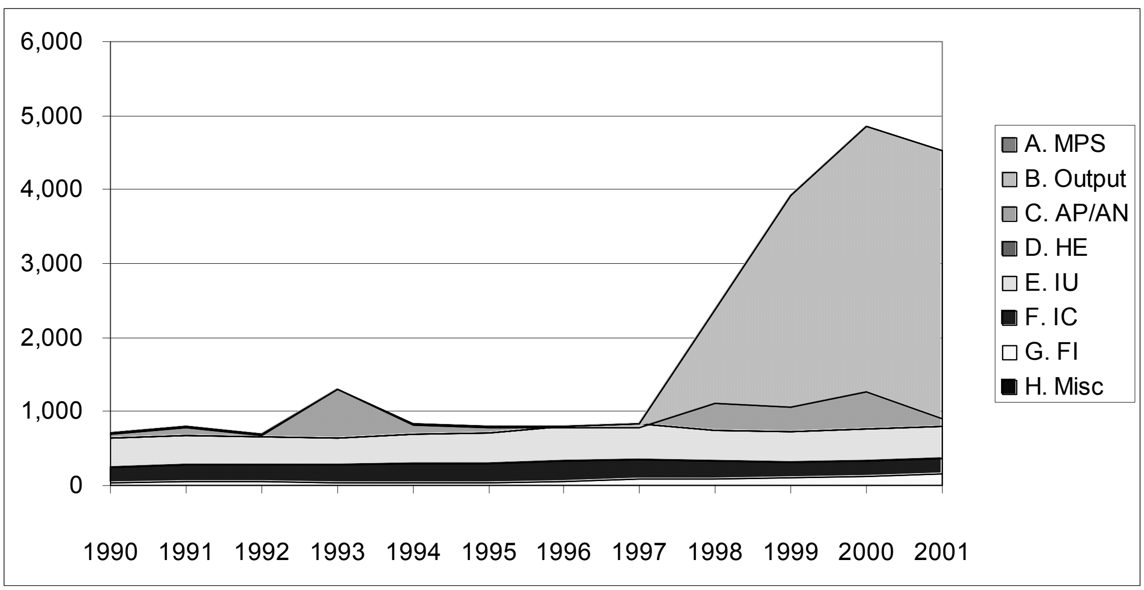

Figure B. 14. US: total value PSE for oilseeds by program type, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

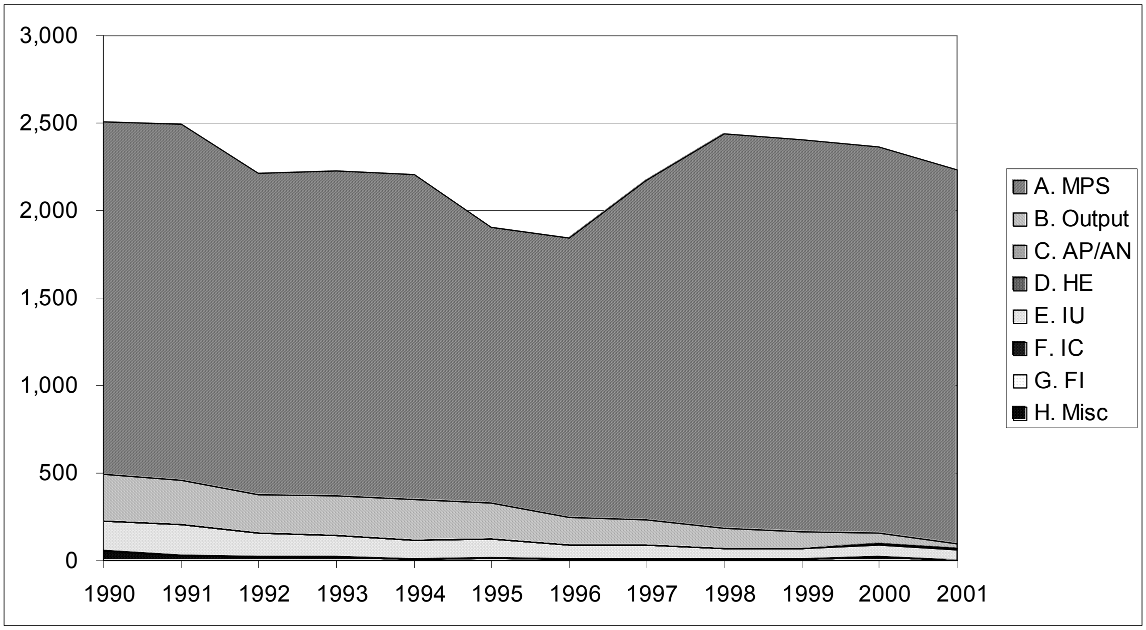

Figure B. 15. Canada: total value PSE for milk by program type, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

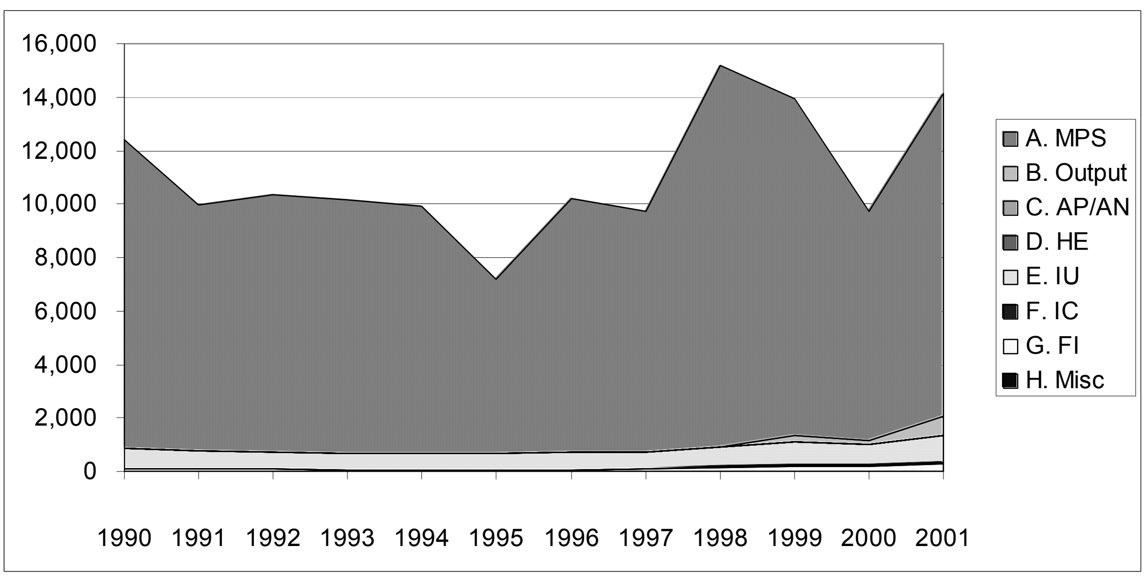

Figure B. 16. US: total value PSE for milk by program type, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

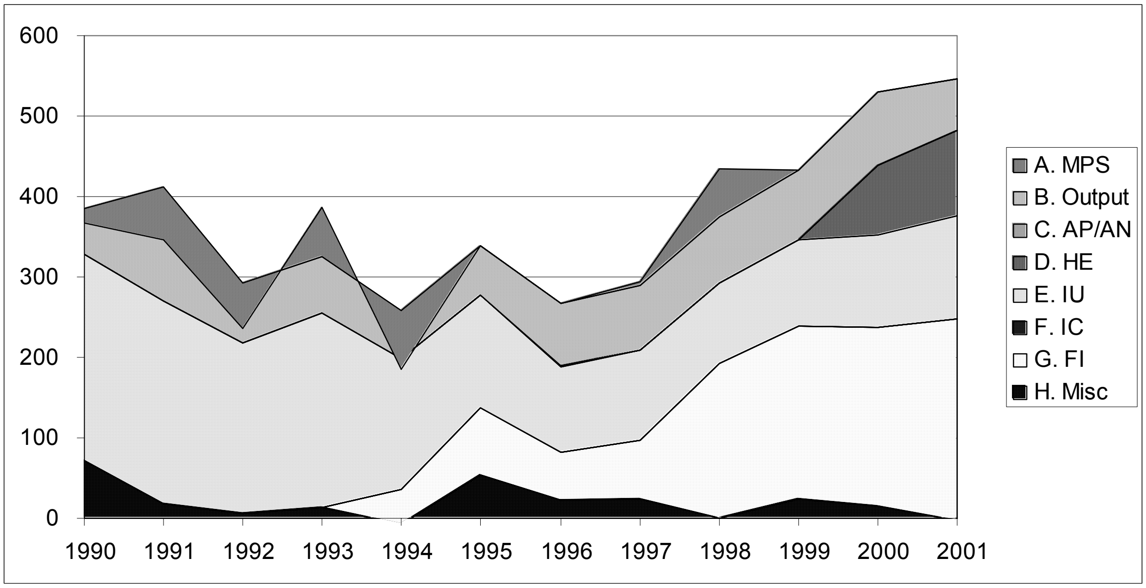

Figure B. 17. Canada: total value PSE for cattle and calves by program type, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

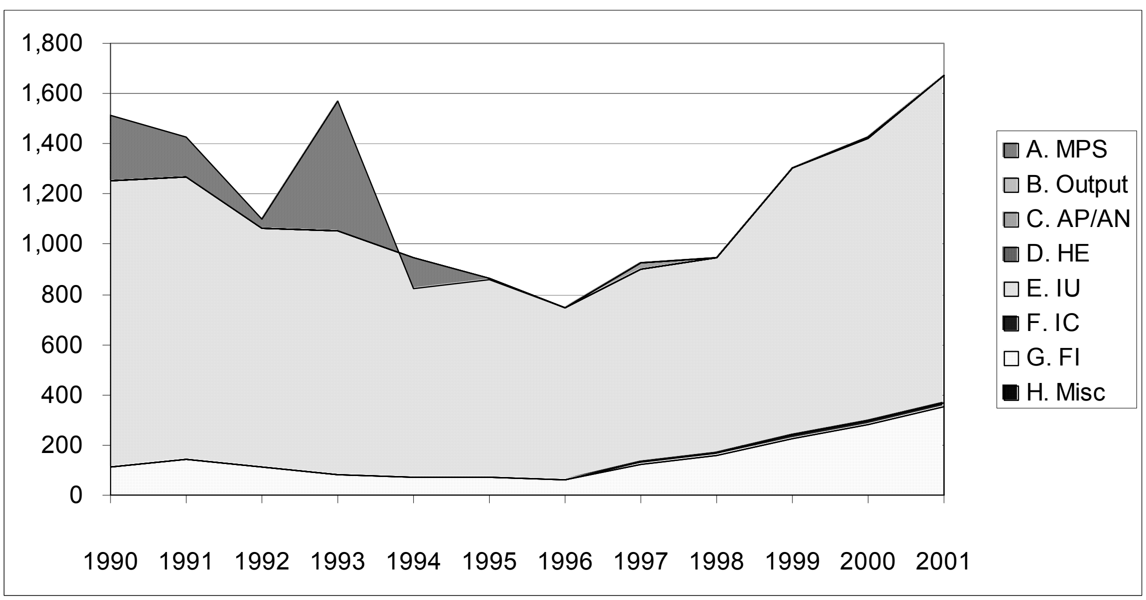

Figure B. 18. US: total value PSE for cattle and calves by program type, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

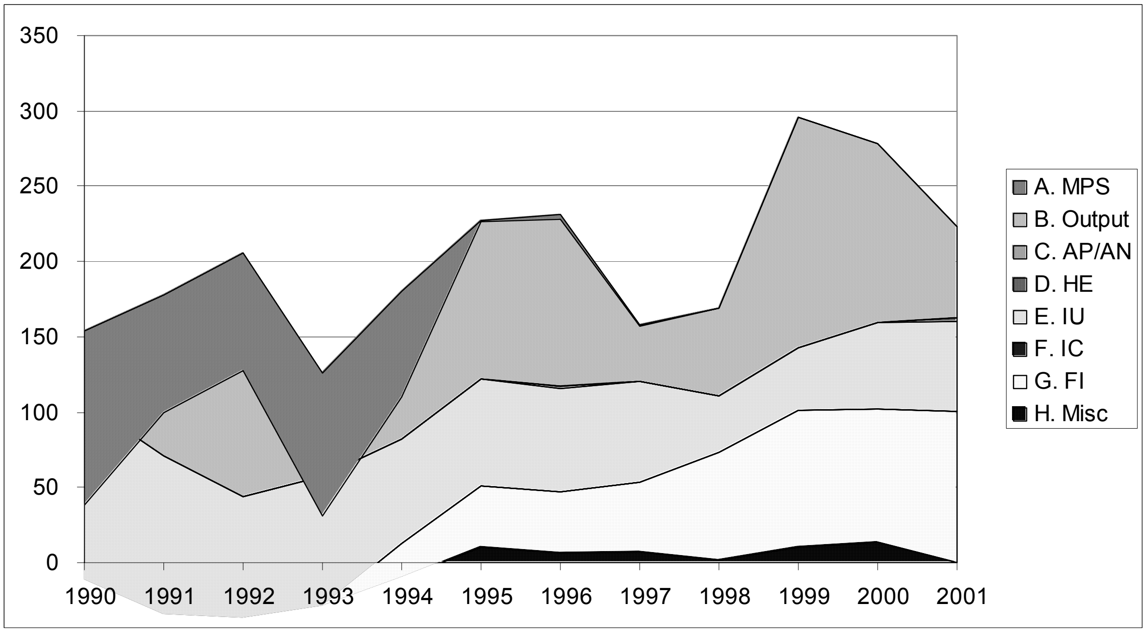

Figure B. 19. Canada: total value PSE for pigmeat by program, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database

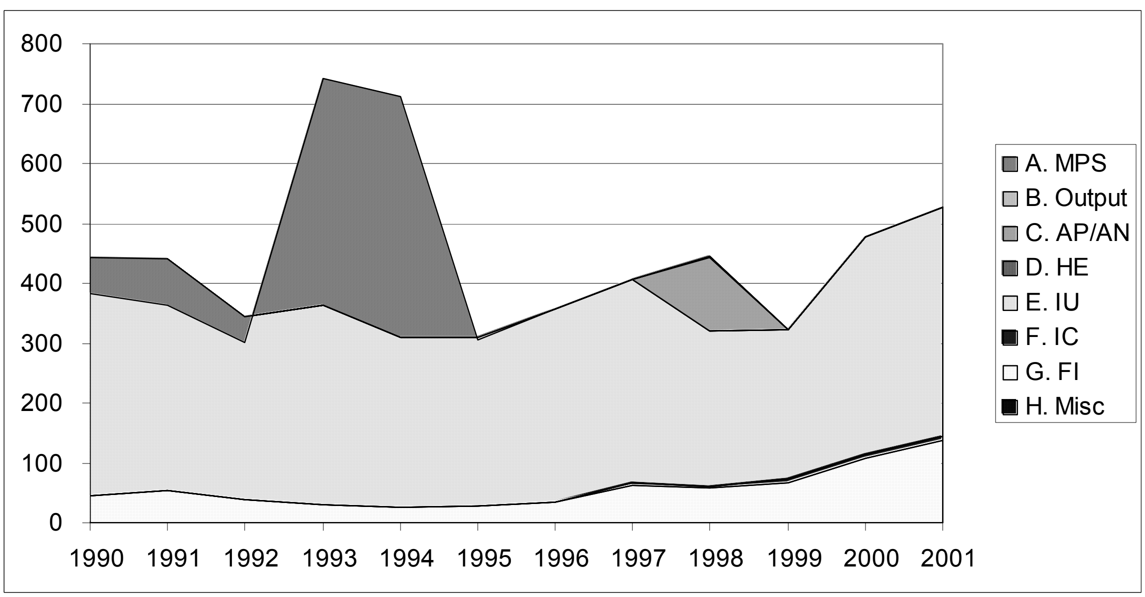

Figure B. 20. US: total value PSE for pigmeat by program, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

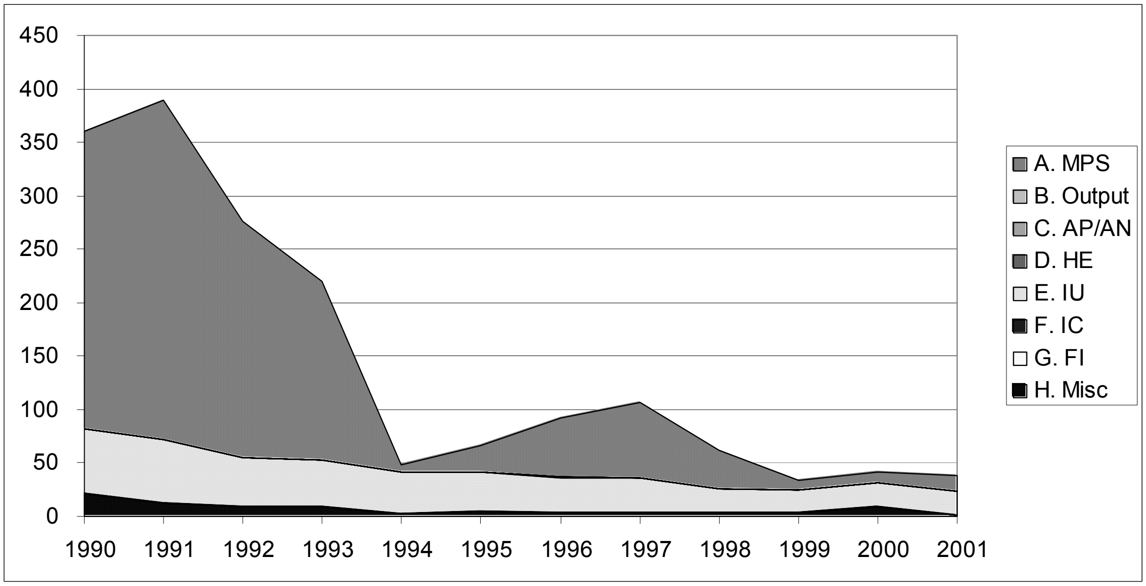

Figure B. 21. Canada: total value PSE for poultry by program type, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

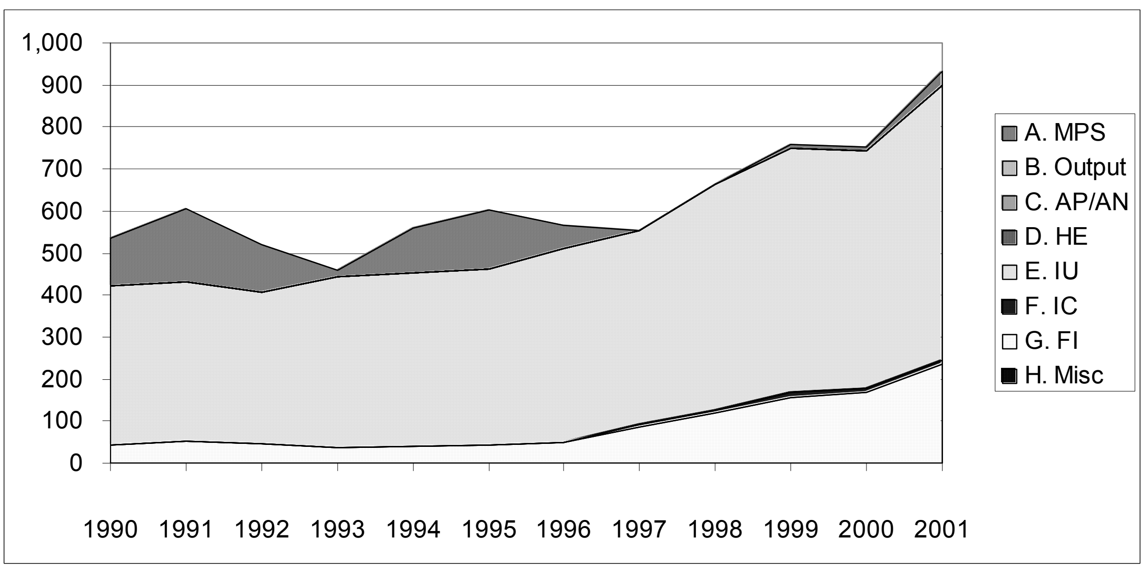

Figure B. 22. US: total value PSE for poultry by program type, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

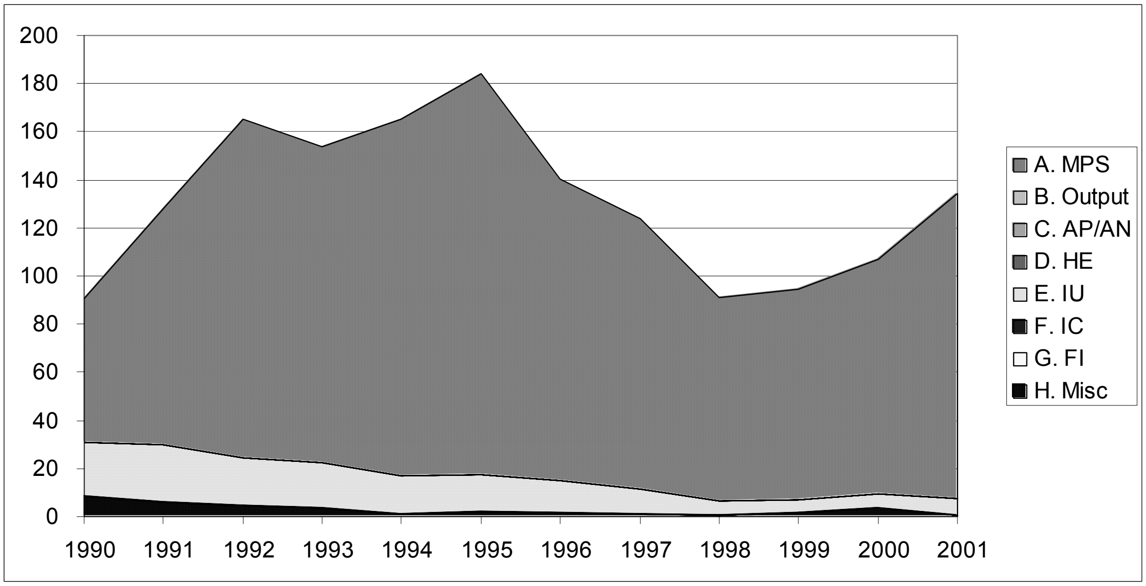

Figure B. 23. Canada: total value PSE for eggs by program type, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

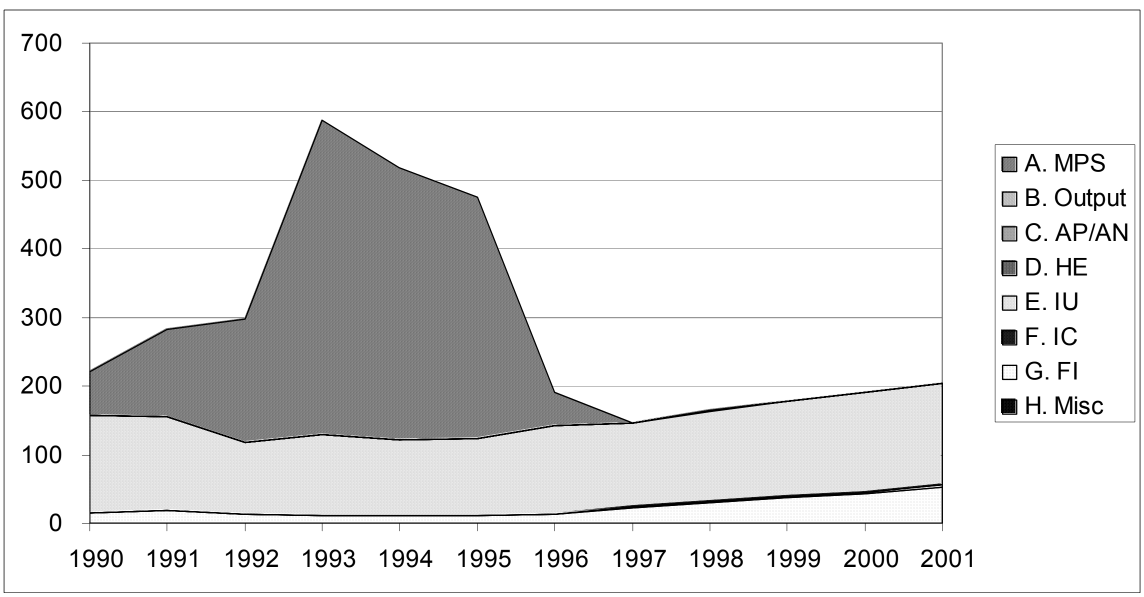

Figure B. 24. US: total value PSE for eggs by program type, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

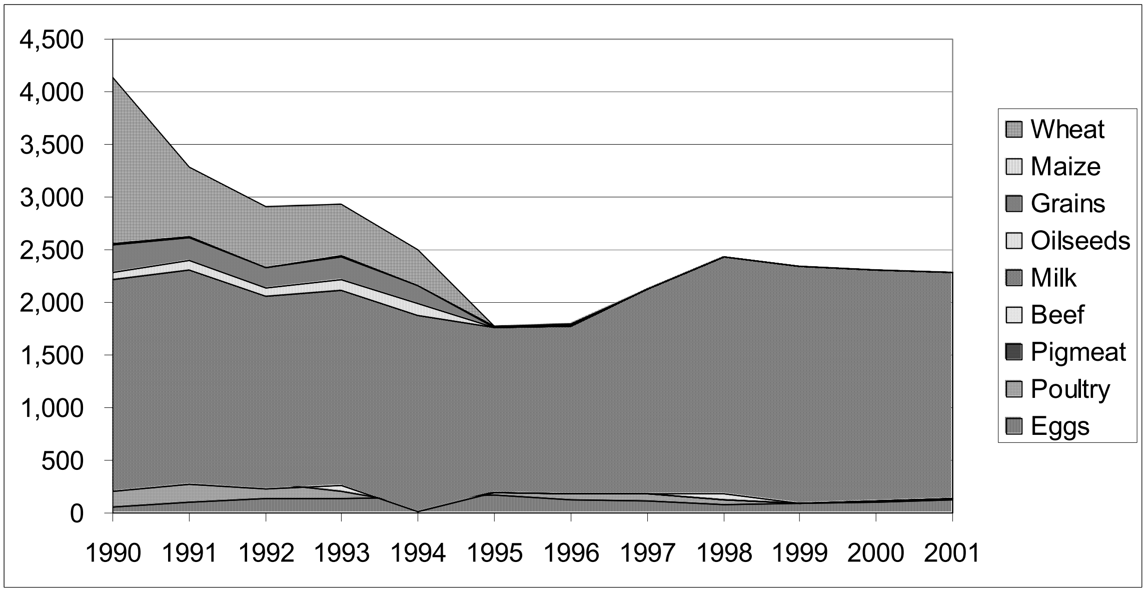

Figure B. 25. Canada: total value MPS by commodity, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

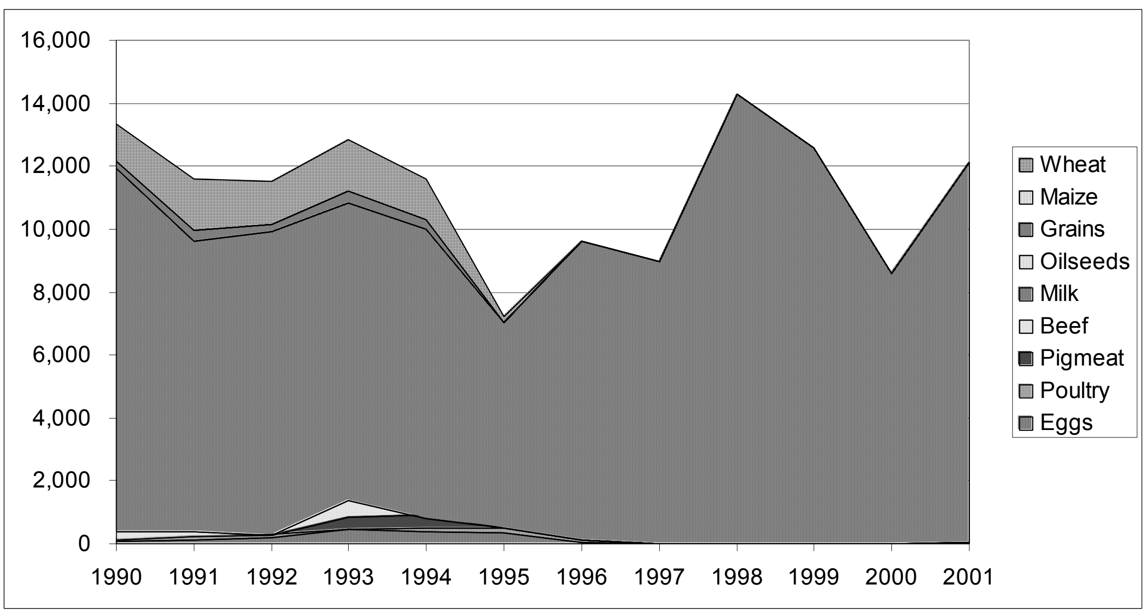

Figure B. 26. US: total value MPS by commodity, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

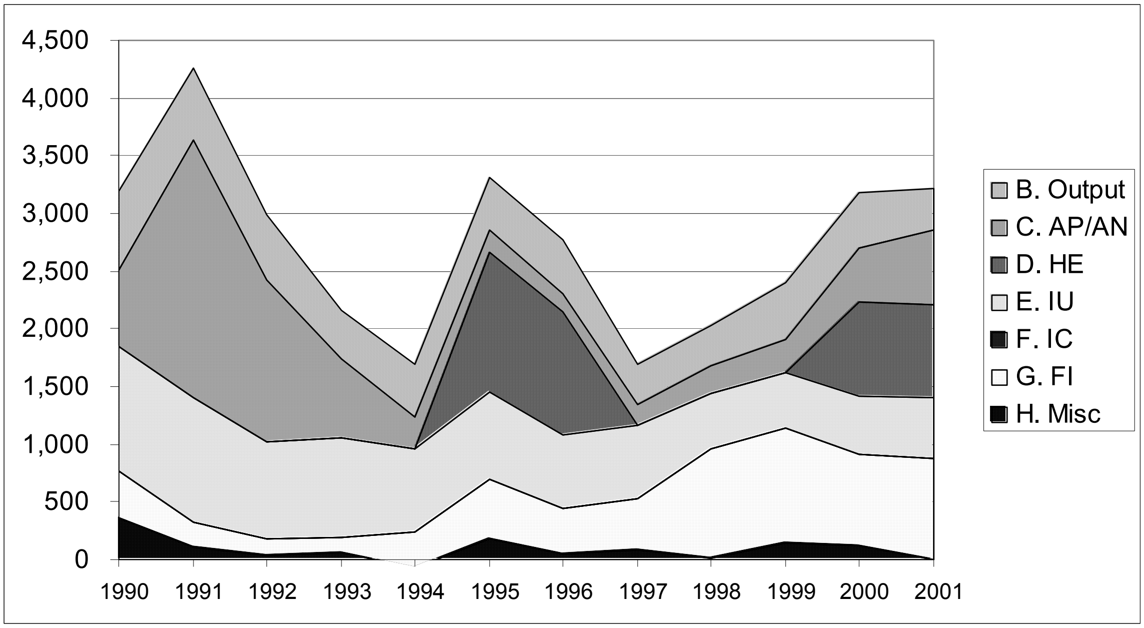

Figure B. 27. Canada: total value government payments for PSE by program type, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

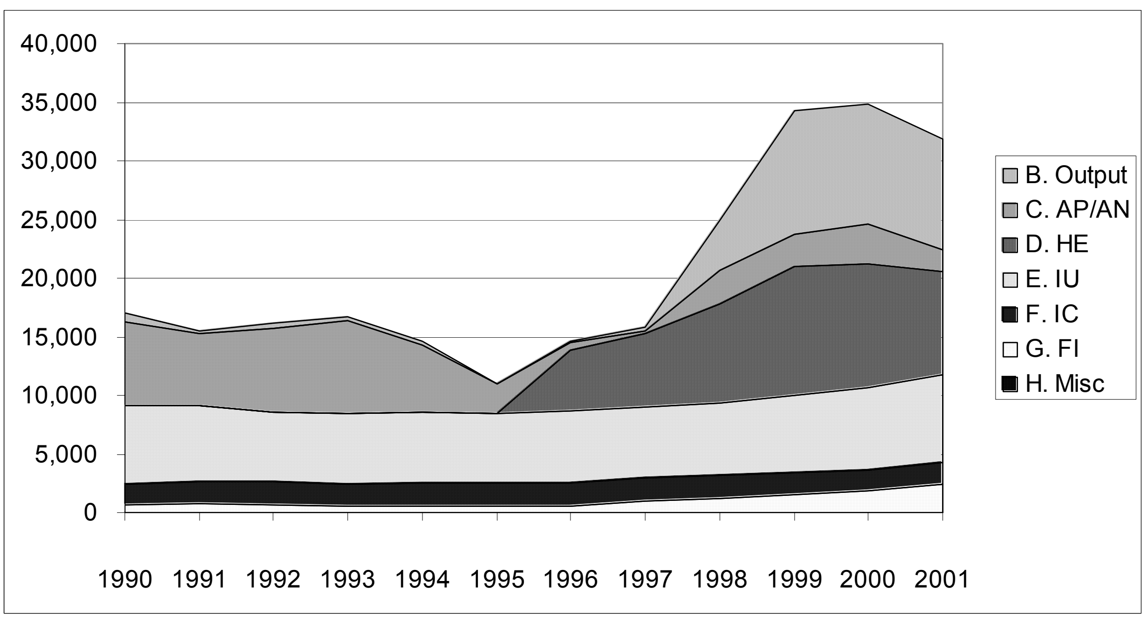

Figure B. 28. US: total value government payments for PSE by program type, 1990-2001.
Source: Organization for Economic Cooperation and Development, Agricultural Statistics Database.

Appendix C

Province/State Profiles

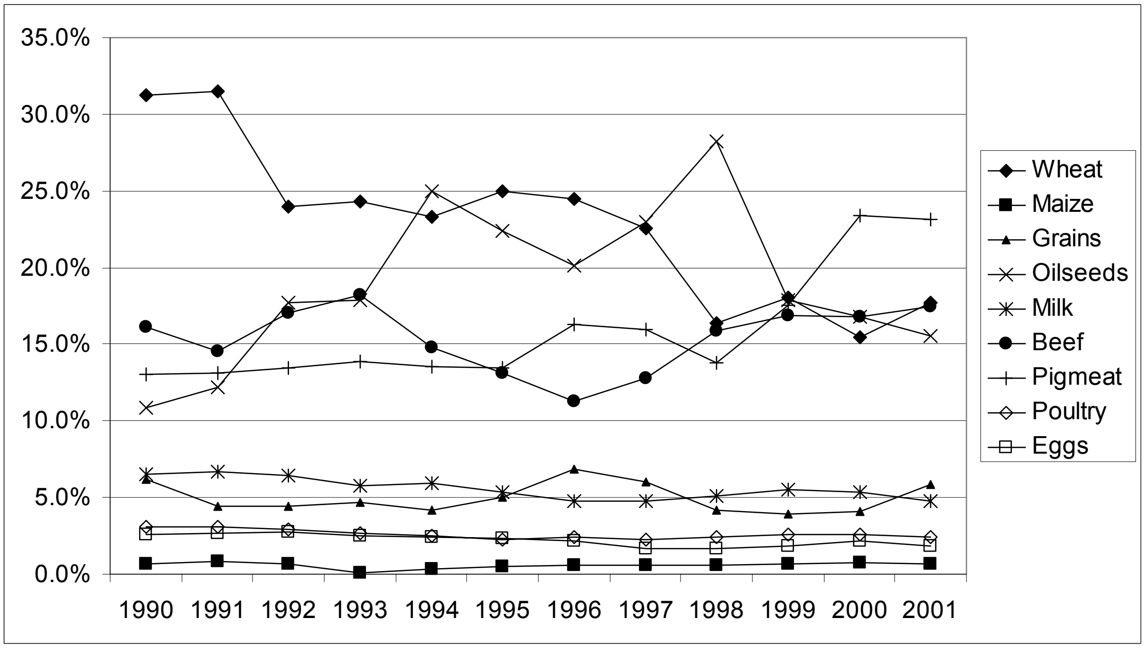

Figure C. 1. Manitoba: individual commodity returns as a percentage of total commodity returns, 1990-2001.
Source: Statistics Canada.

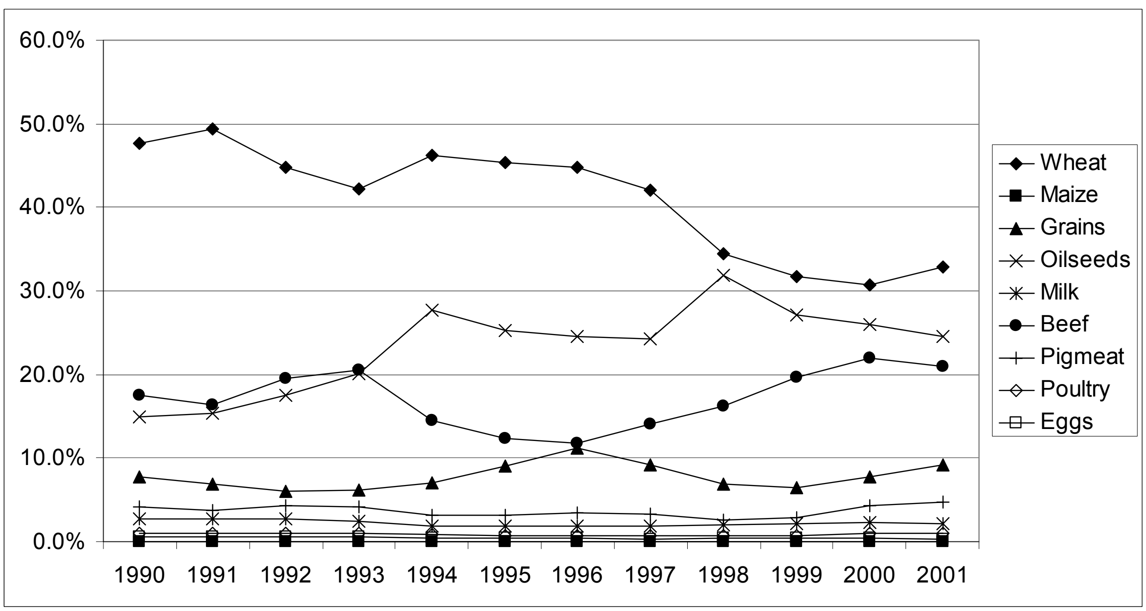

Figure C. 2. Saskatchewan: individual commodity returns as a percentage of total commodity returns, 1990-2001.
Source: Statistics Canada

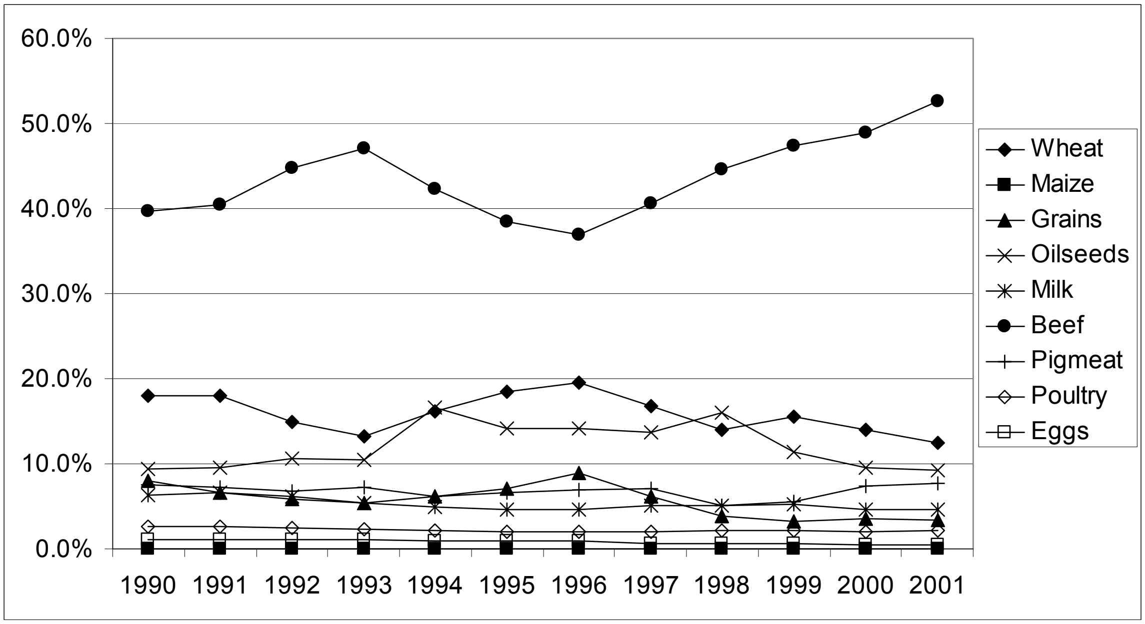

Figure C. 3. Alberta: individual commodity returns as a percentage of total commodity returns, 1990-2001.
Source: Statistics Canada.

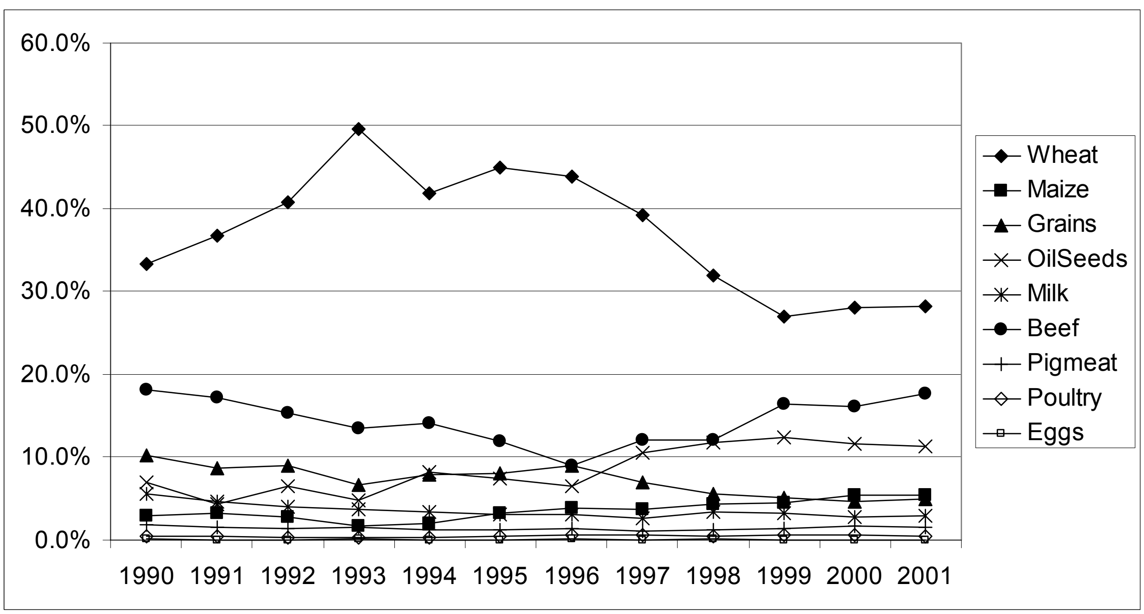

Figure C. 4. North Dakota: individual commodity returns as a percentage of total commodity returns, 1990-2001.
Source: Economic Research Service, United States Department of Agriculture.

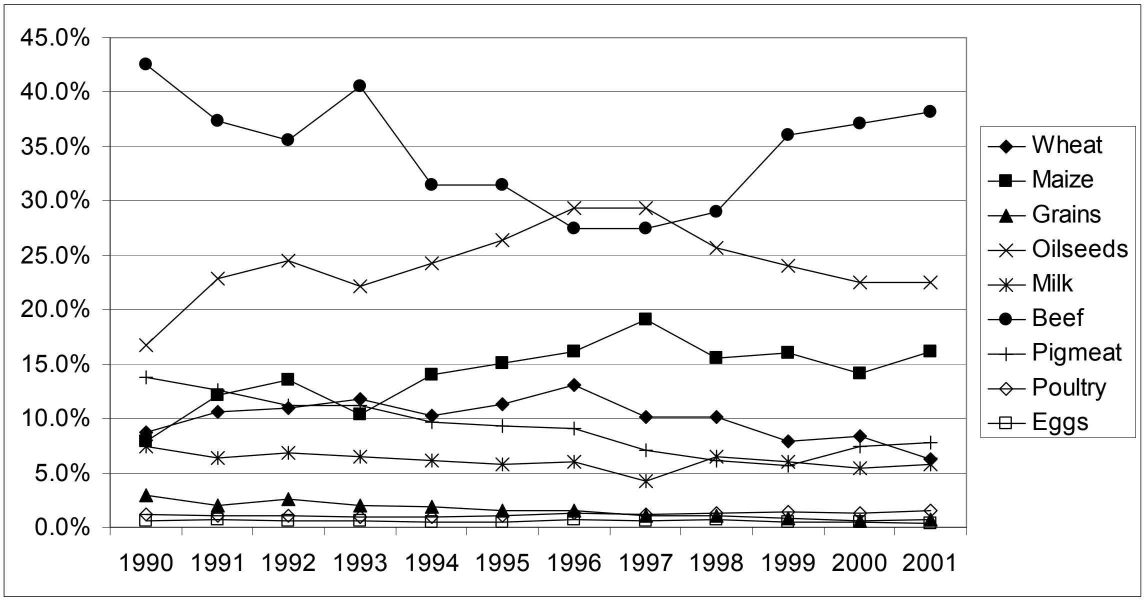

Figure C. 5. South Dakota: individual commodity returns as a percentage of total commodity returns, 1990-2001.

Source: Economic Research Service, United States Department of Agriculture.

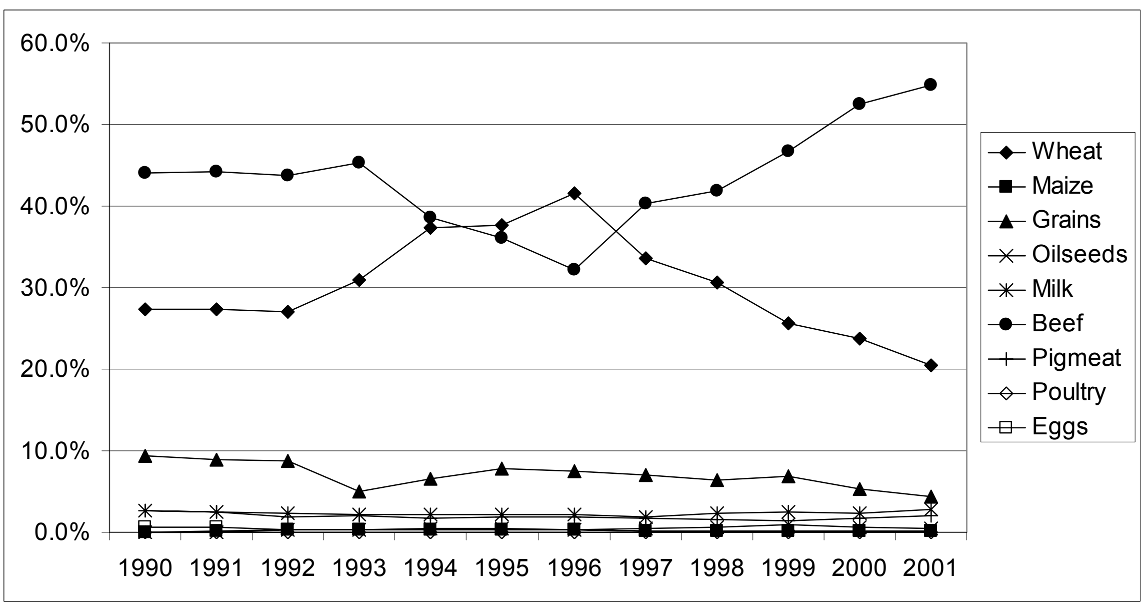

Figure C. 6. Montana: individual commodity returns as a percentage of total commodity returns, 1990-2001.

Source: Economic Research Service, United States Department of Agriculture.

Appendix D

Government Programs

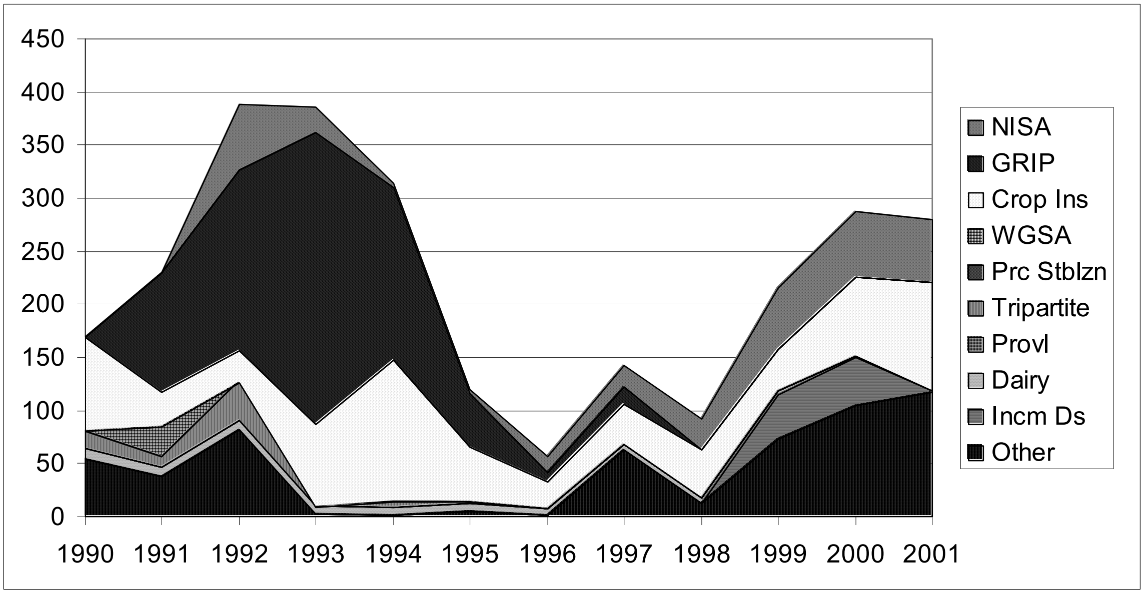

Figure D. 1. Manitoba: total value of government payments by program, 1990-2001. (1000s Cdn dollars)

Source: Statistics Canada.

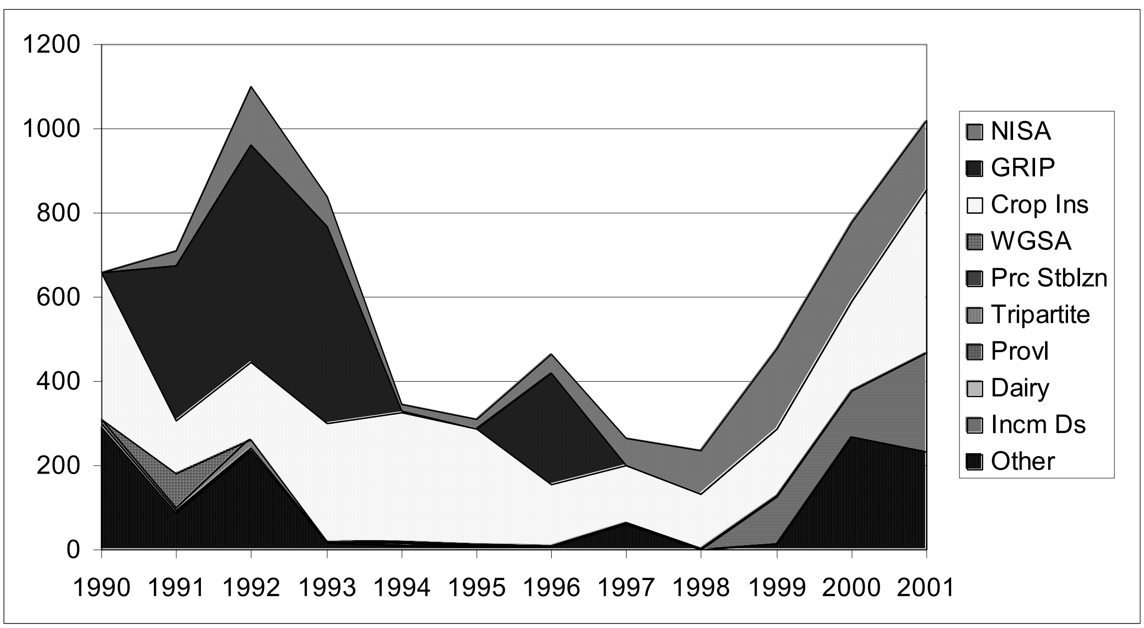

Figure D. 2. Saskatchewan: total value of government payments by program, 1990-2001. (1000s Cdn dollars)

Source: Statistics Canada.

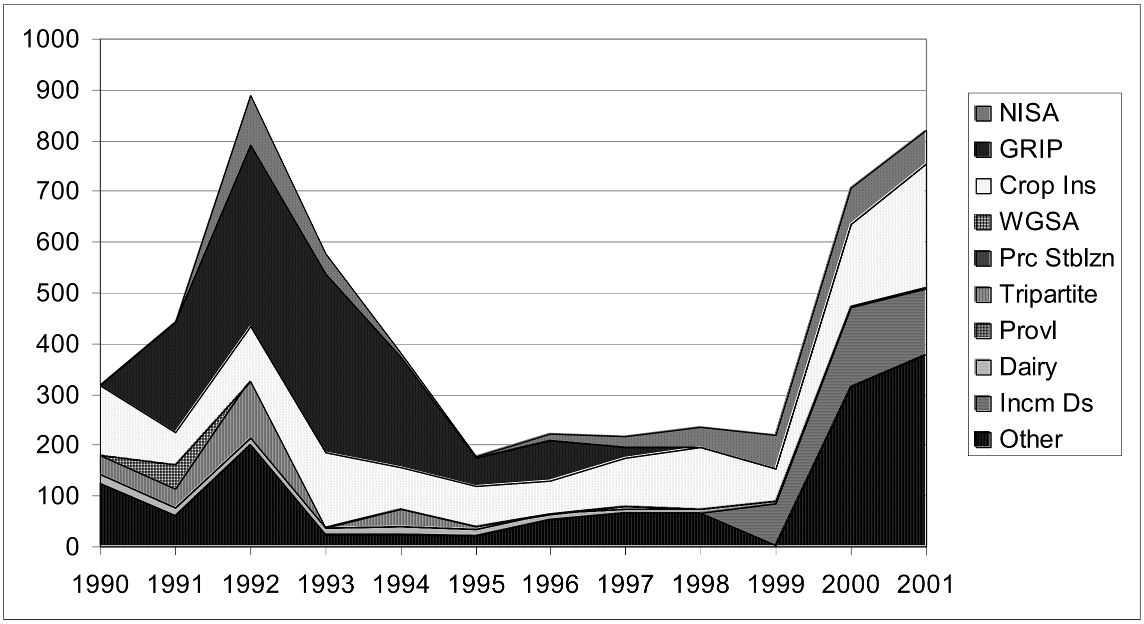

Figure D. 3. Alberta: total value of government payments by program, 1990-2001. (1000s Cdn dollars)

Source: Statistics Canada.

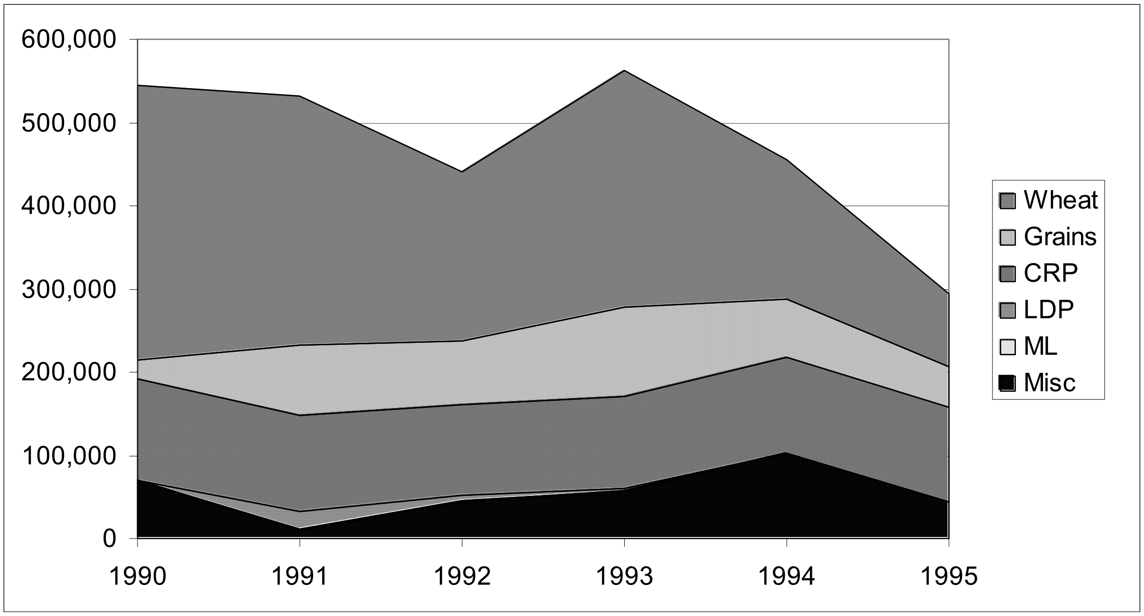

Figure D. 4. North Dakota: total value of government payments by program, 1990-1995. (1000s US dollars)
Source: Economic Research Service, United States Department of Agriculture.

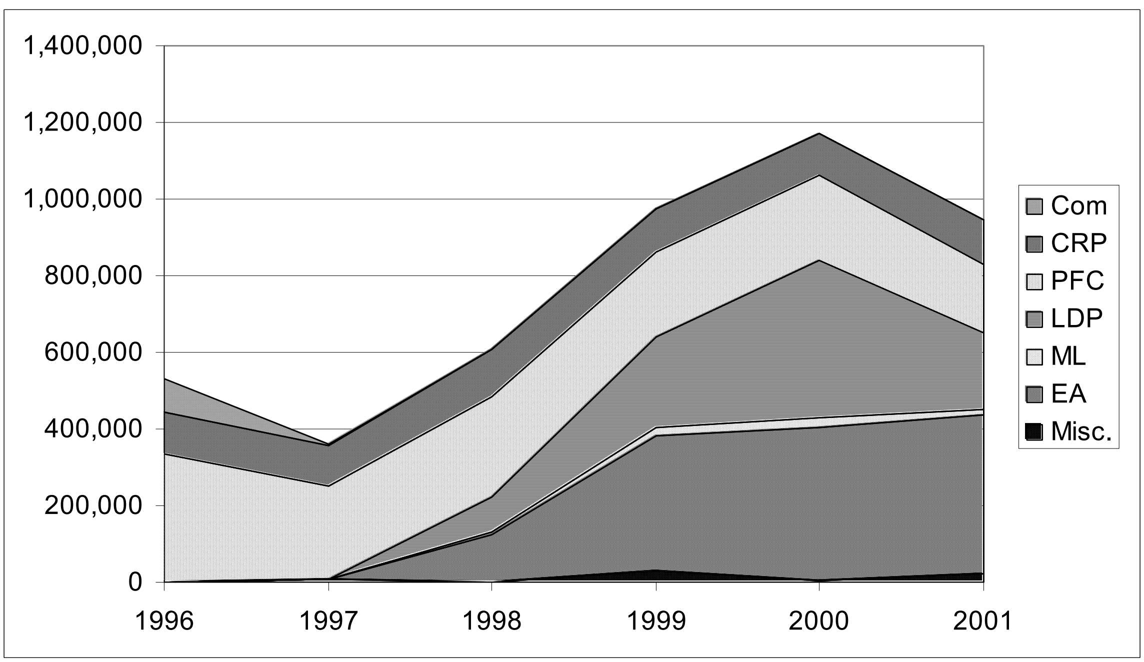

Figure D. 5. North Dakota: total value of government payments by program, 1996-2001. (1000s US dollars)
Source: Economic Research Service, United States Department of Agriculture.

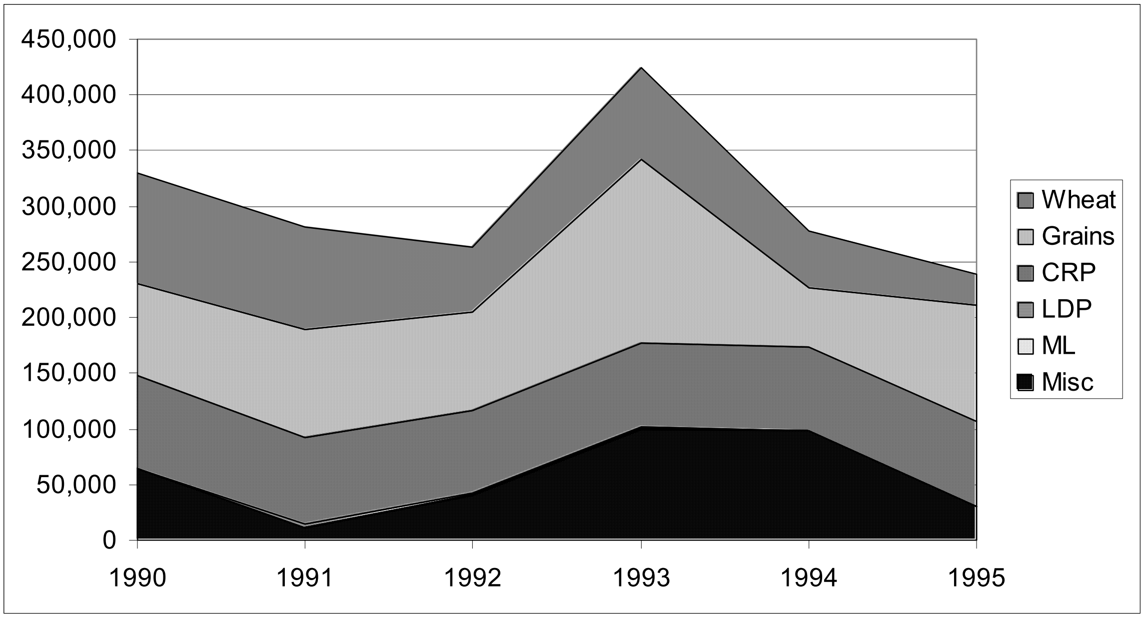

Figure D. 6. South Dakota: total value of government payments by program, 1990-1995. (1000s US dollars)
Source: Economic Research Service, United States Department of Agriculture.

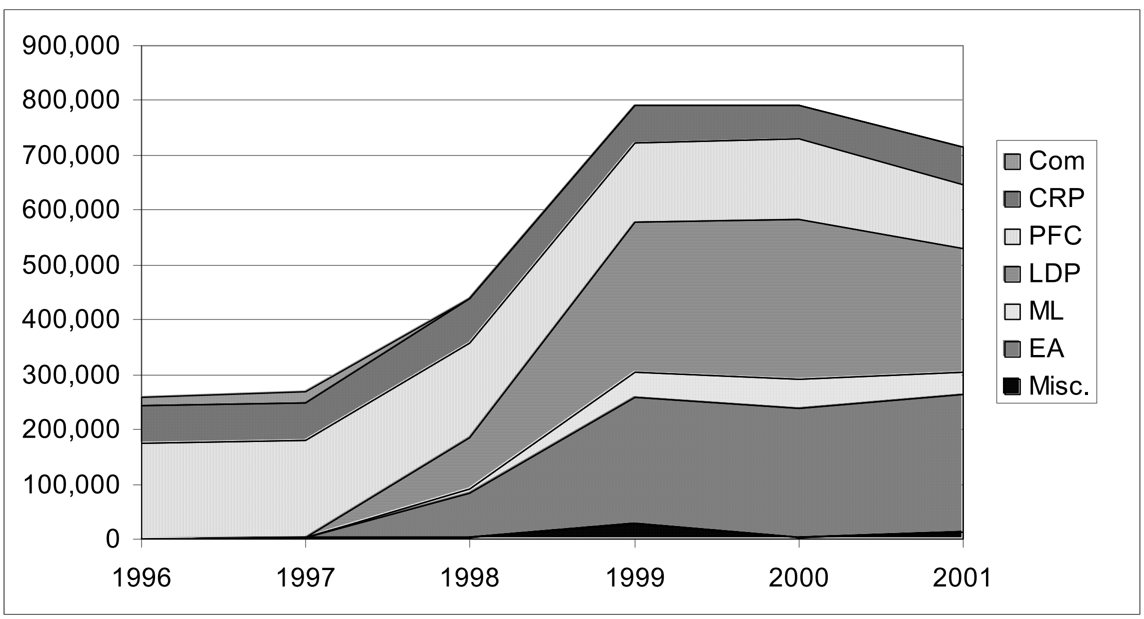

Figure D. 7. South Dakota: total value of government payments by program, 1996-2001. (1000s US dollars)
Source: Economic Research Service, United States Department of Agriculture.

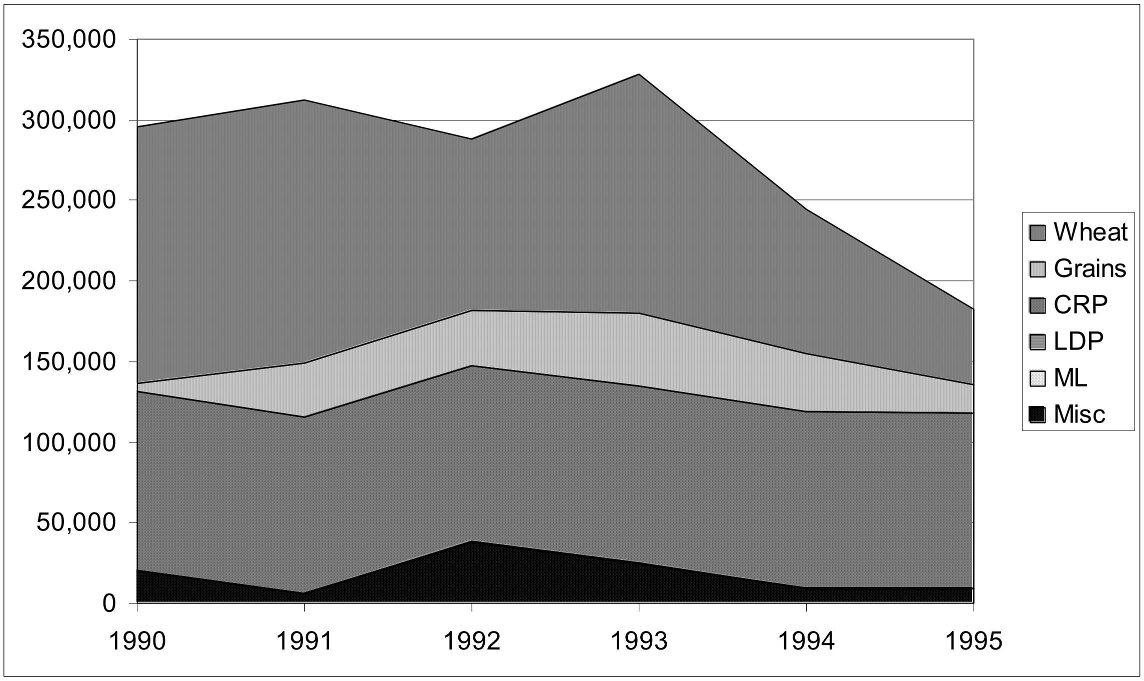

Figure D. 8. Montana: total value of government payments by program, 1990-1996. (1000s US dollars)
Source: Economic Research Service, United States Department of Agriculture.

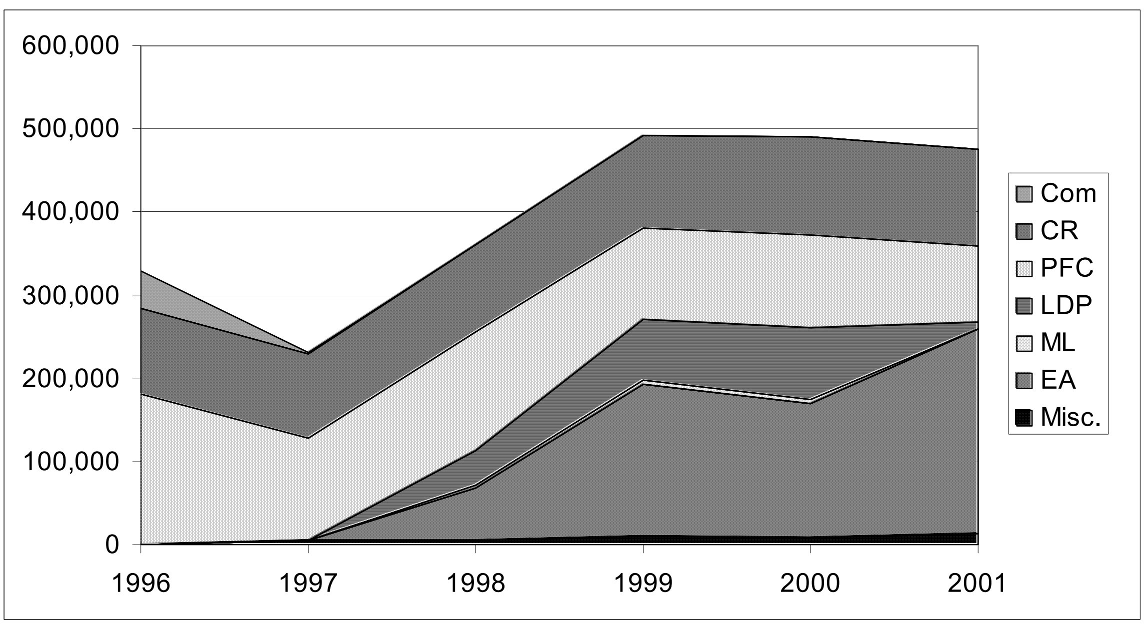

Figure D. 9. Montana: total value of government payments by program, 1990-1996. (1000s US dollars)
Source: Economic Research Service, United States Department of Agriculture.

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