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The Relevance of Offsetting Policy Effects: Covert Distributive Politics in the Conservation Reserve Program

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THE RELEVANCE OF OFFSETTING POLICY EFFECTS:
COVERT DISTRIBUTIVE POLITICS IN THE
CONSERVATION RESERVE PROGRAM

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ABSTRACT

The Conservation Reserve Program (CRP), as initially authorized by

the Food Security Act of 1985, operated by removing land from agricultural

production in order to generate environmental benefits, primarily erosion

reduction. Policy, however, often generates unintended consequences. One

potential unintended consequence in the CRP is slippage; if the upward

pressure that the idling of cropland exerts on commodity prices results in the

activation of new land, behavior that may partly offset the program's

environmental benefits, then price-feedback slippage is said to have occurred.

Examination of county-level wheat production data for the United States

during the years 1980 to 1993 utilizes a two-stage least squares model in which

the effect of land retirement under the program on the price of wheat is

examined, and the correlation between wheat price and acres planted in wheat

is in turn estimated. The model indicates a slippage rate for wheat ranging

between 8.13 and 22.6 percent.

If the intended output of the policy was primarily its stated end of soil

conservation, then the indicated slippage effect is highly relevant to efficacy.

However, if the true intention of the policy was to provide economic relief to

farmers through the application of program rental payments on retired land, then the issue of slippage is irrelevant to the policy's intendment. This study demonstrates that, based on the historical connection between soil conservation and agricultural commodity policies, economic conditions facing agriculture in the early 1980s, a number of studies demonstrating a distributive rather than regulatory effect of the policy on farm operations, and outspoken support for the creation of a program like the CRP on the part of the farm lobby at Congressional hearings during the formulation of the 1985 Farm Bill, the substantive intendment of the policy as passed in 1985 was to provide income relief to farmers, while its stated conservation goals were largely symbolic.

DEDICATION

Dedicated to my cousin Bart, my grandparents Anne and Joseph, and my aunt Jo Ann, each of whom departed before seeing the completion of this endeavor.

ACKNOWLEDGMENTS

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CHAPTER 1

INTRODUCTION

It is a bit self-evident perhaps, but public policy is typically enacted to achieve some purpose. This purpose is, as a rule, stated in the text of the legislation itself or stated by supporters or lawmakers during congressional hearings or debate – this implies a guarantee that "if the actions we recommend are undertaken, good (intended) consequences rather than bad (unintended) ones actually will come about" (Wildavsky, 1979/1987, p.35). One role of the policy analyst is to evaluate whether the policy has succeeded in achieving its stated goals and whether, to the extent it has done so, it has done so efficiently – in essence, to evaluate whether this implied warranty has been kept, or if unintended consequences have occurred. This issue is important in evaluating the efficacy of the policy in achieving its objectives, especially if unintended effects serve to any extent to offset the intended effects of the policy.

Beyond quantifying unintended effects, the policy analyst may also be faced with questions regarding the intended effects – whether the stated purpose of the policy and its intendment, the policy's true goals, the true purpose for which the policy was enacted, are indeed one and the same.

Pressman and Wildavsky (1984) advised that policy evaluation should seek to discover the "actual" and not the "alleged effects". They continued, "Whether or not goals are realized, there may be outcomes of a program or policy that do not relate to the original goals" (p.193). It may well be that the policy does fulfill its stated purpose – be it efficiently or inefficiently, but the policy may serve another, unstated purpose, or it may be more effective at achieving goals that its creators stated as secondary than its primary goals. Put more simply, a policy may cite one purpose and fulfill another. That being the case, it seems relevant for the analyst to inquire as to whether this outcome is serendipitous or if it is what was truly intended by policymakers. Posner (1971) used the term "purpose in fact" to describe this concept: "the reasons, whether or not anywhere avowed, that provide a consistent explanation of the actual course and consequences" of a policy (p.22, footnote).[1] This is an especially pertinent question when the outcome provides largesse for interests that have historically wielded significant influence over the policymaking process. This concept can be illustrated using a particularly egregious example: Suppose a hypothetical member of Congress sponsors a defense bill which awards a substantial contract to a defense firm in which his brother-in-law owns a great

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[1] In essence, the analysis is analogous to that carried out by jurists in determining legislative intent, except that, rather than interpreting meaning of statutory language, this study will seek to determine the underlying motivation for passage of the program.

deal of stock. The stated purpose of the policy may be to enhance the nation's military readiness, but the purpose in fact would be to enrich the congressman's relative.

The purpose of this study is to investigate the relevance of an unintended effect, slippage, as relating to the Conservation Reserve Program (CRP). The stated goal of the CRP was to reduce soil erosion due to cultivation of erodible lands by way of the retirement of environmentally sensitive cropland. If the reduction in cropland is offset, at least in part, by the activation of new land resulting from market effects of retiring land under the program, then slippage is said to be present. To the degree that slippage exists, if it exists, it would have significant ramifications on the effectiveness of the program. However, if the CRP was passed for reasons other than soil conservation, the issue of slippage potentially becomes much less imperative. In the previous example of the hypothetical defense bill, the policy itself may indeed fulfill its stated purpose to some degree, but the extent to which it does would be at best of secondary importance to the bill's sponsor.

If the issue of slippage is not important to the program's goals, the question turns to focus on what the purpose in fact of the CRP was; in other words, why was the CRP passed? This raises the parallel question of why the policy goals were framed as they were, if indeed the intendment was other than the program's stated end. An earlier policy by the same name and

bearing the same policy instruments was framed as being primarily aimed at boosting farm incomes by reducing commodity surpluses; was there any substantive reason for the difference in focus, or was it framed differently for reasons more strategic in nature? This study seeks an answer to these questions.

The first order of business is to introduce the CRP as it was originally authorized in 1985 and how it has been modified since. The focus of the remainder of the study, however, will be the CRP as initially authorized.

Introduction to the Conservation Reserve Program

Congress authorized the Conservation Reserve Program in 1985, following a fifty-two year history of federal soil conservation programs. The program was established in Title XII, Subtitle D of the Food Security Act (99-Stat-1354). The Act authorized the Secretary of Agriculture to accept bids from owners and operators of land used in the production of agricultural commodities to set aside highly erodible farmland for the purpose of preventing soil loss and sedimentation in surface water. The contracts are administered through the Farm Service Agency (FSA), an agency within the Department of Agriculture (USDA). The contracts are in effect from ten to fifteen years. Farmers are not allowed to use the land for harvest or grazing purposes during the term of the contract (except when permitted by the

Secretary, such as for reason of drought or other emergency), and they are required to plant cover crops, most commonly grasses or trees, on enrolled land. In return, the farmers are paid an annual rental fee, and the FSA bears up to 50 percent of the cost of establishing the cover required under the contract. Payments may be made either monetarily or through in-kind commodities, or a combination of the two, which are delivered by way of the Commodity Credit Corporation (CCC).

Under Section 1231(b), the program was phased in between 1986 and 1990, with minimum enrollment growing from 5 million acres in the first year to 40 million acres in 1990, not to exceed 45 million acres in any of the years. Enrollment is limited to a maximum of 25 percent of the cropland in a given county unless it is determined that exceeding this limit would not impose economic hardship on that county.

Section 1235(a)(1) provides that the Secretary shall refuse to enter into a contract on land that has changed ownership within three years prior to the beginning of the contract, unless "the land was acquired under circumstances that give adequate assurance that such land was not acquired for the purpose of placing it in the program". This is intended to prevent the creation of a market for land with the intent of trading the expected future stream of CRP payments as a commodity.

The CRP was reauthorized and amended in Title XIV, Subtitle C of the Food, Agriculture, Conservation, and Trade Act of 1990 (104-Stat-3359) to include wetland and wildlife habitat restoration in addition to soil conservation. Section 1433(c) requires that a minimum of one-eighth of enrolled land between 1991 and 1995 be set aside for trees or other vegetation, or water to provide wildlife habitat.

The only changes to the program in the 1996 reauthorization (110-Stat-888) were a reduction in the maximum enrollment to 36.4 million acres (Title III, Subtitle D, Section 332(b)), and a provision allowing early termination of the CRP contract by participants who enrolled before January 1, 1995, and who have been enrolled in the program for at least five years (Section 332(c)).

The CRP was reauthorized through 2007 under Title II, Subtitle B, Section 2101 of the Farm Security and Rural Investment Act of 2002 (116-Stat-134). This reauthorization also enacted only minor changes to the CRP as previously amended. One change the reauthorization allowed was the location of wind turbines on reserved land, the placement and number of which was to be determined by the Secretary. The maximum enrollment was also increased to 39.2 million acres. The legislation disallows landowners who are under contract with the CRP from bringing erodible land that has not been previously used for cropping into production. It also restricts CRP enrollment to land that has been cropped three of the last six years prior to the contract

period; this provision prevents the extension of the program to potential, in addition to current, agricultural land, which would consume excessive amounts of program funds.

After 1993, the CRP accounted for the greatest amount of acreage reserved under conservation programs and received the greatest share of CCC funding (Leathers & Harrington, 2000; U.S. Senate, 2001). At the end of fiscal year 2005, CRP enrollment was 34.9 million acres and total rental payments were $1.69 billion, averaging $48.43 per acre (Farm Service Agency [FSA], 2005).[2]

A landowner who wishes to enroll land in the CRP must submit a bid to the CCC for the amount of rent for which he would be willing to retire the parcel of land in question; this bid must be at or below the maximum payment rate set by the CCC. This maximum payment rate is set by the CCC on a county-by-county basis and is determined relative to average rental rates and soil productivity. Farmers who wish to increase their chances of being accepted into the program are encouraged to bid below this maximum payment rate (FSA, 1997).

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[2] Average per acre payment includes yearly allowances for maintenance and program incentives. Average rental payment for land enrolled under the basic program is $43.58 per year. Additional payment for participation in continuous enrollment programs and wetland conservation raise the average to as much as $120 per year. These programs account for only ten percent of total program enrollment (FSA, 2005, p.i).

Upon receiving the bid, the CCC enlists the services of the National

Resources Conservation Service to evaluate the environmental value of the

land vis-à-vis the proposed rental rate. Land eligibility is determined through

a targeting process based upon the Environmental Benefits Index (EBI), which

considers, among other things, the erodibility of the land, the proximity to

bodies of water and the leachability of the soil, as well as effects of these land

characteristics on the local population (Feather, Hellerstein and Hansen, 1999).

Once eligibility has been established, the NRCS reports back to the

CCC, which enters into contract with the landowner and begins issuing

payment. Administration of the program, vis-à-vis monitoring, education, and

so forth, is carried out through local agencies, including local conservation

districts, departments of natural resources, forestry agencies, and land grant

colleges.

If a landowner or operator violates the terms of the contract, by way of

disturbing the reserved land by tilling or harvesting without the permission of

the FSA or in a manner not in keeping with established conservation practices,

the farmer may face diminution of the rental rate he receives, cancellation of

the contract, or he may be required to reimburse the CCC for rental payments

received.

In September 1996, the CCC began a Continuous Sign-Up program that

allows for automatic acceptance of bids that meet the EBI-based requirements

and where the land is eligible for certain high-priority conservation practices, such as riparian buffers (FSA, 1997). Continuous Sign-Up occurs in addition to, not as a replacement for, the program's standard periodic sign-ups.

Study Overview

In the following chapters, the relevance of slippage to program goals is assessed by defining the purpose in fact of the program. This is done first in terms of establishing the long-running relationship between soil conservation and agricultural policy. Past agricultural policies were primarily aimed at boosting farm incomes through surplus reduction or direct subsidy. It will then be shown that, while the CRP was framed as being primarily targeted to soil conservation, the evidence does not indicate that its actual purpose was any different than that of similar policies of the past. This is demonstrated by examining the rhetoric surrounding the formulation of the CRP during Congressional committee hearings, primarily from the agricultural lobby. Further, it is demonstrated that the benefits generated by the program were primarily for farmers, while any benefits from soil conservation are far more diffuse, thus making the policy one that is clientele and distributive (see Lowi, 1964 and Wilson, 1973) and not one that can accurately be considered regulatory.

As is discussed in later chapters, McConnell (1953; 1966) examined the historical dominance of farm interests in the agricultural policymaking process, and Browne (1988) addressed collusion between farm and environmental interest groups in the formulation of the Act that among other things created the CRP. No studies, however, have been done to determine whether the stated end of the CRP was indeed its intendment or to determine the possible reasons behind this framing of a policy in a manner that obscures its actual intent.

CHAPTER 2

METHODOLOGY

In previous studies, Wu (2000; 2005) and Roberts and Bucholtz (2002; 2005) addressed the question of whether slippage exists in the Conservation Reserve Program. These previous studies tested for slippage resulting from substitution effects; however, Wu and Roberts and Bucholtz arrived at conflicting conclusions regarding the existence of this phenomenon. This current study seeks to approach the question of the presence of slippage in the CRP from a different angle by testing for the presence of slippage resulting from price feedback effects; no previous studies have been done to detect price-feedback slippage.

Wu and Roberts and Bucholtz, however, operated under the premise that the presence or absence of slippage is indeed relevant to the program's goals. While the stated goal of the CRP is the conservation of natural resources through the reduction of soil erosion (see for example Chapman, 1988), a number of factors raise the question of whether this is indeed the true purpose, or "purpose in fact", for the passage of the CRP. These factors are described in this chapter and are examined in detail in the following chapters.

While the presence of slippage is the starting point of this discussion, the question of the true purpose behind the CRP rises to the fore. If the intendment of the CRP was not soil conservation, then slippage may be irrelevant to the true policy goals. Therefore, this question of purpose in fact is addressed first in order to set the context for the determination of whether slippage is present. In this context, the presence of slippage would add to the argument that the stated goals of soil conservation are of at best secondary import to policy makers, for if the goal of the CRP is in actuality to provide income support for farmers, the presence of effects that offset environmental gains from land retirement would reinforce a view that the stated conservation goals of the program are more symbolic than substantive. The absence of slippage on the other hand, would tend to indicate that the policy is efficacious in meeting its stated goals; while not discounting the arguments regarding the program's purpose in fact, it would greatly weaken the case.

The central question addressed by this research is therefore whether slippage is present in the CRP and whether that slippage is relevant to the true purpose of the policy. No previous studies have addressed the question of slippage in this holistic manner. Doing so requires an interdisciplinary approach involving an historical perspective of soil conservation policy and the application of policy theory, as well as quantitative testing. The process by which this study is undertaken is outlined in the following.

Discerning the "Purpose in Fact" of the CRP

The first part of this research endeavor is to examine the evidence for the true purpose for which the CRP was enacted. Doing this involves a three-pronged approach by which the foundation is laid for the discussion of slippage and its relevance to this true purpose. Clearly, underlying motives are often not directly observable, but through the examination of evidence, they can be ascertained. The following points give cause for which the purpose in fact of the CRP should be questioned, and they provide the means by which it can be discovered. The three "prongs" of this argument are the historical context of the program, the policy environment in which the program was formulated and adopted, and the question of who most directly benefits from the program.

The historical background of the CRP is first examined. This examination begins with the genesis of the modern conservation movement with the early entrepreneurs around the turn of the twentieth century, but mostly involves the development over time of agricultural commodity programs and their close relationship with soil conservation policy beginning in the years of the Dust Bowl, the Great Depression, and Franklin Roosevelt's "New Deal". One policy in particular, the Soil Bank Act of 1956, proves to be especially relevant. This history demonstrates that past policies have not only

been tooled to primarily benefit farmers, but that this goal was the stated purpose of many of these programs.

The policy environment is then discussed in detail. In the context of the historical analysis, the marked similarities within the agricultural sector between the time of the New Deal and the early 1980s when the CRP was enacted are telling. This discussion also points out three major threats that the historically powerful farm lobby faced at the time: an administration favorable to reducing federal program spending, a swell in public sentiment in favor of conservation, and the related growing influence of the environmental lobby in Washington.

Finally, the CRP is examined for who it primarily benefits. This involves the categorization of the policy in terms of the policy typology literature. The argument is proffered that the CRP is distributive (Lowi, 1964) or clientele (Wilson, 1973) rather than regulatory. This is supported by testimony given during Congressional hearings and statements made regarding the CRP during debate of the 1985 Farm Bill.

In conclusion, a theory is formulated in order to explain the reason for the framing of the CRP as primarily a conservation policy while its purpose is in actuality to supplement farm incomes during a financially troubled time. With this foundation laid, the discussion moves to the presence of slippage.

Testing for Slippage

The question of slippage in the CRP has been addressed by a number of studies (Grant, 1979; Gardner, 1987b; Love & Foster, 1990; Hrubovcak, LeBlanc & Miranowski, 1990; Hoag, Babcock and Foster, 1993). Most prominently, the issue of slippage – resulting from substitution effects – has been debated between Wu (2000; 2005) and USDA Economic Research Service (ERS) economists Roberts and Bucholtz (2002; 2005). This current study utilizes data on cropping and CRP enrollment during the same period covered by Wu and Roberts and Bucholtz, the first twelve signups for the program. This specific time period is tested for slippage resulting from price feedback effects in order to facilitate direct comparisons with the previous studies and to comment on the relevance – or lack thereof – of any slippage found in both the previous and this current work.

One difference in the scope of this study is that, while Wu and Roberts and Bucholtz limited their inquiries geographically to a specific region of the United States, this research uses cropping data from all 2,681 counties within the contiguous United States in which the study commodity, wheat, was grown during any year of the study period – wheat is used in order to isolate the effects within the market for a single commodity; wheat is also widely grown and requires relatively little special land preparation. Furthermore, national enrollment in the CRP is used, as price feedback effects are a market-

wide phenomenon, and not farm-specific as is that tested for by Wu and

Roberts and Bucholtz. Narrower models are also run dropping the lowest ten

and lowest ninety percent of counties in terms of wheat production to test the

model's robustness.

This research also differs from Wu and Roberts and Bucholtz in that it

employs an interrupted time series design, which includes six years prior to

the 1986 implementation of the CRP in order to control for any secular trends

that might exist in the data which might have predated the program (see Cook

& Campbell, 1979). The model therefore examines wheat cropping and prices

during the years 1980 through 1993, resulting in a total of 37,534 data points.

Price feedback refers to a general equilibrium condition in which a

commodity price increase stimulates an increase in production in turn

offsetting either partly or wholly the initial price change. In this instance, the

decrease in supply resulting from the retirement of CRP land results in an

increase in commodity price which leads farmers to increase production of the

commodity, which may lead to the activation of new land. This new land

activation is referred to as slippage.

The model utilizes a two-stage least squares regression in order to

directly measure price feedback effects then measure its effect on the total

number of acres planted. The model estimates are used to calculate the rate of

slippage – defined as the number of acres activated as a result of price feedback

effects – as a percentage of the number of acres retired under the CRP.

The Relevance of Slippage

In the following pages, the relevance of the findings of the slippage

model is evaluated in light of analysis of the purpose behind the passage of the

CRP. As described previously, the issue has been the subject of debate with

ERS as one of the parties. However, all of these studies have operated under

the premise that the question of slippage was relevant to the policy's stated

purpose of reducing soil erosion; none of them have raised the question of

whether the program's purpose in fact was indeed the same as its stated

purpose, and therefore whether the effect was relevant thereunto. Both of

these questions are addressed in this study.

CHAPTER 3

POLICY HISTORY

In exploring the motivations behind passage of the CRP in the 1985
Farm Bill, it would be efficacious to provide a historical background of the
relationship between soil conservation policy and agricultural commodity
programs. The passage of the CRP did not occur in a vacuum; there existed a
long history of agricultural policies that employed similar policy instruments.
In addition to achieving soil conservation goals, many were also directed at
supplementing farm incomes.

The conservation movement in the United States can be traced back to
the late nineteenth and early twentieth centuries with the setting aside of the
first national reserve lands by President Benjamin Harrison (Proclamation
No.17, 26-Stat-1565) in 1891 pursuant to a provision in the Forest Reserve Act
(26-Stat-1095). This forest conservation movement largely came in response
to increasing concern over the depletion of forestland during this time (Van
Hise, 1910, pp.3-4). Although the focus was on forest conservation during
much of the early movement, several early entrepreneurs recognized the need
to expand the focus beyond forestland to water and soil. These entrepreneurs

laid the groundwork for conservation policies to follow, including the broad-ranging policies of modern times.

The policies that followed in the years after the entrepreneurs are presented as divided into four phases. The first phase is the initiation of the federal role in soil conservation, during which policy was explicitly aimed at addressing the problems of soil conservation. During the second phase, soil conservation policy became auxiliary to farm income support. The third phase is marked by the maturing of conservationism as a national issue during the environmentally-conscious 1970s, although it is argued that soil conservation remained secondary to income support, the political environment necessitated that conservation be prominent on policy-makers' agendas. The final phase is the response to the economic and environmental backlash of stimulative agricultural policy that came in response to strong domestic and international demand during the 1970s.

Early Entrepreneurs

George Perkins Marsh was the first of the great conservationists in the American movement. Marsh saw Man as disruptive of nature and advocated conservation as a philosophical imperative. Marsh is widely seen as the forerunner of the ecological school of conservation thought (Rose, 1971). John Muir later followed Marsh's ecological philosophy of preservation for aesthetic

and moral reasons. Muir worked as an activist for ecological preservation, including the founding of the Sierra Club, and continues to serve as the patron saint of aesthetic environmentalists to the present day (Rose, 1971).

Nathaniel Southgate Shaler played a significant role in gaining acceptance of the need for a national conservation policy (Livingstone, 1980). Shaler was a true renaissance man in his approach to conservation. Heavily influenced by Louis Agassiz, a Swiss naturalist, and merging the aesthetic (a la Marsh) and utilitarian approach, Shaler recognized the importance of conserving natural resources in a much more holistic manner than many of his contemporaries. While most conservation policies as late as 1939 focused on forest conservation (Van Hise, 1910; Randall, 1939), Shaler wrote on the importance of soil conservation, recognizing the role of tillage in contributing to topsoil erosion; this was almost prescient of the ravages that the Dust Bowl would bring some forty years afterward (Shaler, 1896). Shaler further stressed the importance of education in furthering conservation, and he expressed great confidence in the progress of technology to reduce the demands on the environment of the growing human population.

Gifford Pinchot, a contemporary of Shaler, arose as perhaps the most influential policy entrepreneur in the early conservation movement. McConnell (1966) stated that Pinchot "stamped conservation upon the American consciousness" (p.44). Like Shaler, Pinchot's conservationist

philosophy partly traced to European influence, having been shaped by his

study of forestry in France (Forest History Society, 2005). Also like Shaler,

Pinchot advocated expansion of environmental protection beyond forestry; as

the first head of the Forest Service (1905-1910), a member of President

Theodore Roosevelt's Inland Waterways Commission in 1907 and chairman of

the National Conservation Commission in 1908, he advocated the

interconnectivity of the conservation of forest, water, and soil resources (Van

Hise, 1910). A leader in the utilitarian school of conservation, Pinchot

differed from Marsh and Muir's ecological approach in that he advocated "wise

use", or use with careful management of natural resources, rather than

preservation of nature for its own sake; for this reason, he opposed in principle

the formation of forest reserves. Pinchot and Muir began as allies, but the

disagreement between the ecological and utilitarian schools prompted their

disassociation. It was Pinchot who, in 1907, coined the term "conservation" to

describe the movement (Rose, 1971). Along with Shaler, Pinchot helped to

establish the forestry program at Harvard University in 1904 (Livingstone,

1980).

Initiation of Soil Conservation Policy

A 1928 USDA circular entitled "Soil Erosion: A National Menace",

reprinted in Smith (1971), was authored by Hugh H. Bennett and W.R.

Chapline, researchers with the Bureau of Chemistry and Soils and the Forest Service respectively. The circular brought the problem of soil erosion from water runoff to the public attention, and is credited as being instrumental in the formation of the Soil Conservation Service in 1935. Bennett and Chapline proposed the following measures to mitigate the problem: planting of cover vegetation, regulation of grazing on erodible lands, protection of plant cover from damage by fire, and landscape engineering for the control of erosion (pp.401-413). These measures are echoed in modern conservation policies, including the CRP.

Subsequent to the Bennett and Chapline circular, Congressman James P. Buchanan (TX) added an amendment to the 1929 USDA appropriation bill allowing the Secretary of Agriculture "to make investigation not otherwise provided for, of the causes of soil erosion... and to devise means to be employed in the preservation of the soil, the prevention or control of destructive erosion and the conservation of rainfall by terracing or other means" (Smith, 1971, p.414; 45-Stat-1207).

Starting in 1931, a lack of rain combined with over-cultivated land in the American Midwest resulted in the agricultural crisis known as the "Dust Bowl". During this period, which extended to 1935, a great deal of top soil was lost to wind erosion; one particularly severe dust storm in 1934 spread dust as

far as the Eastern Seaboard. Bennett cited this as garnering public attention to the problem of soil erosion (Laycock, 1988).

In 1933, Secretary of the Interior Harold L. Ickes formed the Soil Erosion Service (SES) within the Department of the Interior; Bennett was made director (Helms, 1998). In that same year, Ickes designated $5 million to the SES to oversee and provide technical assistance to Midwestern farmers for carrying out emergency conservation measures, including terracing, contour plowing and listing – a plowing method that allowed for additional moisture retention (Hurt, 1981).

Congress subsequently created the Soil Conservation Service (SCS) within the USDA in 1935, and Bennett was placed in charge of the new agency. The Act, dubbed the Soil Conservation and Domestic Allotment Act (or Soil Conservation Act), enabled the newly-created Service to conduct research into soil erosion and appropriate preventive measures, to execute such preventive measures as outlined in the 1928 circular, to offer financial assistance to landowners or other entities for the prevention of soil erosion, and to take control of lands for the purposes of the Act, "by purchase, gift, condemnation, or otherwise, whenever necessary" (49-Stat-163). The Soil Conservation Service was the predecessor to the modern Natural Resources Conservation Service (NRCS) (Helms, 1998). The SCS took the lead in overseeing the emergency measures in the Midwest, which Hurt credited with

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bringing the loss of topsoil under control. According to Hurt, farmers

undertaking SCS conservation measures saw an increase in land value and in

farm income. In addition, 95 percent said that they planned to maintain

conservation measures after their SCS contracts had lapsed (p.86).

Also in 1935, Congress passed Title III of the Bankhead-Jones Farm

Tenant Act, which allowed the USDA to purchase submarginal land "to

correct maladjustments in land use, and thus assist in controlling soil erosion,

reforestation, preserving natural resources… and protecting the public lands"

(50-Stat-525). The scope of the mission of the Bankhead-Jones Act would later

be expanded to the protection of fish and wildlife in the 1962 Food and

Agriculture Act (87-Stat-607).

Second Phase: Income Support Tied to Conservation

The initial soil conservation policies, while based upon the work of the

early entrepreneurs, occurred in response to specific focusing events (see

Kingdon, 1995) and were clearly focused upon soil conservation as their

central purpose. However, the arrival of the Great Depression and the Dust

Bowl created a policy environment ripe for an overall paradigm shift in the

role of government in the national economy, which included a number of

agricultural policies aimed at providing income enhancement to struggling

farmers.

The farm aid portion Franklin Roosevelt's "New Deal" centered on the Agricultural Adjustment Act (AAA) (48-Stat-31), passed in 1933.[3] The primary intention of this act was to support farm incomes by restricting supply of agricultural commodities in order to drive up market prices. The AAA offered landowners the option of idling land in exchange for payment, a mechanism that foreshadowed the modern CRP. The AAA utilized the Commodity Credit Corporation (CCC) – created by executive order in that same year – to deliver payment to participating farmers. Funds for providing these payments were generated through taxation of the commodities regulated by this act. The AAA passed with strong support from the American Farm Bureau Federation; the agricultural interest claimed credit for formulation of the program, but this claim was debatable (see McConnell, 1953).

The AAA encountered some constitutional difficulty when the Supreme Court ruled in United States v. Butler, 297 U.S. 1 (1936), that the Act misapplied the use of the power of taxation granted Congress in Article I, Section 8 of the Constitution for purposes of providing for the "General Welfare of the United States", in that legislation that was aimed at benefiting

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[3] The "New Deal" was largely the product of a core group of Roosevelt advisors: Raymond Moley, Rexford Tugwell, and Adolf Berle, Jr., all of whom were Columbia University professors. Moley was Roosevelt's speechwriter who coined the term "new deal", Tugwell was the agricultural expert of the group, while Berle was described as an expert on credit matters (Davis, 1994, pp.254, 268, 292).

agriculture did not constitute a "general" (national) interest, and on the grounds that the federal regulation of agricultural production encroached on the reserved powers of the states guaranteed by the Tenth Amendment. Congress subsequently amended the AAA in 1938 (52-Stat-31) to make soil conservation the primary goal of the Act, stating in Title I, Section 101 that the Secretary shall "encourage and provide for soil-conserving and soil-rebuilding practices", in order to appease the "general welfare" portion of the argument, and to allow state and local administration of the easement program, a means of dealing with the Tenth Amendment issue (Lockart, Kamisar, Choper & Shiffrin, 1986). Clearly, in modern times, with the reevaluation of reserved powers vis-à-vis the powers of Congress under the Commerce Clause, the Tenth Amendment issue is seen as much less of a constitutional problem, as modern agricultural programs such as the CRP routinely engage the local farmer directly with the Department of Agriculture. The 1938 Act remains in effect (7 U.S.C., Chapter 35) except when superseded by newer legislation.

The AAA of 1938 set the precedent for the tying of soil conservation to farm income support programs. In essence, Congress used soil conservation, an issue made viable by the afore-mentioned Dust Bowl crisis, to legitimize a program whose originally-stated intention was to benefit the agricultural industry. The continued practice of linking income support and soil

conservation in subsequent legislation would seem to lend credibility to the statement made by the interest group American Farmland Trust (AFT) decades later that "conservation was definitely a by-product of production controls, rather than a central aim" (AFT, 1984, p.56).

Following the Second World War, a second wave of natural resource conservation measures began, starting with the creation of the Bureau of Land Management (BLM) in 1946 (60-Stat-1100), which was slated to manage public lands. During this time, private conservationist organizations became increasingly involved in the movement, including the Conservation Foundation in 1948, followers of the ecological school, and Resources for the Future in 1952, an organization the uses economic theory to make conservation policy recommendations (RFF, 2006). In 1948, some forestry and other technical societies joined forces with a number of lay groups to form the Natural Resources Council of America, which advocates "the sustainable management of the world's natural resources" (NRCA, 2006; Rose, 1971; Beatty, 1952).

The Agricultural Act of 1954 (68-Stat-897) was the next farm bill to contain soil conservation measures. Title V of the Act amended the 1935 Soil Conservation Act to allow for the allocation of funding of soil conservation practices and research among the states according to need, with a focus on lands converted back to cropping use from acreage allotment programs under

the 1938 AAA. This act was much less interventionist than the AAA and did

not contain a direct link between conservation and income support.

Two years later, however, the Soil Bank program was created by Title I

of the Agricultural Act of 1956 (70-Stat-188), which constituted the next

major step in the evolution of the marriage of income enhancement and soil

conservation programs. The program directly resulted from campaign

promises by President Dwight Eisenhower to deal with surplus production of

agricultural commodities (Congressional Quarterly [CQ], 1956, pp.378-9).

Citing economic hardship experienced by the nation's farmers resulting from

surpluses spawned by wartime production incentives, the president delivered a

message to Congress on January 9, 1956 encouraging "prompt Congressional

action" in order to pass a voluntary program in order to reduce production and

to improve commodity prices. As a part of his proposed legislation, the

president advocated the deactivation of lands that "have come into cultivation

which wise land use and sound conservation would have reserved to forage

and trees," stating that "the nation does not need these acres in harvested

crops" (CQ, 1956, pp.52, 54). Congress subsequently authorized two programs

to reduce "excessive" production of commodities and to conserve soil, water

and wildlife habitat (Section 102). The Acreage Reserve Program, created by

Subtitle A, compensated landowners for the setting aside of agricultural lands

used in the production of a given set of commodities for a set period of time –

the years 1956-1959. The Acreage Reserve Program was discontinued in 1958 due to high expense and little success at reducing production (ERS, 1984, p.22).

Land enrolled in the Acreage Reserve was in addition to land set aside under the second program, the Conservation Reserve Program. This second program, established by Subtitle B of the Soil Bank Act, shares both its name and its instruments with the program that is the focus of this dissertation. Under this earlier iteration of the Conservation Reserve Program, landowners enrolled under contracts that were a minimum of three years and a maximum of ten years, or fifteen if trees were planted as cover on the reserved land. The Soil Bank CRP enrolled as much as 28.7 million acres at one point, but any environmental benefits generated by the program were lost when most of the enrolled lands were plowed within a few years of contract expiration (Laycock, 1988, pp.6-7). The Soil Bank program did not specifically target highly erodible land for enrollment (Bedenbaugh, 1988); aside from the sheer size of the program and the length of contract agreements, this was the primary difference between this program and the CRP as passed in 1985. However, the 1985 CRP was billed as a program aimed primarily at soil conservation. This apparent discrepancy will be addressed in a later chapter.

In 1962, the Soil Conservation Act was amended by Title I of the Food and Agriculture Act (76-Stat-606) to allow the USDA to enter into contracts

with farmers "providing for changes in cropping systems and land uses and for practices or measure to be carried out… on lands… used in the production of crops". These contracts, which did not necessarily require farmers to stop cultivating affected land, paid farmers to use conservation measures on cropped land for a period of ten years – fifteen years if the land was planted in trees.

The Soil Bank, including the CRP, was repealed and superseded by Title VI of the Food and Agricultural Act of 1965 (79-Stat-1206), which established the Cropland Adjustment Program (CAP). This program authorized the USDA to enter into five to ten-year contracts with farmers to maintain "conserving crops" on, or to keep idle, designated land, and to refrain from harvesting or grazing the land during the contract period; in this sense, CAP was not remarkably different from the CRP. However, CAP allowed the Secretary to increase the amount of the payment to the landowner if the landowner allowed the land to be used for activities for the "benefit of the general public", such as hunting, trapping, fishing or hiking. CAP expired at the end of calendar year 1969.

Third Phase: Conservation Comes of Age

Around the beginning of the decade of the 1970s, environmental issues became a politically fashionable issue. Following a number of focusing events,

such as the killer fogs in Donora, Pennsylvania in 1948 and London, England in 1952 and the fire on the Cuyahoga River in Ohio in 1969, public support for environmental regulation began to grow significantly. According to testimony by Thomas Kimball, executive director of the National Wildlife Federation, before the House Government Operations Subcommittee on Conservation and Natural Resources in 1970, his organization's polls indicated that eighty percent of those polled favored environmental regulation. Prior to this, a group of over eighty members of the House of Representatives declared the 1970s "the decade of the environment" (CQ, 1970, p.488). President Richard Nixon's message on the environment, delivered to Congress on February 10, 1970, called for "fundamental new philosophies of land, air and water use… for expanded government action… and for new programs" (CQ, 1970, p.22-A). The first Earth Day was held on April 22, 1970; this is widely considered to have marked the beginning of the modern environmental movement. In response to this shift in public awareness and opinion, lawmakers passed a new wave of environmental regulations much more comprehensive than those of previous generations, including Nixon's Reorganization Plan Number Three in 1970, which created the Environmental Protection Agency, the Clean Water and Clean Air Amendments of 1972, and the Endangered Species Act of 1973.

During this period, Title VIII of the Agricultural Act of 1970 (84-Stat-1379) amended the Soil Conservation Act to allow the use of acreage set asides

under the Act for wildlife food plots or habitat as determined by the Secretary

of Agriculture in consultation with the Secretary of Interior. The Soil

Conservation Act was further amended to limit the amount of land set asides

in any county or community so as to not adversely affect the local economy;

the quantity of this limitation was to be determined by the Secretary of

Agriculture, taking into account the productivity of the retired land relative to

other local agricultural lands. Additionally, Title X of the Agriculture and

Consumer Protection Act of 1973 (87-Stat-241) established the Rural

Environmental Conservation Program by authorizing the USDA to carry out

the purposes of the Soil Conservation Act by entering into three, five, ten, or

twenty-five year contracts with landowners giving the agency "such control as

the Secretary determines to be needed on the farms, ranches, wetlands, forests,

or other lands covered thereby." The legislation further authorized the USDA

to "purchase perpetual easements to promote… the sound use and

management of flood plains, shore lands, and aquatic areas" and for other

purposes, including expanding fish and wildlife habitat and recreational areas.

Landowners under both of these regimes were responsible for submitting a

plan for conservation practices to be carried out on the land; acceptable

practices were to be determined in conjunction with an advisory board in each

state to be appointed by the Secretary. The USDA was authorized to provide

materials including seed, plants or trees to the landowner to assist in carrying

out the provisions of the contract. The USDA was also authorized to implement a forestry incentives program that was to be aimed at encouraging the planting of trees in open or deforested areas for timber production.

Title XV of the Food and Agriculture Act of 1977 (91-Stat-1019) amended the Soil Conservation Act, creating the Agricultural Conservation Program, which authorized the Secretary to offer financial assistance to landowners for implementing conservation practices where there is "a conservation or environmental problem which reduces the productive capacity of the Nation's land and water resources or causes degradation of environmental quality." The amount of the payment was to be determined by the Secretary according to the level of benefit to the environment resulting from the practice, the costs imposed on the landowner or operator by the practice, whether the practice would be carried out at desirable levels without USDA financial assistance and whether the landowner or operator is receiving assistance under other environmental programs. This program was not an easement program, which is telling given the high demand experienced by the agricultural sector during this period. Federal policy was primarily stimulative in nature, rather than targeted at surplus reduction as it had been during earlier decades.

Phase Four: Economic and Environmental Trouble

According to an ERS study (Heimlich, 1985), between the years 1979 and 1981, following a decade of high demand for United States agricultural products in the world market, a net of 6.9 million acres were converted to cropland from other uses – an average rate of 2.3 million acres added to production per year. Heimlich found that newly activated land was somewhat more susceptible to water erosion than existing cropland and that fewer conservation practices were carried out on the new land. 1.9 million acres of newly activated cropland over this three-year period were classified as "highly erodible". On balance, Heimlich described new cropland as having "slightly higher erosion rates than existing cropland" (p.12). Much of this land was located in the Great Plains states – particularly Colorado and the Dakotas (Laycock, 1988). Chapman (1988) cited this increase in cultivation of erodible land as the "real reason" that the CRP was enacted (p.11). The ERS described the purpose for the CRP as "primarily to reduce soil erosion on highly erodible cropland"; "secondary objectives" listed include "protecting the Nation's long run capability to produce food and fiber, reducing sedimentation, improving water quality, fostering wildlife habitat," and finally, "curbing the production of surplus commodities, and providing income support for farmers" (ERS, 2002).

This income support had become necessary because the boom in agriculture of the 1970s had come to an end by the early 1980s. A wheat embargo against the Soviet Union following its invasion of Afghanistan substantially diminished international demand for United States commodities while a deep recession depressed domestic demand. In addition to this, a bumper crop in 1982 further depressed commodity prices (Bowers, Rasmussen & Baker, 1984, p.40). One farm interest representative described this period of time as an agricultural depression (U.S. House, 1984, p.161). Such is the economic environment into which the 1985 Farm Bill was introduced.[4] The first "Farm Aid", a massive concert fundraiser intended to benefit cash-strapped small family farmers, was held on September 22, 1985, just under two months to the day before passage of the 1985 Farm Bill.

The first relevant piece of legislation passed during this period was Title XV, Subtitle A of the Agriculture and Food Act of 1981 (95-Stat-1328), wherein Congress reaffirmed its commitment to "promote soil and water conservation, improve the quality of the Nation's waters, and preserve and protect natural resources through the use of effective conservation and

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[4] ERS found that the number of farm bankruptcy filings in the 1980s was nearly double that of the years leading into the Great Depression. In 1987, the number of filings peaked at 23.1 per 10,000 farms compared to 13.7 per 10,000 farms in 1925. ERS, however, attributed some of this number to the implementation of a new bankruptcy law in late 2006 (Stam & Dixon, 2004, pp.11-13).

pollution abatement programs." In Subtitle B, Congress reported the findings

of USDA studies indicating that agriculture-related soil erosion and related

losses in productivity were serious problems being faced across a wide range of

geographic areas. Congress further reported that policies aimed at addressing

this problem should "address the local social, economic, environmental, and

other conditions unique to the area involved" and should be "integrated with

the concerns of the local community." The Special Areas Conservation

Program authorized the USDA to designate geographic areas with "severe and

chronic" problems with erosion or water management, then entering into

contracts with landowners and operators within these areas to provide

technical and financial assistance for the implementation of conservation

practices aimed at alleviating the specific problem. As in the case of the 1962

Soil Conservation Act amendment, this program did not necessarily prohibit

cultivation of land under contract, unless cover crops were the chosen

practice, but simply required farmers to utilize the land using the designated

practices; the USDA assisted the farmer in the costs of implementing the

chosen conservation practices.

The Act also authorized the Resource Conservation and Development

Program (p.1337), by which the USDA provided technical and financial

assistance to state and local governments and non-profit organizations for the

development and implementation of programs for the conservation of land and

other natural resources. The Act further established the Farmland Protection Policy Act (p.1341), requiring the Federal Government to ensure that its programs did not contribute to the loss of farmland to non-farming use.

The Food Security Act of 1985 (99-Stat-1354) established the modern Conservation Reserve Program, which is the focus of this study. In addition to the CRP, the Act included the "Swampbuster" and "Sodbuster" programs, which denied farm subsidy program benefits to farmers who cultivated wetland or highly erodible land, respectively. The Act also put in place "Conservation Compliance" measures, which required farmers to implement approved conservation measures and to grow only approved crops on highly erodible land already cultivated. As in the case of Conservation Compliance, failure to comply meant loss of program benefits.

Conclusion

Soil conservation and agricultural policy have been intimately tied from the very beginning of both policy areas. This association is of course natural, given the centrality of soil as a resource for crop production and the role that agriculture has historically had in contributing to soil erosion. But there is an additional facet to this relationship.

The 1933 Agricultural Adjustment Act was the prototype of the policies to come, both commodity and conservation programs; the AAA was a program

intended to boost farm income in the face of extreme economic hardship, although a goal of soil conservation was added to the 1938 edition in response to the Butler opinion. Federal policy that explicitly targeted soil conservation, beginning with the 1935 Soil Conservation Act, originally placed the federal government principally in an advisory role, but it is telling that when the federal role became more activist with the passage of the Soil Bank in 1956, the programs largely were patterned after the AAA. The connection, therefore, between soil conservation and agricultural policy is not merely a matter of the importance of soil to farming or of farming to soil erosion. The common thread between the two policy areas is the enhancement of farm income.

This provides the first link in the chain of arguments that the purpose for which the CRP was passed was to supplement farmer incomes. Indeed, that many of these past policies, one of which was virtually identical to the program that is the current object of study, were passed for the stated purpose of farm income enhancement would seem to place the burden of proof, as it were, on the claim that the CRP was enacted primarily for conservation purposes.

CHAPTER 4

REVIEW OF LITERATURE – CRP IN CONTEXT

The first step in examining the purpose for the passage of the

Conservation Reserve Program is to provide context within the body of

scholarly literature in which the CRP is to be scrutinized. First, the literature

on policy typology is considered. Next, the role of interest groups and

subgovernments in the policy process is discussed, including a previous work

examining the passage of the 1985 Farm Bill (Browne, 1988), the legislation

that authorized the CRP. Finally, the role of public opinion in determining

policy formulation and adoption is reviewed.

Policy Typologies

Lowi (1964) classified policy into one of three types – distributive,

redistributive or regulatory.[5] Lowi (1964) pointed out that with a long enough

time horizon, any policy can be defined as either redistributive, because any

policy ultimately will require use of tax money collected from one group and

effectively allocated to the beneficiaries of the policy, or regulatory, as any

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[5] Lowi (1972) later added constituent policy as a fourth type.

policy ultimately removes resource allocation decisions from the private to the government sector. However, distributive policy is differentiable from redistributive and regulatory because, in the short run, it can be enacted "without regard to limited resources" (p.690). Costs in the long run are sufficiently disaggregated to substantially diminish the incentives toward opposition. Ripley and Franklin (1980) described distributive policy as "aimed at promoting private activities that are said to be desirable to society as a whole… such policies and programs provide subsidies for those private activities and thus convey tangible government benefits" (p.21).

Regulatory policy has a direct bearing on the behavior of the individual by positive inducements, which decrease the cost of the behavior through incentives, or negative inducements, which increase costs by way of penalties, up to and including outright prohibition. According to Lowi (1964), regulatory policy is distinguishable from distributive because beneficiaries and those on whom these costs are to be imposed are both identifiable in the short run. Ripley and Franklin expanded the regulatory type to include "competitive regulatory" and "protective regulatory". Competitive regulatory policies are aimed at restricting competition between multiple providers of a good or service, for example, regulation of the cable television industry and licensing requirements that many states have for certain industries; these are the types of regulatory policies that Stigler (1971) argued would be sought by

rent-seeking producers within given industries. Protective regulatory policies are aimed at protecting public welfare through the restriction of certain types of behavior; examples of this type of regulation include food and drug regulation and environmental policies such as clean water and clean air regulations.

Lowi (1972) placed his four policy types on a two-by-two grid. He differentiated regulatory from distributive policy by the likelihood versus the applicability of coercion. Both policy types apply coercion (attempt to influence) to individual behavior, but the application of coercion (direct government action) is remote for distributive policy and immediate for regulatory. Spitzer (1987) differentiated between pure and mixed regulation on the basis of the immediacy of coercion. It is mixed regulation, which depends upon incentive structures to influence individual behavior instead of command-and-control instruments within which Spitzer placed farm subsidies (i.e. commodity programs). He argued that, while resembling distributive policy, mixed regulatory policies are regulatory by their character. However, Spitzer's inclusion of farm subsidies in this category conflicts with Lowi's (1964) use of land policies and "agricultural 'clientele' services" as archetypes of distributive policy (p.690), and with Ripley and Franklin, who likewise used

agricultural price support and soil conservation policies as examples of

distributive policy.[6]

An alternative typology to Lowi's was put forth by Wilson (1973; see

also Wilson & DiIulio, 2004). This typology is somewhat similar to the matrix

laid out by Lowi (1972). Wilson described policy according to the

concentration of costs and benefits. Two of his types are relevant to this

discussion.

When a policy imposes costs that are diffused among a large number

and benefits that are concentrated – i.e. directed at a relatively small number –

the policy process is labeled client (or clientele) politics – this policy type

coincides with Lowi's distributive type. In such a regime, only beneficiary

interests have incentive to organize and lobby for favorable policies; those

providing the funding for the largesse (i.e. the taxpayers) typically have little

incentive to incur the cost of organizing due to the low marginal costs imposed

upon them by the policy.[7] Wilson classified agricultural commodity programs

under this type, again agreeing with Lowi's (1964) typification of agricultural

policy. The reverse – concentrated costs and diffuse benefits – is termed

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[6] Spitzer warned, however, that the distinction between the applicability of coercion to individuals versus the policy environment and between the remote versus immediate likelihood of coercion should be viewed as a continuum and not as discrete.

[7] Buchanan & Tullock (1965/1999) discussed the scenario of diffused costs and concentrated benefits as conducive to the formation of interest groups by beneficiaries.

"entrepreneurial politics". Wilson classified environmental regulatory polices

under this type. For example, clean air and clean water regulation provide

benefits that are diffused among the entire population of the affected area, but

the regulation imposes costs on a relatively small number, namely factory

owners, farmers, or whoever the polluters are in the given situation. This

form of politics requires policy entrepreneurs to in effect represent the

interests of the beneficiaries, since by and large the benefits are diffused

enough to dispel the incentive to incur the costs of organizing and lobbying

for the benefits themselves.[8]

Baldwin (1971) distinguished between positive and negative

inducements in that the withholding of reward (positive) in the case of

noncompliance is not equivalent to punishment (negative), if the reward is

conditional and the receiving party has a "prior expectation" that he will not

be rewarded for noncompliance (see p.26) – these conditions are of course met

in the CRP, given that the conditions for reward are laid out in the contract.[9]

Positive and negative "inducements" are sometimes equated in terms of their

effects on behavior (Stone, 2002, p.272). Baldwin characterized positive and

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[8] This is not to say that interest groups are entirely absent in this regime. Olson (1965) for
example dealt with the questions surrounding how interest groups are organized and
mobilized under circumstances of diffuse benefits. Nonetheless, even in these circumstances,
entrepreneurial behavior plays a central role.

[9] Baldwin used the term "sanctions" rather than "inducements".

negative inducements as both relevant to the exercise of political power. Baldwin does not distinguish between the regulatory and distributive elements of positive and negative inducements. Unlike negative inducements, however, positive inducements provide the opportunity for income supplementation by those being regulated, while negative inducements only impose penalties for non-compliance.

Stigler (1971) in describing the demand for regulation generated by firms within given industries, differentiated between regulations that impose "onerous" effects upon the industry, such as so-called sin taxes levied on alcohol and tobacco products, and those that he deemed as "beneficial regulation" (p.3). The latter includes entry restriction, such as licensing which has the effect of limiting competition, price floors and subsidies. Stigler defined regulation in general as "the coercive powers of the state" (p.4). Clearly, in the case of "beneficial regulation" as in the examples cited by Stigler, the coercion is not directed to the firms currently within the industry. Perhaps the *caveat* of "usually" should be added to the previous sentence – some coercion is applied to firms within the industry in the case of price floors for example, as the threat of penalties are imposed on firms to prevent an attempt to undercut their competitors by charging below the minimum price. One might imagine however the firm pleading, "Please don't throw me in that briar patch".

Posner (1971) stated that "one of the functions of regulation is to perform distributive and allocative chores usually associated with the taxing or financial branch of government" (p.23). Maloney and McCormick (1982) concurred, stating that regulation "not only corrects a resource misallocation, but it creates a scarcity rent as well" (p.99). Positive inducements clearly carry out this function. Naturally, they also fit with Stigler's beneficial regulation category; as in the case of price floors, producers are required to behave in a certain manner, but this behavior produces outcomes beneficial not onerous to the "regulated" firm. Stigler is correct in describing this type of policy as "regulation" insofar as it affects the allocation of resources versus that which would occur in an unregulated market. However, the classification of this type of policy as akin to command-and-control regulation is not tenable. One imposes a net cost, *eo ipso*, on the regulated firm; the other imparts a net benefit. This shall be examined in the next chapter. First, however, a review of the role of interests in the policy process shall be undertaken.

<u>Interests in the Policy Process</u>

This study would be remiss to discuss interest groups without discussing their interaction with other players within the policy process (Bentley, 1908/1967). This interaction is commonly referenced by theorists as subgovernments or policy subsystems. The traditional view of

subgovernments is the iron triangle, consisting of interest groups interacting with Congressional committees and executive regulatory agencies. Within these subgovernments, interests and bureaucrats exert influence upon legislators through personal relationships, persuasion – sometimes by playing committee members or even committees themselves against one another, other times by exploiting their information advantage over legislators as interests are typically specialized in their particular policy area – and propaganda, appealing to legislators' own interests via their constituents. Legislators in turn hold the purse strings, giving them influence over executive agencies and bargaining power with interests (Freeman, 1965). Browne (1995) however dismissed iron triangles as "hopelessly reductionist" (p.11). McCool (1998) stated that "the iron triangle concept described an extreme set of conditions that were so specific and unyielding that very few political phenomena matched the description" (p.554). The iron triangle concept, it would seem, lacks the flexibility to explain the complexities of the policy process. Constraining the cast of participants to three "players" disregards a number of other factors that enter into the process and influence its outcome. Nonetheless, as a very basic framework, the iron triangle has proven to have some value; Heclo's (1978) issue network construct as well as Sabatier's (1988) advocacy coalition framework, both to be discussed in the following paragraphs, are fundamentally variations on the iron triangle concept. At the

very least, by identifying the central players and outlining their basic relationship to one another, the triad provides a conceptual reference around which more complex or more flexible models can be built.

With the increase in complexity seen within the American political system during the twentieth century, Heclo (1978) argued that the traditional iron triangle no longer adequately describes the dynamics of policy subsystems. Rather than old policy issues replaced by new ones, new issues are simply added onto the old ones, leading to more individuals and groups with a stake in the outcome; additionally, policy issues have become much more technical. As a result, besides the standard triad, academics, legal experts and even the general public have become increasingly involved in the policy process. Membership in these "issue networks" is more dynamic relative to iron triangles, whose membership is much more stable over time. McCool (1998), however, criticized Heclo's issue network concept as too amorphous to identify and too broad to carry any explanatory power, in effect implying the old axiom "it explains everything, therefore it explains nothing".

Sabatier (1988), however, offered a useful expansion of Heclo. Sabatier described the interaction of "advocacy coalitions" that form around a set of beliefs or values concerning policy issues. These coalitions (i.e. subsystems) may alter their strategies or modify their beliefs in response to internal or external factors. Most relevant to the current discussion is change in the

external environment, including social and economic factors (to use Sabatier's example, the oil crisis in the 1970s spurred some interests that had previously favored automobile emission standards to call for a relaxation of those standards), shifts in political power structures (a shift in party control of Congress or the White House for example), or the behavior of other coalitions, which may require a strategic response or countermove by the first coalition. In general, however, Sabatier argued that coalitions will be relatively stable over time, at least as concerning the key issues in which the coalition is interested. Policy changes, according to Sabatier, are attributable to these movements in the central belief structures of coalitions.

While policy subsystems involve a number of players, this current study is primarily concerned with the behavior of interest groups. Truman (1951/1971) described interests as the unit of study in public policy formation. Buchanan and Tullock (1965/1999) described the growth in influence of interest groups during the twentieth century as "one of the most significant developments in the American political scene" (p.3.19.1). Buchanan and Tullock attributed this growth to the increase in the importance of the government relative to the private sector and to the asymmetric impact policy has had on subsets of the population. Truman put forth a similar view of the growth in interest group activity, attributing it largely to the organization of

latent groups of individuals whose self-interest is threatened in some way by the activities of previously-organized interests.

Interests interact in one of two ways (Kelso, 1978). Groups may compete in a type of free market for influence through a process very much like that described by Madison in Federalist 10; this was ensconced in theoretical political science by Truman (1951/1971) who described the organization of unrepresented interests to countervail the exertion of influence by existing groups (as discussed in the previous paragraph), the creation of new interests by societal "disturbances", and the restraint on interests' ambitions by the conflicting loyalties growing out of overlapping membership. This competition between interests was dubbed by Kelso as laissez-faire pluralism. Buchanan and Tullock (1965/1999) discounted the effect of overlapping membership on interest group behavior by pointing out that, while individuals may be associated with multiple groups, their loyalties or concern will not be the same for each group; they will favor one issue area over another, thus valuing the power and influence of one group over another. They asserted that group competition will eventually result in a state of equilibrium, or "mutual exploitation", assuming that groups are roughly equal in power (p.3.19.13). McCormick and Tollison (1981) described interests competing in a market for influence over legislators in order to secure wealth transfers, based upon the "interest group theory of government", which posits

that government policy is largely a vehicle for wealth redistribution. Maloney and McCormick (1982) stated that "many existing laws and institutions can be explained as devices for distributing rents created by regulation" (p.121). In such an environment, policies tend to distribute wealth to those interests that most efficiently exert political pressure (Becker, 1983).

Groups may also choose to divide policy domains among themselves, coming in effect to a détente, agreeing not to compete over turf, but rather exerting their influence each within their respective fiefdoms. Kelso labeled this cooperative pluralism. So complete was the farm lobby's monopolization within their domain during most of the twentieth century for example that Lowi (1969) described agricultural policy as the "private expropriation of public authority" (p.102). McConnell (1953) described the agricultural lobby (specifically the Farm Bureau) as a "structure of power" that "extends from a base of social organization in a multitude of localities to a peak of direct influence over the exercise of governmental authority in the entire nation… It is a vertical structure that rises through every level of political organization in America" (p.173). Wildavsky (1979/1987) questioned whether this trend was leading toward corporatism (p.72), as described by Schmitter (1974), Brand (1983) and Olson (1986). Olson in fact described corporatism as displacing (laissez-faire) pluralism (p.166).

In a corporatist regime, interest groups are either formed by or at the least legitimized by government itself, thus giving them a "quasi-public role" in the policy-making process (Brand, 1983, p.101). This differs from Kelso's cooperative pluralism largely in the manner by which the monopolization of the policy arena by an interest group, or a coalition of groups, comes into being: Under cooperative pluralism, the monopoly forms through mutual agreement between interest groups; in a corporatist regime, the government plays an active role in establishing the interest group monopoly. Whether the farm lobby's position vis-à-vis policymakers was best described as cooperative pluralism or corporatism, it remains that the power it held in the policy-making process was clearly substantial at the time of McConnell (1953) and Lowi (1969)[10], but by the 1980s, following the rise of environmentalism in the public consciousness and within the lobbying community, although the farm lobby was still powerful, interaction between interest groups in the agricultural policy arena was becoming much more competitive (Browne, 1988). The behavior of the farm lobby can be expected to have changed accordingly.

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[10] Hansen (1991) argued that the Farm Bureau's access to policymakers had been eroded by the 1960s due to policy splits with legislators over flexible versus strict price controls in the late 1940s and an overstatement of popular support for their policy positions leading to political losses by friendly members of Congress in the late 1950s (pp.162-163). This conflicts somewhat with Lowi's description of the agricultural policy arena in 1969. The discrepancy does nothing to effect the contentions made in this study.

In one chapter of his book on the role of interest groups in agricultural policy, Browne examined the collusion between agricultural interests and the newcomer conservation interests in the passage of the 1985 Farm Bill. Groups that are typically on opposite sides of an issue may cooperate or collude if each group's interests are served by a common goal. Becker (1985) found that the choice of policy instruments is largely determined by the expected deadweight loss associated with them; if the deadweight loss is high, then taxpayer groups are more likely to oppose the policy. However, Becker (1983) found that policies aimed at correcting market failures tend to distribute wealth to those with the most political influence; that is, if the group being subsidized is more efficient at exerting political pressure on lawmakers, then the policy may be passed in the end despite high deadweight losses.[11] Which firm is most effective at exerting pressure is a function of the difference between the impact on the effected group and the costs associated with lobbying and organization costs, quantity divided by the size of the effected group (Peltzman, 1976). As such, the size and diffuseness of the impact is a factor in the amount of lobbying that each interest group will be likely to carry out in favor of or in opposition to a policy.

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[11] Becker (1983) defined efficiency in exerting pressure as relying in part upon ability to control the free-rider problem and upon group size, as relating to economies of scale (p.395).

In addition to interest groups, as pointed out by Heclo (1978), the public plays an important role in the policy process. The contribution of the public shall therefore be discussed in the following section.

Public Opinion and Public Policy

A number of studies have examined the effect of public opinion on public policy. Sabatier (1991) described past findings as showing a "strong correlation between important shifts in public opinion and changes in the *general direction* of governmental policy" (p.148, italics in original). Manza and Cook (2001) concluded, "Where measured public opinion expresses a coherent mood or view on a particular policy question (or bundle of policy questions) in a way that is recognizable by political elites, it is more likely than not that the movement of policy will be in the direction of public opinion" (p.31), insofar as certain details of the policy making process are open to public view.[12] Herring (1929/1967) posited that "public opinion... is king (and) the man who controls public opinion will easily control the nation itself" (p.60).

Kingdon (1995) described how the political viability of an issue with the public, when combined with a "problem stream" and a policy option that

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[12] See Hamilton (1997). Even for salient issues, the selection of specific instruments for carrying out highly technical policies are often not closely scrutinized by the public, thus leaving interest groups in a stronger position to influence legislative votes [cf. Heclo (1978)].

has been sufficiently "softened" over time, elevates an issue to policy-makers' agendas. Key (1961) described public opinion as a series of "dikes" that set a range of discretion within which governmental action is channeled. Key saw this as a long-term process by which the public does away with elected officials who do not keep pace with the tenor of public opinion.

Key differentiated public opinion into supportive consensus, in which case the public supports a particular policy approach to an issue, and permissive consensus, by which the public is of a certain mind regarding an issue, but does not support a specific policy approach but in effect gives lawmakers consent to do something. The latter form of consensus is not generally as closely tied to action taken by policy makers as the former, since it does not carry as immediate a threat of reprisal – lawmakers are given permission to act but without a mandate.

Downs (1957) described policy makers as vote maximizers who will spend on programs to the point that the number of votes gained by an additional dollar is equal to the votes lost by the marginal dollar taken from taxpayers to finance it (p.52). Downs predicted that lawmakers will follow the will of the majority when it can be clearly identified (see Arrow, 1951); lawmakers are most certain to follow majority rule when the public holds a "consensus of intensities" – that is, there is agreement as to which issues are most important – as well as a "consensus of views", or agreement on which

policies should be applied to the issues (p.67). Mayhew (1974) likewise said

that lawmakers will in general heed the public will because their goal is

ultimately to maximize votes in order to gain reelection; consistently ignoring

or snubbing public preferences would be counterproductive to this goal.

Per contra, a number of studies have exposed putative weaknesses in

the transmittal of public preferences to the policy-making process. Anderson

(1990) pointed out that the influence of individuals in the private sector is

limited to the degree that citizens choose not to vote or become otherwise

politically involved; nonetheless, he was careful not to imply that the public

taken as a whole had no effect on policy.

Lindblom (1968) saw individual citizens as largely inactive in the

political process, but those who wished are able to gain access to what

Lindblom called "proximate policy makers" through political parties and

through interest group participation. According to Hansen (1991), interests

influence policy by directing lawmakers' attention to one set of issues over

another; this influence includes picking and choosing which voters' opinions

they will represent. Schattschneider (1960) argued that, when interest groups

hold sway in the absence of strong political parties, only elites – those with

resources to organize effective lobbies – are able to influence public policy.

Becker (1983) came to similar conclusions. McConnell (1953) documented a

similar trend within the agricultural lobby, in which "big" or at least "the

more prosperous" farmers dominate (p.151). McConnell (1966) likewise described interests, or "private associations", as oligarchic and without sufficient means to protect the interests of non-elite members. In both instances, McConnell's findings support Schattschneider's contentions of the elitist tendencies of interest-dominated governance.

Zulauf, Guither and Henderson (1987) demonstrated this via a 1984 survey that included agribusiness and farm operators in Illinois and Ohio regarding preferences for the 1985 Farm Bill. Zulauf et al. found that the final version of the Farm Bill more closely reflected the preferences of large farms than those of smaller farms. Olson (1965), however, argued that, while groups may sometimes fall into furthering the interests of leadership over that of its members, this will ultimately be limited by the demise of groups that fail to serve the interests of its membership (pp.5-6).

Page and Shapiro (1983) addressed the question of the causal relationship between public preferences and public policy by conducting a study comparing national polls conducted between 1935 and 1979 and public policy passed during the study period. The study examined policies for congruence with opinion ranging between two years prior to polling samples to four years after. They found that in a majority of instances, policy followed public opinion, with direction of causality being indicated by the lag between the appearance of a shift in public opinion and the passage of the new policy.

Further, they found that opinion appeared to have a greater effect on policy when the issues were highly salient and when changes in public opinion were sustained over a long period of time – more transient shifts in opinion were found to have little effect on policy. Interestingly, Page and Shapiro found a greater congruence between public opinion and policy when the change in opinion represented a leftward shift along the political spectrum; they speculate that this could be attributable to the overall liberal tendency of policy during the study period.

<u>Conclusion</u>

The foregoing review lays the foundation for the remainder of this study. In the following chapter, the CRP is examined in the context of the policy typology literature examined in this chapter, and the policy environment in which the CRP was formulated and adopted is scrutinized in light of the literature regarding the role of interest groups and public opinion in the policy process. This will serve as further evidence pointing to the true purpose for which the CRP was enacted.

CHAPTER 5

DISTRIBUTIVE POLITICS AND THE CRP

When the 1985 Farm Bill came up for consideration, farm and

conservation lobbies colluded to seek passage of the Conservation Title, which

included the Conservation Reserve Program (see Browne, 1988). This chapter

will formulate a theory as to why this putatively environmentally-oriented

program enjoyed the support of the farm lobby. If rationality dictates that

interest groups are expected to behave in their members' interests, by

definition, then it follows that the CRP was expected to benefit farmers. That

the program does indeed benefit farmers was demonstrated by a number of

studies (for example, Shoemaker, 1989a; Johnson, Wolcott & Aradhyula, 1990;

Shaik, Helmers & Atwood, 2005).

It is not the goal of this research endeavor to suggest that the CRP has

had no effect in reducing the amount of erodible land cultivated or that it has

had no success at achieving the stated goal of reducing overall topsoil erosion.

Indeed, Newman (1988), for example, reported a 241 million ton reduction in

soil erosion in the Great Plains states through the first four program sign-ups

(p.58).[13] However, Chapman's (1988) comment that the preservation of erodible land was the true purpose for the CRP (p.11), as well as Bedenbaugh's (1988) argument that the "CRP is not viewed as primarily a reduction adjustment program… it is a conservation program that will have a desired impact on reducing surplus production" (p.17), bears some scrutiny in light of the benefits that the program generates for participating farmers. For example, Shoemaker (1989a) stated, "The primary aim of the CRP is to protect the nation's highly erodible cropland and to conserve and protect water and wildlife resources," but then added that the CRP "may also… provide financial relief to farmers" (p.1). Shoemaker continued, "The CRP may have raised returns to enrolled farmers whose land would have earned less if they had not enrolled and instead had farmed or rented out the land" (p.3). Johnson et al. (1990) referred to "distributional and rent-creating features" of policies that generate positive benefits that are priced into agricultural land values (p.204). Shaik et al. (2005) did in fact find that a 10 percent increase in farm program payments (CRP rental payments would be an example) can be expected to increase agricultural land values by 3 percent.

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[13] This number is based upon the reduction per acre enrolled in the CRP. As such, this number would not take into account any offsetting effects such as slippage.

Benbrook (1979) advocated the integration of existing agricultural commodity programs and soil conservation programs in order to offset years of stimulative programs that had disregarded effects on the environment. While Benbrook's focus was on soil conservation, he also supported the continued provision of income support to farmers. Commodity programs, like those referenced by Benbrook, boost market prices by both restricting output (by permitting the number of acres that can be planted in program crops) and guaranteeing target prices for program crops; this enhances the competitiveness of domestic farmers in the international market as well as protecting the competitiveness of small farmers in the domestic market (see also Gardner, 1987b). Shoemaker argued that, insofar as the CRP causes the value of enrolled land to appreciate due to the future stream of rental payments, it resembles a commodity program, which often increases the market value of lands used for planting program crops.

In addition to this, the CRP, like traditional commodity programs, restricts commodity supply by removing land from production (the extent to which this actually occurs is of course related to the question of slippage). Senator Sam Nunn of Georgia, when introducing his amendment to the 1985 Farm Bill to increase the maximum acreage for the CRP from 25 million acres – as it was in the version of the bill passed in the House of Representatives – to 45 million acres, stated, "With current commodity surpluses depressing U.S.

farm prices, I believe such an expansion of the conservation reserve would be beneficial" (U.S. Congress, 1985, p.33464).[14] A report by the interest group American Farmland Trust (AFT) stated the underlying theme in no uncertain terms, asserting that, historically at least, "conservation was definitely a by-product of production controls, rather than a central aim" (AFT, 1984, p.56).

As discussed in an earlier chapter, soil conservation has long been tied to agricultural policy. It is clear why environmental goals were added to the 1938 revision of the Agricultural Adjustment Act – as a reply to the "General Welfare" findings in the Butler case – and why the 1956 CRP under the Soil Bank Act was passed with support from farm interests – to reduce crop surpluses; conservation was given as a secondary objective. Further examination of the political reasons behind the framing of these historic policies shall be left for other studies, but the question for the present discussion is why the 1985 CRP, though markedly similar to its 1956 namesake, and passed within a remarkably similar policy environment, was framed as a primarily conservation-oriented policy as opposed to one that is primarily directed at boosting farm incomes.

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[14] The Nunn Amendment was added as an amendment to the amendment proposed by Senator Robert Dole (Kansas), which was adopted by the Senate. The Conference Committee adopted the Senate provision for CRP acreage limits when reconciling the two versions of the bill (U.S. House, 1985). Chapman (1988) described this as "somewhat of a surprise because they usually just split the difference" (p.13).

CRP as a Distributive Policy

Viewing the CRP as a distributive/clientele policy, as defined by Lowi (1964) and Wilson (1973), offers significant insight as to the reasons why farm interests were so willing to support its passage in 1985. As just noted, the CRP passed in 1956 under the Soil Bank Act was framed by advocates as primarily intended to benefit farmers by reducing crop surpluses. However, in 1985 when the new CRP was passed, it was cited as primarily a conservation program. The substantive differences therefore between the 1985 CRP and that of 1956 are minor, but the policy images – the way in which a policy is depicted by members of the policy community (Baumgartner & Jones, 1991) – are quite different.[15]

By seeking a synthesis of the policy typologies advanced by Lowi (1964; 1972), Wilson (1973) and Spitzer (1987), the nature of the CRP can be characterized by identifying the beneficiaries and those upon whom costs are imposed. The CRP both attempts to regulate farmer behavior vis-à-vis resource utilization and provides largesse to farmers, the cost of which is

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[15] Baumgartner and Jones state, "Because images have implications for which actors in society will be attracted to a given debate, policymakers have the incentives to attempt to manipulate them, and many political scientists have noted their attempts to change public or elite understandings of the nature of important policy questions" (p.1047). In this case, policymakers depicted the CRP in such a way as to advance it in an environment in which conservation was a growing concern and farm subsidies were seen in a less favorable light as in previous years.

diffused among taxpayers at large – in other words, the program contains both regulatory and distributive elements. If the CRP is primarily a regulatory policy therefore, to use Lowi's terminology, one might expect costs to be imposed upon farmers as the regulated party insofar as the regulation would restrict the farmer from engaging in behavior that he otherwise might based on profit-maximization.[16] Indeed, the CRP has the (immediate at least) effect of influencing resource allocation decisions made by farmers in terms of reducing cultivation on highly erodible land. However, two interrelated factors undercut the view of the CRP as a primarily regulatory policy.

First, participation in the CRP is not compulsory. Farmers are not prevented by edict from cultivating erodible land, insofar as this program is concerned. Only those farmers who choose to enter into contract with the USDA face any compulsion against cultivation on the lands in question, and even then the threatened penalties are limited to cessation or surrender of the benefits received by the farmer under the program; viewed in light of the earlier discussion of Baldwin's (1971) positive inducements that are anticipated within the framework of the easement contract, this arrangement is not

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[16] For example, if a program restricts the production of corn to a level below which a given farm owner planned on sowing in a particular year, then, *ceterus paribus*, a cost would be imposed on that farmer in the form of lower profits because he would necessarily have to sow more of a less profitable crop or else leave the land idle, given the assumption that in the absence of regulation a farm owner will allocate his resources to the production of commodities in the proportion that will generate the maximum level of profit.

equivalent to command and control regulation.[17] Second, while cost is

imposed upon farmers (in terms of opportunity costs) by the voluntary

restriction placed on their use of resources, these costs are at least offset by

payments made to the farmers for their participation in the program. It is said

they are "at least offset" because, assuming rationality on the part of the

farmer, and given that the program is not compulsory, no farmer would be

expected to enter into the contract unless the return from the transaction were

at least equal to the discounted stream of expected return from cultivating the

land over the life of the contract, or from selling the land, a potentially Pareto-

improving transfer.[18]

In order to address the question of why agricultural interests favored

passage of the CRP, it is necessary to further explore this question of whether

the policy is indeed primarily distributive or primarily regulatory. If the

program is regulatory in nature, it would fall under Ripley and Franklin's

(1980) protective regulatory regime (given the stated environmental goals of

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[17] Chapman's (1988) description of the CRP as a "the carrot" in the Conservation Title is
supportive of this view (p.13).

[18] Kaldor (1939) illustrated this principle in the context of a commodity program, the repeal of
which created an effective reduction in income to farmers (due to the decrease in the price of
the commodity). Kaldor posited that a transfer from those who benefited from the policy
change (through taxation) to farmers would offset the shift in income distribution while
maintaining the overall social benefit resulting from an increase in the availability of the
commodity at a lower price. As such, the final outcome is potentially Pareto-improving. In
the case at hand, society at large presumably benefits from the decrease in erosion resulting
from the retirement of CRP land and the farmers are compensated for their lost productivity.

the policy), which raises the question of why it was not opposed by farm interests; if it is distributive, the focus of the question turns to the stated conservation goals of the program and the level of importance that they held with policymakers – particularly the lobbyists who exerted pressure on lawmakers for passage of the program – when the program was formulated and adopted. The task at hand is to resolve this grey area.

Policies often have attributes of more than one type (Steinberger, 1980, pp.186-187; Johnson et al, 1990, p.204; Stone, 2002, p.224); classifying policies therefore requires identifying which of the attributes are more central to the policy.

Under Spitzer's (1987) typology, agricultural commodity programs are classified as "mixed regulatory"; as discussed earlier in this chapter, the CRP is in its essence a commodity program. Spitzer's classification recognizes that the level of coercion in such a program is much lower than that seen in a pure regulatory policy – in the vein of the 1972 Clean Air Amendments, for example. However, classifying the CRP as mixed regulatory would consider only the strength of the regulatory element without considering the strength of the distributive element. As such, while the Spitzer typology moves the analysis in the proper direction, it does not go far enough in this case.

Gauging the strength of the distributive element versus the regulatory element requires identification of the primary beneficiaries. If the policy is

primarily regulatory, the primary beneficiary – i.e. the party receiving the most concentrated benefits – can be expected to be conservation interests and the policy can be classified as entrepreneurial according to Wilson's (1973) typology; if it is primarily distributive, it follows that the primary beneficiaries will be the farmers themselves, which would make the policy fall under clientele politics by Wilson's typology. In the case of the CRP, the benefits to farmers – direct payment as well as benefits accruing from surplus reduction – are far more concentrated than the benefits expected to accrue through environmental impacts of soil erosion reduction, which would be expected to be quite diffuse. This aspect of the policy further complicates viewing it as other than primarily clientele and distributive in nature. As groups tend to behave in such a way as to maximize their own interests, which interests were vocal in support of the policy will provide verification of this conclusion by identifying who most expected to benefit. Browne (1988) stated: "Questions of social justice, environmental need, and nutritional value may be given some perfunctory public attention, but the search for financial advantage structures the lobbying agenda of farm and agri-business interests" (p.146). This would seem to indicate that if farm interests supported the CRP, then there was the expectation of "financial advantage".

In sum, the reasons for passing the CRP in 1985 were the same as those given by Eisenhower in 1956, albeit by a different mechanism – the means by

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which the 1956 CRP was intended to aid farmers was through creating upward pressure on commodity prices. The focus in the 1985 program was on the income provided through CRP rental payments. Shoemaker (1989b) found that landowners are able to increase land values through the application of CRP rental payments due to asymmetry of information – that is, the landowner may overstate the productivity of the land in order to extract a larger rental payment from the program. Shoemaker further cited evidence of increased value of program land allowing its use as collateral for additional land purchases – these benefits are independent of any effects that the program may have on surplus reduction, that is, they directly result from the positive inducements. Given these factors, it becomes difficult to classify the program's positive inducements as compulsory in nature or the program as regulatory as defined under Lowi's regime.

The contention of the program's focus upon largesse generated by rental payments as opposed to surplus reduction is further supported by Babcock, Carter and Schmitz (1990), who pointed out that taxpayer advocates' attempts to promote output restrictions over raising target prices, which requires taxpayers to foot the bill of compensating farmers when actual prices fall below the target price, were unsuccessful due to opposition by agribusiness interests. Given that the agribusiness lobby prevailed in this portion of the Farm Bill, it stands to reason that it would not support a program strictly

aimed at reducing production in order to raise commodity prices in the Conservation Title. Assuming the correctness of this current study's assertion that conservation was not the purpose in fact for the CRP (for the sake of this point of argument), this leaves only program rental payments as the motivator for agriculture's support for the program. Although, as will presently be seen from testimony, not all farm interests were in lockstep with this as the prime mechanism, the underlying theme of income support is apparent.

Illustrating the income-enhancing effects of CRP rental payments, Lambert, Sullivan, Claassen and Foreman (2006) found that approximately 50 percent of farmers participating in land retirement programs like the CRP produce no commodities – that is, they receive income from their land by renting it to the government. Lambert et al. further found that these farm owners tend to be older, operate smaller farms and are more reliant on non-farm income than those who participate in conservation programs that do not involve the retirement of land. In essence, CRP rental payments serve to provide sufficient income to allow retirement from agriculture for small farmers who may be most susceptible to downturns in the agricultural market.

<div align="center">Hearings</div>

In light of this, farm interest representatives, as well as individual farmers, came to the hearings for the 1985 Farm Bill seeking economic relief. When transcripts of the House committee hearings on conservation measures

in the 1985 Farm Bill are examined, conservation groups were noticeably all but absent (U.S. House, 1984). In the three sessions of hearings before the House Subcommittee on Conservation, Credit, and Rural Development in 1984, which preceded passage of the 1985 Farm Bill, fifty-five witnesses appeared or submitted material; of these, only four were affiliated with entities that were clearly conservation-oriented – three of these were federal agencies.[19]

The continued dominant standing of farm interests was evident from their preferred position at the front of the queue in the 1984 House hearings, as witnesses most favored by the Congressional committees are typically scheduled to testify first on the first day (Fritschler & Hoefler, 1996). The first of the conservation organizations represented on the witness list was preceded by representatives of the Small Business Association, catfish farmers, Women Involved in Farm Economics, dairy farmers, a cattleman and a soybean farmer. A summary of the interests represented at the hearing is presented in Table 1.[20]

The overriding theme of testimony during the 1984 hearings was that of the financial hardships being experienced by farmers in the current market

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[19] Represented were the Alabama Association of Conservation Districts, the Agricultural Stabilization and Conservation Service, the Soil Conservation Service, and a local field office of the SCS.

[20] Tables do not include material submitted by witnesses not appearing. Taxonomy is the author's.

(beyond the fact that the subcommittee's domain obviously included farm

credit as well as conservation issues). According to numbers presented by the

Alabama Farm Bureau Federation, farm debt had grown nationally from $53

billion in 1970 to $217.5 billion in 1983 (p.56).[21] A representative of the

interest group Rural America declared:

> I would just like to state that if as other speakers have said dramatic
> Federal action is not forth coming in the next year, we could likely lose
> fully one-third of all family farm units throughout the Midwest and the
> United States in the next 12 to 24 months (p.162).

An Iowa Farm Bureau representative went so far as to describe the state of

American agriculture as a "farm economic depression" (p.161). A

representative of the Iowa Farm Unity Coalition cited a "dramatic drop in land

prices" (indicative of the falling profitability of agriculture) as a major problem

being faced by farmers (p.126) – interestingly, boosting land values was one of

the benefits of CRP rental payments cited by Shoemaker (1989a).[22]

Conservation received very little mention at the 1984 House hearings.

The only testimonies focused on soil conservation as a primary concern were

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[21] The numbers presented were not adjusted for inflation. Converted into 2000 dollars using
the GDP Chain-Type deflator, farm debt increased from $192.5 billion in 1970 to $333.5
billion in 1983.

[22] It is worth noting that Iowa received the largest number of CRP contracts over the first
twelve sign-ups, and ranked fifth among the states in the number of acres enrolled. All of the
other states in the following discussion saw substantial acreage enrolled in the program as well
(see Appendix).

that of the president of the Alabama Association of Conservation Districts (U.S. House, 1984, pp.15-18) and a letter submitted by a representative of an Indiana field office of the SCS (p.324). Conservation was prominently mentioned by two other witnesses – one the chairman of the Young Farmer Committee of the Indiana Farm Bureau (pp.325-326), the other a resident of Masonville, Iowa in a hand-written letter submitted to the committee (pp.263-264). The latter posited that conservation measures "would greatly alleviate lake siltation and water pollution and at the same time reduce part of our overproduction of grain" (p.263).

It was quite a different matter in hearings before the Senate Committee on Agriculture, Nutrition, and Forestry held in 1983 and 1985 (U.S. Senate, 1983a; 1985). Conservation districts, conservation interests and state and federal governmental agencies involved in conservation policy were much more heavily represented on the day of testimony devoted to conservation and extension issues than in the House hearings, as indicated in Tables 2 and 3.[23] Additionally, a much larger contingent of non-governmental conservation interest groups were present. Farmers and farm interests were also well-represented.

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[23] Conservation groups and conservation districts are listed separately in Tables 2 and 3, because conservation districts are local organizations comprised largely of landowners. As such, they can be expected to be more friendly to farmer interests than typical conservation interest groups such as the Sierra Club or the Audubon Society, for example.

Table 1.

**Hearings before House Subcommittee on Conservation,
Credit and Rural Development**

Date/Location of Hearing	Interest represented	Number of Witnesses
04-May-1984 Selma, Alabama	Farmer or Farming Organization	7
	Farm Supply	1
	Business/Development	1
	Commodity Distribution/Handling	0
	Finance	4
	Conservation Group	1
	Government Agency	1
	Academia	0
06-July-1984 Indianola, Iowa	Farmer or Farming Organization	12
	Farm Supply	1
	Business/Development	2
	Commodity Distribution/Handling	1
	Finance	3
	Conservation Group	0
	Government Agency	1
	Academia	1
08-October-1984 Washington, Indiana	Farmer or Farming Organization	7
	Farm Supply	1
	Business/Development	0
	Commodity Distribution/Handling	0
	Finance	2
	Conservation Group	0
	Government Agency	1
	Academia	1

As predicted, testimony by farm interests was in favor of soil conservation measures. The president of the Hinds County (Mississippi) Farm Bureau, in speaking of the benefits that soil conservation in farming states generates for non-farming states, testified that "it's only logical that they help us by supporting a strong national [as opposed to state-financed] program of soil and water conservation" (U.S. Senate, 1983a, p.19). This essentially constituted a call for income transfer from non-farm states to farm states. The president of the Mississippi Farm Bureau Federation said, in response to a question regarding the need for incentives to farmers to undertake conservation:

> I definitely think that there needs to be some incentive... I think that is one of the points that can be used by farmers on the diverted land or the conserving acres, is that they can use natural cover... I think that if farmers were offered some payment-in-kind type of a program, that they would use more conserving acre crops (U.S. Senate, 1983a, p.28).

Both conservation and farm interests alike, including the Farm Bureau (U.S. Senate, 1983a, p.115), expressed support for a conservation program patterned after the payment-in-kind (PIK) program. PIK was first initiated in 1961 for the purpose of surplus reduction; the program paid farmers with government-held surplus commodities, which could then be sold, in exchange for reducing the amount of crops planted (see ERS, 1984). The program went by the wayside during the high-demand 1970s, but was reactivated by the

Table 2.

Hearings before Senate Committee on Agriculture, Nutrition and Forestry, Subcommittee on Soil and Water Conservation, Forestry, and Environment

Date/Location of Hearing	Interest represented	Number of Witnesses
May 31, 1983 Jackson, Mississippi	Farmer or Farming Organization	5
	Conservation Districts	2
	Forestry	0
	Conservation Group	1
	Government Agency	5
	Academia	0
	Other	3
June 1, 1983 Louisville, Kentucky	Farmer or Farming Organization	4
	Conservation Districts	6
	Forestry	0
	Conservation Group	5
	Government Agency	7
	Academia	2
	Other	2
June 13, 1983 Ames, Iowa	Farmer or Farming Organization	7
	Conservation Districts	6
	Forestry	0
	Conservation Group	2
	Government Agency	6
	Academia	2
	Other	6
June 24, 1983 Brattleboro, Vermont	Farmer or Farming Organization	3
	Conservation Districts	8
	Forestry	0
	Conservation Group	3
	Government Agency	10
	Academia	0
	Other	0
June 28, 1983 Washington, DC	Farmer or Farming Organization	1
	Conservation Districts	1
	Forestry	0
	Conservation Group	2
	Government Agency	1
	Academia	0
	Other	0

USDA in 1983 in response to the declining economic condition of US agriculture. In essence, PIK, very much a distributive policy, allowed farmers to cultivate fewer crops while retaining the same effective level of output, in terms of marketable commodity. An Illinois dairy farmer suggested that rather than farms having a commodity base, they should have a "conservation base", for purposes of PIK (U.S. Senate, 1983a, p.160). A representative of the Iowa Farm Bureau Federation described a conference held by the organization in 1983 "to emphasize the soil conservation opportunities that have been made available by the PIK program" (p.222). American Farmland Trust likewise testified about the efficacy of using PIK as a template for a new conservation program (pp.230, 342-343). Also of interest is an exchange between Mary Kay Thatcher of the American Farm Bureau Federation and a member of the committee:

Table 3

Hearings before Senate Committee on Agriculture, Nutrition and Forestry

15-April-1985	Farmer or Farming Organization	6
	Conservation Districts	2
	Forestry	2
	Conservation Group	6
	Government Agency	1
	Academia	3
	Governor of Idaho (Representing Committee on Agriculture, National Governors' Association)	1
	Other	3

Ms. THATCHER. Our members have been very supportive of the PIK program. It has given many of them a lot of hope for the first time in 3 or 4 years. Most of them, especially the wheat farmers, would like to see the PIK program extended another year…

Senator JEPSEN. Who should pay for conservation…?

Ms. THATCHER. I think a lot of our members would like to have it be some type of a joint effort, some type of a cost sharing between possibly the State and Federal Government and the farmers themselves….

Senator JEPSEN. Do you think that your organization would be interested in keeping some of the acres in a multiyear, long-term set-aside for wildlife feed and habitat purposes, if they could do it on a dual basis of conserving soil and providing this, too?

Ms. THATCHER. They might be (U.S. Senate, 1983a, p.355).

Three months later, in hearings before the same committee, a representative of

the National Association of Wheat Growers stated:

Farmers would welcome the opportunity of participating in both short- and long-run conservation programs offering cost-sharing in cash or in-kind. For farmers who are uncertain of their program participation over a long-term period, conservation payments to assist in maintaining idled acres during a particular season would be helpful in assuring the best conservation techniques. Supplemental payment could also be helpful in prolonging the farmers' interest in supply management programs, and permanent land retirement (U.S. Senate, 1983b, p.94).

Although not all CRP payments are made "in-kind", the CRP is in

essence a variation on this concept of an environmentally-focused PIK

program. As in the case of PIK, the CRP allows farmers to receive

compensation for commodities that they putatively would have grown

without the capital expenditure necessary for cultivation.[24] A representative

of Southern Iowa Agricultural Boosters testified in a prepared statement for

the 1985 hearings: "In order for good conservation practices to be

implemented, there must be a PROFIT in agriculture" (U.S. Senate, 1985,

p.670, emphasis in original). A representative of the American Forestry

Association, when questioned about the level of incentive that would be

required for farmers to remove land from production to plant with trees,

replied, "With the net profit figure that many people are experiencing today

with corn, soybeans, and wheat, almost anything would look better" (p.277),

indicating a view of the CRP as a means of bolstering farm income.

The Role of Public Opinion

In the years leading up to the 1985 Farm Bill, pro-environmental public

sentiment was certain to have been very prominent on policy makers' minds.

Polls taken between 1980 and 1985 revealed a substantial tide of public

opinion in favor of environmental protection. A Washington Post editorial

quoted pollster Lou Harris as describing public attitude on the environment as

"one of the most overwhelming and clearest we have ever recorded in our 25

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[24] It is telling that a letter inserted into the Congressional Record (1985) opposed "another
acreage diversion PIK program" due to its effects on quantity of production (p.27045); this
letter was written by the manager of a fertilizer plant, which clearly gave him a stake in
maintaining high production levels (see Babcock et al, 1990).

years of surveying public opinion in this country… [The environment] happens to be one of the sacred cows of the American people" ("It's a Depression", 1981). A poll taken by the New York Times and CBS in 1981 stated, "A large majority of the American public supports continued strong protection of the environment even if it requires economic sacrifice," although the poll does indicate that "the public is not ready to accept all of the demands of environmentalists, and in some cases would accept such tradeoffs as between energy development and easing of environmental protection" (Shabecoff, 1981). However, less than one year later, after the House of Representatives voted to block the selling of gas and oil leases in national forests by the Department of the Interior, Democratic Congressman Don Albosta and two Republican Senators, Alan Simpson and Malcolm Wallop, cited "constituent pressure" as the reason behind their vote (King, 1982).

When the Clean Air Act came up for reauthorization in 1982, "virtually all public opinion polls" showed strong support for maintaining the act's provisions against attempts by industrial groups to weaken it (Shabecoff, 1982). A 1982 Gallup-Newsweek telephone poll of 1,018 adults found that 54 percent indicated that they would be less likely to vote for congressional candidates who favored lifting environmental regulations, even when these regulations have led to price increases (Gallup, 1982a). This trend was supported by another New York Times and CBS poll, which found that 58

percent of respondents agreed that "protecting the environment is so important that requirements and standards cannot be too high and continuing environmental improvements must be made, regardless of cost" (Shabecoff, 1983a). Nearly four years earlier, a Harris poll found that a combined 77 percent of those surveyed felt that the prevention of soil erosion was slightly to much more imperative than holding down regulatory costs (Harris, 1980).

In addition to these, the environmental lobby showed its prowess in Washington, DC in that same year when Secretary of the Interior James Watt and EPA Administrator Anne McGill Burford ran afoul of environmental and conservation groups for their handling of public lands and industrial regulation, respectively. A news report at the time stated: "While the environmental groups did not precipitate the crises that brought Mr. Watt and Mrs. Burford to grief, there is little dispute that the unrelenting drumfire of criticism that the groups leveled at the two officials created a climate of public opinion that made the officials vulnerable" (Shabecoff, 1983b); two-thirds of respondents to a poll by the Washington Post and ABC News indicated an awareness of the controversy within the EPA (Sussman, 1983).

When President Ronald Reagan ran for reelection in 1984, the environment was a major campaign issue – an unnamed aid to a Republican member of Congress described the issue as a "fire… on the verge of becoming a conflagration" (Hoffman, 1983). In a Gallup poll, 44 percent of respondents

described the environment as "important" in the presidential campaign, while 35 percent identified it as "most important" (Gallup, 1983). Certainly, farm interests could not have helped but take note of this increase in standing of environmentalism in the public arena.

Whether public opinion influences public policy per se, or if the congruence between public opinion and policy found by Page and Shapiro (1983) was the result of elitist influence upon public opinion (see Manza & Cook, 2001), media coverage of the sustained movement in public opinion in favor of conservationism would be an indicator of the possible future direction of policy nonetheless. Indeed, Gallup (1982b) found that conservation outranked agricultural aid to farmers in importance among respondents, although the difference was just outside of the margin of error.[25] However, the crucial issue is not so much whether public opinion in actuality has a positive correlation to policy, but rather whether farm lobbyists had a rational belief that movement in public sentiment in favor of conservation would result in policies that would threaten agricultural rents.[26]

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[25] When asked what policy areas should receive "first consideration" for federal funding "[i]f and when more federal money from Washington is available", 18 percent of respondents supported Pollution/Conservation while Agricultural Aid was supported by 13 percent.

[26] See McCallum (1980) for a discussion of rational expectations and decision-making.

If indeed farm interests expected increased pressure from public opinion and the activity of conservation interests for policies that could be detrimental to their ability to extract largesse from farm legislation, they would be expected to respond in a rational manner. This response would be such that would preserve the farm interests' power by diffusing any perceived threat. That the farm lobby advocated the policies laid out in the Conservation Title of the Farm Bill is a strong indication that farmers expected to benefit from the included programs, such as the CRP, and it is reasonable to see farmers' choice to support these provisions as a response to the threat posed by the rising environmental lobby and the pro-environmental shift in public opinion.

<div align="center">Responding to a Potential Threat</div>

Browne (1988) articulated several overriding issues that interest groups recognized when the time came for formulating the 1985 Farm Bill. Among these was concern over farm solvency. As previously noted, a record number of farms were declaring bankruptcy due to economic hardship resulting from a drop in demand in the international market, which followed large increases in production to meet the international demand which had been booming in the 1970s. Farm bills had for the past several cycles been aimed at encouraging increased production, but now the pressure was on for Congress to formulate a

policy to bring the agricultural sector in for a soft landing, as it were. A

second concern that Browne identified was the impending 1986 election,

which a number of legislators from farm states were eyeing with some

apprehension about backlash from the farming crisis.

Conservation groups were active in lobbying for conservation measures

in the Farm Bill, as may be expected. Environmental initiatives that would

have an effect on agriculture were already in the works within other sectors –

pesticide regulation was becoming a larger issue in the early 1980s with the

Environmental Protection Agency's decision to issue an emergency ban on

ethylene dibromide (EDB) in 1983 (EPA, 2007), which, although done for

reasons of safety of farm workers in addition to broader environmental

concerns, imposed a significant cost on farms[27]; legislation amending the Clean

Water Act (CWA) to address non-point pollution sources, including fertilizers

and pesticides from agricultural runoff, was also under consideration during

this time.[28]

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[27] A letter written by the American Farm Bureau Federation to the EPA stated: "the government had better be prepared to pay farmers for as much as 40 percent of the grain harvested this year" (Peterson, 1984).

[28] Section 319 of the CWA (101-Stat-52), which authorized grants to states, territories and Indian tribes to implement programs to reduce pollution from non-point sources, was passed in 1987. During the period of the debate over the 1985 Farm Bill, Congress proposed but failed to pass amended versions of the CWA: HR 3282 and S 431 in 1984, and HR 8 and S 1128 in 1985 (CQ, 1984, p.330; 1985, p.205).

American Farmland Trust, an interest group made up of both farmers and conservationists, published a report entitled "Soil Conservation in America: What Do We Have to Lose?" (AFT, 1984) that Browne (1988) described as being "the major instrument in articulating a moderate and intentionally reasonable message" that agribusiness interests found palatable (p.232). The AFT report gave twenty-three policy recommendations for improving soil conservation efforts by federal and state and local governments, most of which involved improving classification of land erodibility and the means of publishing this information.

Most relevant to this study, of course, is the recommendation that the 1985 Farm Bill establish a program granting multi-year contracts to farmers for enrolling acres in a conservation reserve. Farm interests, including the Farm Bureau, the National Farmers Union, and the National Farmers Organization, got on board with the AFT recommendations. The reason Browne gave for this was that the conservation measures proposed by AFT did not conflict with income support provisions of the bill. In fact, as discussed previously in this chapter, the conservation reserve provision supplemented them. Put another way, the CRP fulfilled the goals of both farmers and environmentalists (Leitch, 1987; see also Maloney & McCormick, 1982). Browne stated that this provided a rallying point allowing farming and conservation interests to build coalitions facilitating advancement of the Farm Bill. The reasons for this

coalition require further scrutiny, however, particularly in light of the

generally adversarial relationship between the two sides described by Browne.

What prompted the farm lobby to embrace the conservation provisions of the

bill as opposed to, for example, simply seeking an expansion of existing

commodity programs? If the farm lobby was interested in bolstering farm

income, a coalition with conservation interests would not be necessary per se,

unless there were circumstances that made it so.

It is worth noting that the farm lobby was not monolithic in its set of

preferences for the Farm Bill. Zulauf, Guither and Henderson (1987) found

that agribusiness interests, with an eye toward more competitive prices on the

world market, preferred a somewhat more laissez-faire policy stance with

regard to commodity programs in general, while small farm operations

favored, for example, focusing price and income support on farms generating

less than $40,000 per year in sales, for obvious reasons; larger farm operations

opposed this and prevailed. Most relevant to this analysis, however, is that all

three groups strongly favored the soil conservation provisions within the Farm

Bill (pp.90-91).

What was the motivation for agricultural interests advocating a

conservation reserve program? Leitch (1987) posited:

> [The 1985 Farm Bill] does include the Conservation Title, not as a
> primary purpose, but rather as a consolation to the environmental
> community. Amidst growing public skepticism, and with an

administration ideologically committed to removing government from the marketplace, agricultural interests had little choice but to compromise and give environmentalists room to push their agendas (p.92).

This gets closer to the underlying issue, particularly in acknowledging that conservation was not "a primary purpose" of the legislation, but if passage of the CRP constituted a "compromise" allowing environmentalists "room to push their agendas", why then did farmers receive the most concentrated benefits from the program? Neither Browne nor Leitch provided a satisfactory answer to this question.

One alternative explanation is that, with the threats to agriculture's ability to appropriate largesse described by Leitch, farm interests moved to expand the conflict by bringing environmentalists into the fray (Schattschnieder, 1960). Moe (1991) stated that "political victory is exceedingly difficult in the absence of compromise with the losing side. If the winners want to shift the status quo, they will usually have to let the losers participate" (p.125). Baumgartner and Jones (1991) described three ways (or a combination of any of the three) in which this conflict expansion might occur. The first scenario described is that of an interest in a losing position that seeks to draw in additional players to gain visibility for the issue. As discussed previously, this clearly does not apply to the agricultural lobby in this case; although threatened from multiple directions – most notably the rise of

environmentalism as a political force – agriculture was not in what could be characterized as a "losing" position at any point in the process. The second scenario described by Baumgartner and Jones involves the entrance of "concerned outsiders", which may themselves be proceeding from a position of weakness, seeking to ally with the losing faction in the subsystem. Again, the "loser" characterization does not fit with the position of agriculture in this instance, and further, the environmental lobby was clearly not in a position of weakness. Weakness on the part of the "outsiders" was not a presented by Baumgartner and Jones as a necessary condition, however. The conservation lobby was clearly seeking to make inroads to the agriculture policy community (Browne, 1988), but this does nothing so far to explain the motivation of the agriculture lobby for embracing this expansion. The final alternative described by Baumgartner and Jones is encroachment by policy-makers (i.e. legislators or bureaucrats) from other subsystems seeking to expand their domain. The incursion here involved interests from other subsystems, rather than legislators or regulators, but the scenario is similar to a degree.

The underlying shortcoming of these expansion-of-conflict scenarios is that they assume weakness on the part of the group whose policy domain is being encroached upon – in this case, the agricultural lobby. As such, while farm interests were clearly accepting an expansion of conflict (as it were), they

were not doing so from a position of weakness, per se. They were in a position

of relative strength, and their behavior was aimed at preserving that strength.

McCool (1990) described the concept of "cooptation through

allocation", by which a subsystem responds to potential conflicts, be it from

within the ranks of the subsystem or from without, by consenting to part of

what the conflicting interest wants in order to allow their own agenda to be

passed. Ripley and Franklin (1980) stated:

> A "smart" subgovernment – one intent on preserving its dominance
> without serious diminution – will adjust to potentially threatening
> developments ahead of time, perhaps by finding a way of defusing
> them… Continuing competition among several subgovernments can
> also stimulate one or more of them to make adjustments that will
> preserve their importance and dominant positions (p.120).

Wildavsky (1979/1987) similarly said that "sectors try to internalize… external

effects, so that whatever happens, they remain in charge" (p.70). Moe (1991)

described political uncertainty, i.e. who would be involved in (or in control of)

the policy arena in the future, as it affects the structure of political institutions;

an agency is organized so as to not only to achieve desired outcomes, but also

for "insulating it from the [future] legitimate control of political enemies"

(p.124). This argument is here applied not to organizational design, but to

policy formulation.

What is being described differs from Baumgartner and Jones (1991) in

the sense that the inclusion of the environmental agenda was not so much a

matter of concession to environmental interests as it was the expropriation of the language, i.e. the policy image per Baumgartner and Jones, of a conservation agenda to pass a program which was all along intended to provide income support for farmers. In addition to acquiring income support for its members, the framing of the CRP as primarily conservation-oriented and the allowance for a policy that generates environmental benefits allowed the farm lobby to inoculate its subsystem against potential cooption by harder-line environmental interests who may well have sought policies detrimental to the interests of the agricultural lobby's membership.

In a reversal of Browne's (1988) analysis, the question of why the environmental lobby supported the CRP reemerges at this point. As noted by Representative Marlenee of Montana, the CRP enjoyed essentially "unanimous support" (U.S. Congress, 1985, p.24582). If the policy was mainly aimed at supplementing farm incomes, and if offsetting effects such as slippage were a potential problem (although little was said of this potential during the policy hearings, primarily since neither the agricultural nor environmental lobbies had any incentive to point out anything that would be contrary to the program being passed), then what purpose did environmental interests have in supporting this policy instead of seeking one which would have more directly brought about reductions in soil erosion?

This focuses the discussion back onto the concept of purpose in fact (Posner, 1971): Are policies sometimes passed for reasons other than those explicitly stated by supporters and policymakers? Judges often attempt to discern the true meaning or legislative intent of statutes when applying the law to cases brought before them. In this context, judges are typically attempting to determine the meaning of specific words within the statute based upon the legislative history of the policy. Corry (1936), however, argued that "intention of the legislature is a myth, and the only possible value of parliamentary reports and debates is to give clues to the social purpose which was the driving force behind the bill" (p.290). This point is well-taken. It is the social circumstances surrounding formulation and adoption of the CRP, as has been discussed in earlier chapters, which lends context to statements made in support of it in determining its purpose in fact.[29]

Stone (2002) pointed out that the stated purpose of a policy is not merely a statement of desired outcome, but a tool for gaining the support of key players in the policy community. For this reason, Stone contended, stated policy goals are often vague in order to allow support to be drawn from actors who might conflict over a more defined set of goals (p.243). Edelman (1971)

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[29] Purpose in fact is similar to legislative intent insofar as it attempts to discern the meaning behind legislative action. However, unlike legislative intent, purpose in fact does not necessarily speak to the manner in which the statute is to be interpreted vis-à-vis enforcement, only to the purpose it was intended to fulfill.

described the use of language in political situations to "intensify some perceptions and screen others out of attention" (p.66). Edelman (1960; 1964) carried the argument further, claiming that policies very often "[promise] something substantially different from what was delivered" (p.697).

Edelman contended that the public interests that policies claim to focus upon are in actuality often not addressed by the policy's instruments. The question Edelman addressed was why, once the relative ineffectiveness of a policy became apparent, offended interest groups did not lobby for changes or repeal – using Edelman's terminology, why were they quiescent regarding ineffectual policies? His response was that groups often favor not simply the substantive attributes of a policy, but they also value a policy's symbolic value. Therefore, when faced with competing interests, policymakers often "give the rhetoric to one side and the decision to the other" (p.702). In other words, the policy may include sufficient language to reassure the one interest that their concern is addressed by the policy, but it may well substantively favor the other, even to the point of offering protection to the group putatively being regulated. Often, Edelman (1960) concluded, policies may contain both substantive and symbolic effects, with one of the two effects being dominant (p.703).

In the case of the CRP, the language in the Act – the symbolic, or at least largely symbolic, aspect – is clearly aimed at environmental interests, but,

as has been demonstrated in the preceding sections, the substance of the Act, and its apparent intent, is directed at benefiting farmers, the group that it ostensibly regulates.

Why might the conservation lobby go along with this? Svendsen (1999) found environmental lobbies and electricity producers on the same side in favor of a hypothetical grandfathered tradable CO_2 permit regime. Electricity producers favored permits because there was no charge to firms for the initial distribution of permits and because they provide a barrier against new entrants (only existing firms received emission permits – new entrants would be excluded, thus creating a substantial cost barrier); environmental groups, although initially objecting to marketable permits because they essentially "legitimized" a level of pollution, came to support permits because they must achieve results in order to maintain financial support from contributors, and cooperation with the electricity producer lobby was the most likely means to accomplish this goal even if the policy advocated did not generate the preferred level of abatement (p.119). In the case of the CRP, the conservation lobby found itself in the position of potentially going up against the farm lobby, whose influence in this arena had been entrenched for over half a century. Conservationists found themselves better served to cooperate with the farm lobby in order to achieve the level of soil conservation resulting from the program (though not insubstantial, as previously discussed; see

Newman, 1988) and a large symbolic victory than to treat the process as a

zero-sum game (Moe, 1991) and pursue strict regulation of farm operators,

which the still-powerful farm lobby would certainly oppose. One risk of an

all-or-nothing approach is the very real possibility of ending up with nothing.

Coming away with nothing was hardly an attractive option. Taking a

cooperative approach was for conservationists therefore purely rational.

<u>Conclusion – Preemptive Policymaking</u>

Although the agricultural policy arena had become much more

competitive than it had been when McConnell (1953) and Lowi (1969)

described it as a veritable fiefdom for the agricultural lobby, the farm lobby's

influence remained very substantial in the first half of the 1980s. However,

the farm lobby was forward-looking enough to recognize a threefold threat to

their income support programs: The Reagan administration had articulated a

philosophy of reducing government involvement in the market, which

included retrenchment on agricultural commodity programs; public opinion

had been moving strongly in favor of conservation since the 1970s were

declared "the decade of the environment" (CQ, 1970, p.488), and conservation

had become a viable campaign issue; finally, armed with this swell in public

support, the environmental lobby had entered the previously monopolized

agricultural policy arena. Sabatier (1988) indicated that such changes in the

policy environment can be expected to elicit a strategic response on the part of the threatened subsystem.

In light of this, a theory of the motivation of the behavior of the players within the agricultural policy subgovernment can be formulated. The farm lobby, which had dominated its policy arena for much of the twentieth century, was faced with incursion by conservation interests. The risk was that this newcomer would push for policies that would work contrary to the interests of farm operators, in the form of negative inducements. The farm lobby therefore chose to engage in preemptive policymaking behavior.

In medicine, practitioners inoculate patients against disease by injecting them with weakened or killed viruses in order to stimulate the body's natural resistance to the contagion. In policy, subsystems likewise may choose to inoculate themselves against incursion by "infectious" external agents by enacting policies that give, in Edelman's (1960) terms, a largely symbolic victory to the new entrants, while retaining the substantive policy effects for themselves. By so doing, potentially damaging conflict can be avoided through mollification. This goes a step further than previous studies such as McCool's (1990) "cooption through allocation", in that it steps beyond pragmatic compromise to recognition that the use of the policy image, thus creating symbolic policy, may be sufficient to disarm such a threat. Ripley and Franklin (1980) stated that "successful" challenges to a dominant

subgovernment may "force marginal adjustments that still preserve the substance of policy and the reality of subgovernment dominance" (p.120). Ripley and Franklin give as an example the adaptation of the tobacco subsystem to "relatively mild" smoking regulations (pp.106, 120; see also Fritschler & Hoefler, 1996). However, although Ripley and Franklin describe a very similar phenomenon insofar as they characterize gains made by the anti-smoking movement as "largely symbolic", the thrust of preemptive policymaking is that it allows the dominant subsystem to acquire benefits to itself, not simply to minimize costs of onerous regulation, as was the case with anti-smoking policy.

Symbolism can be used by subgovernments to disarm possible threats from other subsystems while securing additional benefits for themselves. In politics, rhetoric is a powerful tool for advancing an agenda (Stone, 2002; Edelman, 1971). To illustrate, assume two subsystems: Alpha, a subsystem currently dominating a particular policy arena, and Beta, a subsystem that seeks to challenge Alpha's dominance. Alpha may be able to decrease the threat posed by Beta by cutting away at Beta's ability to frame the policy agenda to its own advantage. It can do this by robbing Beta of its rhetoric. In other words, it is to Alpha's advantage to expropriate Beta's rhetoric and adopt it for its own policy agenda in order to portray itself as already-friendly to

Beta's cause, leaving Beta no grounds for attack. This is what is meant by preemptive policymaking.

In the case of the CRP, the farm lobby preemptively advocated what it characterized as conservation policy and used it to supplement existing income support programs, thereby disarming the potential threat of onerous regulation in the 1985 Farm Bill by allowing the conservation lobby to score in effect a rhetorical victory. On the other side of this would-be battle, the environmental lobby, when faced with the risk of failure in achieving its goals in a new arena already dominated by an entrenched farm lobby, chose cooperation over conflict. Any weaknesses that might have existed in the proposed program, such as offsetting effects like slippage, were certainly not in the interest of either farmers or conservationists to point out. A breakdown of this détente would likely have resulted in open battle, leaving the conservationist lobby with the risk of leaving empty-handed and the farm lobby with the possible diminution of farm income support due to pressure from the White House and costly regulation due to pressure from the environmental lobby. At any rate, the farm lobby was successful at securing a policy to advance its own interests and effectively placating the environmental lobby.

As a final consideration, in addition to the CRP, the Conservation Title of the Farm Bill contained three other provisions: Conservation Compliance,

Sodbuster and Swampbuster. These programs, as discussed earlier, prevented payment of benefits for commodity programs to farmers who did not conform to certain conservation practices. Chapman (1988) referred to the CRP as "the carrot" and to these three ancillary programs as "the stick" (p.13). While the CRP is considered in this study separately from these programs, the potential environmental benefits of these programs is evident and warrants consideration. Given the policy environment described in this chapter, these programs can be seen as the use of the issue of soil conservation to shield existing commodity programs from cuts to which they might otherwise be vulnerable. This kind of strategic behavior would not be inconsistent with the behavior described in this section.

CHAPTER 6

SLIPPAGE DEFINED AND DETECTED

Policy, in the methods it employs to achieve its stated objective, often generates unintended consequences. Pressman and Wildavsky (1984) pointed out that "[t]here is no mode of organizing social life not subject to… unanticipated consequences" (p.xviii). Peltzman (1975) famously illustrated this phenomenon using the example of regulations requiring the production of automobiles with safety features such as seatbelts and impact-absorbing steering columns. Peltzman demonstrated that data indicated no net effect of these safety regulations on the rate of highway deaths; this occurred, he contended, because as safety measures decreased the risk of death from vehicle accidents, drivers were inclined to engage in riskier behavior, in effect offsetting the effects of the safety regulation.[30] Conservation programs are likewise susceptible to unintended offsetting behavior. Burtraw, Palmer and Krupnick (1997), for example, discussed potential unintended effects of certain policies used by regulators to reflect social costs in technological investment

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[30] It should be noted that Crandall and Graham (1984) found that offsetting behavioral effects are small relative to the technical benefits offered by automobile safety devices.

choices of electrical utilities. The authors pointed out that the policy may cause the utilities to use technologies that are more environmentally friendly but less cost effective, resulting in higher prices to energy consumers. These higher energy prices may cause residential consumers to use alternative heat sources, such as wood, that are ultimately even more environmentally unfriendly (p.225). Kwoka (1983) showed that provisions in the Corporate Average Fuel Economy (CAFE) standards on automobiles allowing manufacturers to meet the standards by changing the mix of cars sold (i.e. selling more fuel-efficient cars and fewer "gas guzzlers") could in actuality increase the amount of fuel consumed if the demand for fuel-efficient cars is more elastic than that of larger, less fuel-efficient models; this would result in a net increase in automobile sales and, presumably, an increase in miles traveled, thus offsetting, potentially *in toto*, the fuel savings intended by the CAFE standards (p.696). Kleit (2002) argued a similar effect due to the lower per-mile cost of driving more fuel efficient automobiles; he predicted that overall miles driven would increase as a result of CAFE standards, the emissions from which would partially offset the program's goals.

Such unanticipated consequences largely result from one of three factors (Merton, 1936). Firstly, they occur due to the state of knowledge regarding the full range of possible outcomes from policy instruments; unanticipated consequences in this case are just that. They come about from

effects on the environment not foreseen by the policy's framers. The second factor is error on the part of policymakers in anticipating all possible outcomes; this factor occurs not due to ignorance, but simply from a failure to take into account all available information. Finally, unanticipated outcomes can occur due to a bias on the part of policymakers toward short run returns over long run consequences. While it is the goal of this chapter in particular to provide illumination regarding the first factor, if the thesis of this study – that the CRP was passed for purposes other than for soil conservation – is correct, the final factor will be the more likely explanation for the presence of the alleged slippage in the program, insofar as alleviating economic hardship in the agricultural sector in the short run was a more immediate problem than that of the long run preservation of natural resources.

Reserve programs like the CRP and others past and present were implemented with one of the following stated goals: to reduce the acreage farmed (for environmental purposes), to reduce the quantity of crops produced (in order to reduce crop surpluses, with the ultimate effect of exerting upward pressure on the market price), or to achieve both of these goals. These goals, however, can be upset by unintended effects such as slippage. Generally speaking, slippage is said to have occurred when the resulting decrease in either the number of acres in production or the quantity of crops produced is

partly or wholly offset by some behavior stemming from unintended incentives created by the program (see Love & Foster, 1990, p.272).

Roberts and Bucholtz (2002) defined four types of slippage (p.2). "Type 1" slippage occurs when land retired under the program is low-yield; if the goal of the program in question is to reduce the level of commodity production, the removal of this low-yield land will not reduce output by the amount it would if land of average productivity were retired; Hoag, Babcock and Foster (1993) referred to this as "land-quality slippage" (p.182; see also Benbrook, 1979; 1980). This type of behavior by farmers is rational, given the option of receiving rental payments on land that is not productive versus receiving payment for land that is income-generating. If possible, one would expect the landowner to choose to enroll the less productive land so long as the rental payment was greater than the income generated from cropping that land. This would, however, reduce the effectiveness of the program in terms of reducing crop production.

The second type of slippage ["Type 2"] results from increased use of resources on non-enrolled land, thus increasing its productivity and offsetting reductions in crop production resulting from the retirement of the program land (Grant, 1979; Love & Foster, 1990; Hrubovcak, LeBlanc & Miranowski, 1990).

These first two types of slippage are those more commonly examined in the literature. Gardner (1987b) estimated the percentage of crop output reductions lost to slippage by multiplying the percent decrease in planted acreage by a slippage coefficient:

$$1 - \frac{\%\Delta output}{\%\Delta acreage} \, . \qquad \text{(Eq.1)}$$

Gardner stated that the common level of slippage in commodity reduction programs is around thirty-five percent (p.60). Love and Foster (1990) defined slippage algebraically as

$$s = \frac{\Delta Y}{Y} \times \frac{\Pi}{\Delta \Pi} \qquad \text{(Eq.2)}$$

with Y representing total aggregate yield per acre and Π the ratio of planted land to total land (p.272). They estimated slippage for wheat to be between 29 and 37 percent, for corn between 48 and 58 percent, and for soybeans (as a result of the reductions in corn production, as soybeans are a substitute for corn in terms of land use) between 30 and 38 percent (pp.279-80). Hoag, Babcock and Foster (1993), in a study of corn farms in North Carolina, estimated farm-level slippage rates to be lower than the national aggregate rates found by Love and Foster (1990), which they attributed to low land

quality variability within individual farms relative to land quality variability that may be observed between farms.

Fewer studies have been done on the last two types of slippage, which shall be the topic of this current study. These types were defined as the activation of previously uncultivated land ["Type 3"] and activation of land that would otherwise be left fallow due to crop rotation ["Type 4"] (Roberts & Bucholtz, 2002). These two forms of slippage are difficult to distinguish between when measuring, and both tend to arise from the same causes, so Type 3 and Type 4 slippage were studied jointly in the articles that shall be discussed shortly, as well as in this current study. For purposes of this study, Type 3 and Type 4 slippage shall be referred to collectively as land-loss slippage (LLS). LLS can in general terms be said to exist, ceteris paribus, if:

$$\left| \frac{\delta A_{Ct}}{\delta R_{Ct}} \right| < 1, \qquad\qquad \text{(Eq.3)}$$

where A_{Ct} is the total acres planted of crop C in time "t", and R_{Ct} is the number of C base acres retired under the program in time "t".

LLS can result through two possible mechanisms. The first is the substitution of new or previously fallow land by individual farmers for land idled under the CRP. Wu (2000) explained that farms will contain land of variable productivity; the most productive land will be devoted to crop

production, while less productive land will be split between cropping and non-cropping uses, such as grazing, rangeland and forestry, depending upon the relative profitability of each usage. Assuming that the marginal profit of both activities is diminishing with respect to the amount of land used (which is a reasonable assumption so long as there are some resources that are fixed), when some of the less productive land being used for crop production is idled under the CRP, the marginal profitability of cropping increases, providing an incentive for farmers to shift some of the land currently used for non-cropping activity to cropping (p.982).

Wu (2000) used regression analysis to compare county-level land usage in the Northern Midwest United States in the years 1982, before the CRP was initiated, and 1992. Wu found that, holding other parameters constant, there was an increase in cropland between the two years; slippage rates were estimated to range from 15 percent in some states in the region to 30 percent (p.986). Wu also found that the more acres that are enrolled in the program in a given county, the more likely LLS is to take place. Wu estimated significant reductions in the environmental benefits from retiring CRP land as a result of LLS.

USDA Economic Research Service (ERS) economists Roberts and Bucholtz (2002, 2005) attributed Wu's findings to "spurious correlation" due to the omission of land quality as a variable, which is a factor that is expected to

affect land use, as well as the number of acres enrolled in the CRP. They argued that this created a missing-variable bias in Wu's regression. Roberts and Bucholtz tested this theory by "reversing" Wu's model, regressing land converted from cropping to non-cropping usage. The results of this model indicated a twelve percent increase, i.e., negative slippage, in non-cropped land over the study period, which they contended proves that Wu's findings were biased (Roberts & Bucholtz, 2005, pp.246-247). Roberts and Bucholtz additionally used a two-stage least square model in which CRP enrollment was instrumented and regressed on the proportion of land classified as highly erodible within each crop district, and in which the second stage regression was weighted to deal with heteroskedasticity due to sampling errors. Different permutations of these models returned varying estimates of slippage ranging between 2 and 19 percent. As before, they also constructed a model with cropland converted to non-cropping use as a check of specification; this model returned an estimate of negative slippage of 8 percent. These "ambiguous" results led the authors to submit that there is "no convincing evidence" of LLS due to substitution in the CRP (pp.249-250).

Wu (2005) argued that instrumenting CRP enrollment was unnecessary because, while farmers may base their decision to enroll land in the program partly on land quality, the overall level of enrollment within a given area is determined not by farmers but by program administrators. As such, the CRP

enrollment variable was exogenous to his land use model (p.253). Wu further

countered that the models run by Roberts and Bucholtz (2005), while

ambiguous in terms of the degree of slippage present, did in fact indicate that

LLS due to substitution is present, thus verifying rather than refuting Wu

(2000). Intuitively, however, this form of LLS is rational so long as farmers

can increase profits by replacing productivity lost to CRP land; farmers can

thereby continue to receive the same, or nearly the same, level of income from

commodity production while nonetheless receiving rental payments on retired

land.[31]

The second mechanism through which LLS may occur is price feedback

effects. This type of LLS has received no empirical study. Price feedback

refers to a general equilibrium phenomenon in which price changes in a

commodity or resource generate in essence a causal loop, resulting in a

reciprocal, offsetting effect. For instance, Vietorisz and Harrison (1973) gave

the example of feedback in the labor market wherein an exogenous increase in

wage rates may result in producers ultimately shifting to more capital-

intensive production processes resulting in a decrease in labor demand, thus

bringing wage rates back down, possibly returning to the original equilibrium,

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[31] Testifying before the House Subcommittee on Conservation, Credit and Rural Development in 1988, the National Audubon Society expressed concern that this type of behavior required "priority attention" (U.S. House, 1988, p.325).

depending on the strength of the feedback effect; this phenomenon is referred to as negative feedback. Also possible is a positive feedback effect wherein the same exogenous increase in wages may lead to the adoption of labor-saving innovation, thus increasing worker productivity, increasing the demand for labor and driving wage rates further up. In this study, the focus shall be on negative feedback.

The price feedback effect concerning the CRP and agricultural production is hypothesized to be the following (for purposes of this illustration, assume a competitive market for wheat): A given number of wheat base acres is retired from production under the CRP, thereby reducing the supply of wheat by the amount $Y_W \times R_W$, where Y_W is average yield of the retired land in terms of bushels of wheat per acre (assuming for simplicity that all of the retired land had been in production prior to enrollment). This decrease in the market supply will raise the price of wheat faced by farms across the entire industry. If farm operators are profit maximizers, each farm in the market will increase its production in order to take advantage of above-normal profits. This increase in production, it is predicted, will involve the activation of fallow or previously uncultivated land; this activation of new land to replace that retired under the program is what is being referred to as price-feedback land loss slippage. The increase in demand for land may result

in a temporary increase in agricultural land values (Shoemaker, 1989). The

long-term effect of LLS will be to increase the market supply of wheat as new

land is activated, creating offsetting downward pressure on the price faced by

farmers.[32] As such, LLS, of both varieties, holds implications not only for

environmental goals, but for any surplus reduction goals as well.

The Model

As the form of LLS for which this study is testing is that resulting from

price feedback effects, the offset in acres planted can be expected to come

about by way of an increase in the price of wheat resulting in turn from the

removal of land from production through enrollment in the program. The

commodity wheat was chosen because it is a very widely grown commodity,

grown in nearly every region of the country, and it requires relatively little

special land preparation. For example, slippage is less likely to exist for a

commodity such as rice, as that crop requires special land conditions (such as

flooding of fields) to be grown, thus making the amount of uncultivated land

suitable for activation much lower, and the cost of new land preparation much

higher.

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[32] Interestingly, LLS resulting from substitution effects may have an offsetting effect on price
feedback effects, depending on how quickly new land is activated to replace retired land. The
greater the extent to which farmers activate new land to replace that retired under the CRP,
the less the market supply will decrease.

The model used to detect LLS is a two-stage least squares (2SLS) regression in which the price of wheat is the instrumented variable. This design is used in order that the effects of CRP enrollment on the price of the commodity can be estimated in the first stage, and the effect of this change in price on the number of acres planted in wheat can then be estimated in the second stage.

First Stage Equation

The price of wheat (P) is determined by both demand and supply effects:

$$P_d = \gamma_x X_i + \gamma_q Q_d + \varepsilon_d, \qquad\qquad \text{(Eq.4a)}$$

$$P_S = \alpha_Z Z_i + \alpha_q Q_S + \varepsilon_s, \qquad\qquad \text{(Eq.4b)}$$

where Q_d is quantity demanded, Q_S is quantity supplied, and X_i and Z_i are vectors of determinants for demand and supply, respectively, for observation "i". Assuming that the market is in equilibrium, $Q_d = Q_s$ and $P_d = P_S$. The demand and supply equations are therefore set equal and solved for Q:

$$Q = \frac{\gamma_x}{\alpha_q - \gamma_q} X_i - \frac{\alpha_Z}{\alpha_q - \gamma_q} Z_i + \frac{\varepsilon_d - \varepsilon_s}{\alpha_q - \gamma_q}. \qquad\qquad \text{(Eq.5)}$$

The solution for Q is next substituted into the demand-side equation for P:

$$P = \frac{\alpha_q \gamma_x}{\alpha_q - \gamma_q} X_i - \frac{\gamma_q \alpha_Z}{\alpha_q - \gamma_q} Z_i + \frac{\alpha_q}{\alpha_q - \gamma_q} \varepsilon_d - \frac{\gamma_q}{\alpha_q - \gamma_q} \varepsilon_s . \qquad \text{(Eq.6)}$$

Finally, assuming that ε_d and ε_s are independently, identically distributed with mean zero, the reduced-form equation for price is as follows:

$$P = \beta_\gamma X_i + \beta_\alpha Z_i , \qquad \text{(Eq.7)}$$

where $\beta_\alpha = -\dfrac{\gamma_q \alpha_Z}{\alpha_q - \gamma_q}$, and $\beta_\gamma = \dfrac{\alpha_q \gamma_x}{\alpha_q - \gamma_q}$.

In the above reduced-form equation, the demand-side variables are I, which is per capita personal income, E, which is the state's share in national wheat exports, F, total foreign exports, and O, Y, C, and B, the price of oats, rye, corn and barley, respectively. The supply-side variable included is R, enrollment in the CRP. Further discussion of each of these variables will follow.

Second Stage Equation

In order to detect LLS from price feedback effects, the second stage model examines the effect of the price of wheat on the number of acres planted in wheat (A). As the number of acres planted is a production decision, the relationship between the quantity of wheat produced (Q_S) and acres planted is:

$$Q_s = \alpha_H H_j + \alpha_A A_j + \alpha_p P_S + \varepsilon_s, \qquad \text{(Eq.8)}$$

where H_j is a vector of the determinants of supply for observation "j",

excluding A and P_s. Solving for A_j yields:

$$A_j = \frac{1}{\alpha_A} Q_S - \frac{\alpha_H}{\alpha_A} H_j - \frac{\alpha_p}{\alpha_A} P_S - \frac{1}{\alpha_A} \varepsilon_s. \qquad \text{(Eq.9)}$$

Again assuming that ε_s is independently, identically distributed with mean

zero, the reduced form for the second stage equation is therefore:

$$A_j = \beta_q Q_S + \beta_H H_j + \beta_p P_S, \qquad \text{(Eq.10)}$$

where $\beta_q = \dfrac{1}{\alpha_A}$, $\beta_H = -\dfrac{\alpha_H}{\alpha_A}$, and $\beta_p = -\dfrac{\alpha_p}{\alpha_A}.$

The variables included in vector H are the target price for wheat set by

the USDA (T) and D1 and D2, which are dummy variables that correspond to

the Beale Code, an index of the level of county urbanization. Again, these

variables shall be discussed in more detail in the following section.

Regressions

Using the above equations, the models used to detect LLS are:

Stage 1: $P_{it} = f\left(R_t, I_{it}, E_{it}, F_t, O_{it}, Y_{it}, C_{it}, B_{it}\right)$, and $\qquad$ (Eq.11a)

$$\text{Stage 2:} \quad A_{it} = g\left(\hat{P}_{it}, Q_{it}, T_t, D1_i, D2_i\right), \qquad \text{(Eq.11b)}$$

for panel "i" and time "t". The models use panel data from all counties within

the contiguous United States that showed wheat production in any year

between 1980 and 1993. The use of panel data allows for the observation of

effects over several time periods and across a wide cross section, giving an

abundance of data points in which the effects may be observed. The model is

an interrupted time series, beginning six years prior to treatment, i.e. the

implementation of the program, in order to capture any unrelated trends in

agricultural production that may have occurred during the study period that

may otherwise manifest as spurious correlation. The period 1986 through

1993 represents the first twelve sign-ups for the program, data included in ERS

Statistical Bulletin 925.

The market price of wheat (P) is instrumented in order to test the effect

of CRP enrollment on the variable. Wheat price is then included in the

second stage equation as a regressor to provide the link between land use and

price feedback slippage. The price used is the marketing year average (MYA),

or the average market price of the commodity over the course of the current

year. Wheat price is therefore lagged one year in the second stage regression

due to the necessity for farmers to base their planting decisions on the past

year's market price, as the current year price is based on market conditions,

such as production and demand, which are not observable at the time of planting.[33] Wheat price is available only at the state level; in cases where no state price for wheat is available in a given year, which would be a year in which no counties within that state planted wheat, the national average price of wheat is used. This variable is predicted to have a positive coefficient in the second stage regression, assuming a positively-sloped supply curve. Wheat price data as well as other commodity price data in this model were obtained from the National Agricultural Statistical Service (NASS).[34]

Acres enrolled in the CRP in each year (R) is included as a regressor in the first stage equation in order to ascertain what, if any, effect the variable exerts on the price of wheat. If the number of acres enrolled in the CRP significantly decreases wheat supply, the coefficient for CRP enrollment can be expected to be positive and significant, as an increase in enrollment would decrease supply which would increase the market price for the commodity. Combining this with the expected positive impact of the price of wheat on

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[33] Agricultural commodities are predicted by Ezekiel (1938) and Waugh (1964), for example, to follow a "cobweb" pattern in which production in period "t" is determined by the commodity price in period "t-1", while the price in period "t" is determined by production in the current period.

[34] All dollar amounts were discounted for inflation using the Chain-Type Price Index, 1996=100.

acreage planted will indicate the level of price feedback slippage in the program.

CRP data were aggregated at the national level in each year in order to account for the effect of removing program acreage from production on the market as a whole. Using county-level data to search for LLS due to price-feedback effects would miss the effect on local production resulting from changes in CRP enrollment occurring in other counties or regions of the country. For example, land retired in Cheyenne County, Nebraska will have a market price effect on crops produced in Dawson County, Montana. As such, failure to use cumulative data from program land retirement in all affected counties will not detect price feedback effects (see Roberts & Bucholtz, 2005; Wu, 2005). CRP enrollment data in this study focus on wheat base acres retired. Wheat base refers to land that was designated by the enrolling landowner as either having been used for the cultivation of wheat, or that allegedly would have been used for wheat cropping. There is no indication from USDA data of any significant contract expirations or early opt-outs by landowners during this period, so that this enrollment data can be assumed to be a faithful measure of the number of acres of wheat-producing land that was retired in each year under the program. CRP enrollment was lagged one year behind the wheat price variable, since land enrolled in the program in one year may not actually be removed from production until the following year.

State share of exports in metric tons (E) is the second regressor in the first stage equation. Using export data gathered by the Customs Service, ERS estimates the value of each state's exports of wheat based upon the total value of wheat exported by the United States divided proportionally by each state's contribution to total national production. These data are only available from ERS stated in dollars. However, in order to avoid possible interaction between this variable and the dependent variable, this statistic was calculated independently using state-level NASS production data for wheat and total US wheat exports from the FATUS database.[35] The coefficient for this variable is expected to be positive, as exports constitute a substantial portion of the demand faced by wheat farmers. According to ERS statistics, nearly half of United States wheat produced is exported (ERS, 2006). An increase in exports is therefore seen as representing an increase in demand for wheat, producing upward pressure on the price of the commodity.

Total foreign exports (F) was obtained from ERS Agricultural Economic Report Number 712. As wheat exported from foreign countries competes with U.S.-produced wheat in the world market, a negative correlation with the price of wheat is predicted.

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[35] "Foreign Agricultural Trade of the United States", published by USDA Foreign Agricultural Service. Data used is annual world total exports of unmilled wheat, wheat flour and other wheat products in metric tons.

State per capita personal income (I) as reported by the Bureau of Economic Analysis is also used to explain P. USDA data (ERS, 2003a) show that the income elasticity of bread and cereal food types for the United States is about 0.05, which indicates that grains are a normal good, albeit relatively inelastic. The coefficient for this variable is predicted to be positive, but small.
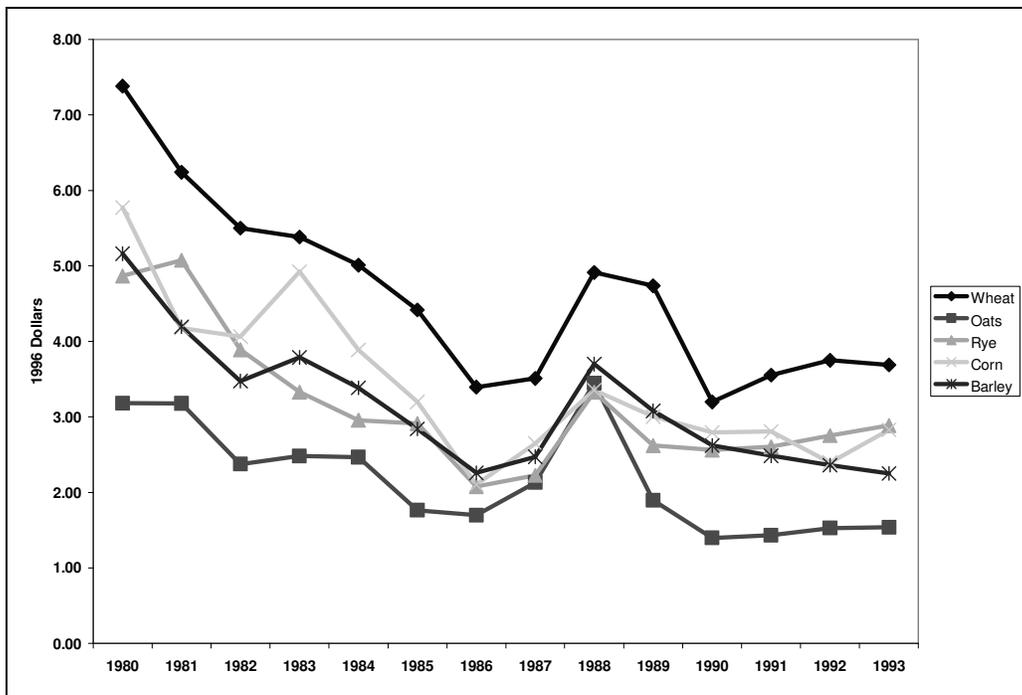
Figure 1. Real Commodity Prices (U.S. Average)

Prices of other commodities are included in the model in order to control for cross-price effects. These substitute commodities are oats (O), rye (Y), corn (C) and barley (B). The coefficient for these variables is expected to

be positive, as increases in the market price for these commodities relative to wheat will tend to increase demand for wheat. The historical trend of wheat prices and the substitute commodity prices is shown in Figure 1.
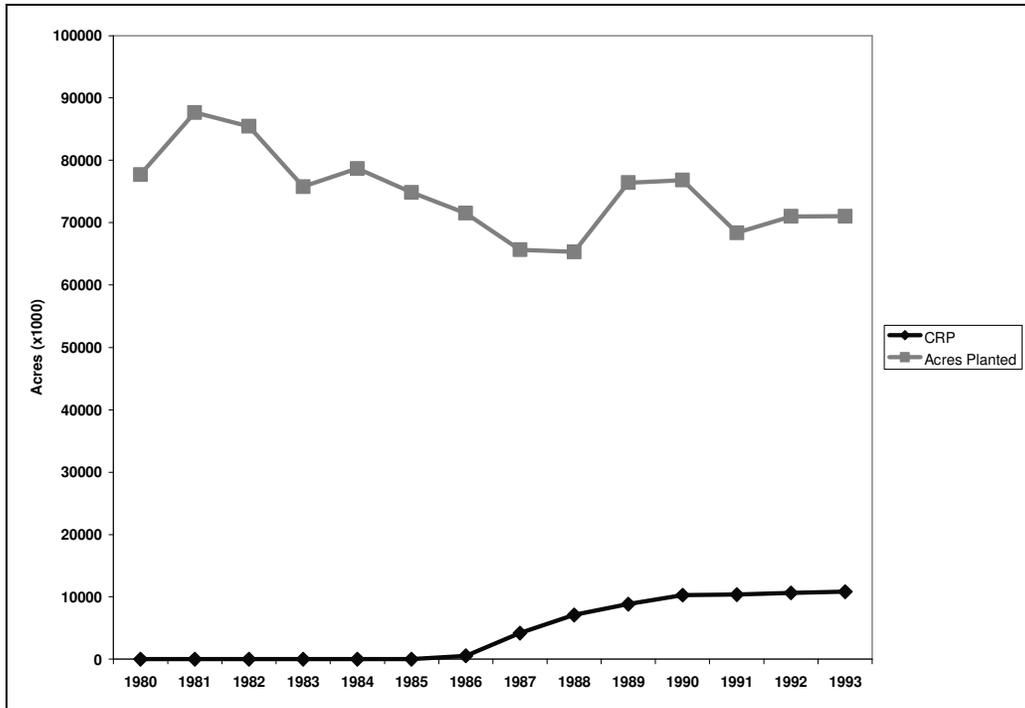
Figure 2. Total Wheat-base Acres Enrolled and Acres Planted in Wheat (U.S. Total)

The dependent variable in the second stage regression is total acres planted in wheat (A) in county "i" and year "t". Cropping data for each county were obtained from NASS. The model, in order to isolate price effects within commodities, deals strictly with acres planted with wheat. Total acres planted

in wheat and total CRP enrollment of wheat base acres are presented in Figure 2.

The first independent variable in the second stage regression is production (Q), the amount of wheat harvested in the previous year in each county. This variable is included in order to control for land productivity in previous years. This is expected to have a positive effect on acres planted if land is allocated to its most highly valued use; farming operations will tend to favor counties with more productive land and cultivate proportionally less land in counties that have less productive land. The variable Q also controls indirectly for the geographical county size, given that, *ceteris paribus*, a larger county will have more land that can be devoted to crop production.

The target price for wheat (T) is included in order to control for effects on production resulting from price supports. In each year, the USDA sets minimum per bushel target prices for commodities; if the national average market price received by farmers does not meet the target price, the USDA issues deficiency payments to farmers to make up the difference. Intuitively, the coefficient on target price is expected to be positive, as farmers can be expected to respond to a higher target price in the same manner as they would respond to higher market prices (as assumed by Choi & Johnson, 1993); however, the presence of the 0/92 program complicates the matter. This will

be further discussed in the presentation of results. Target prices used in this study are reported in ERS Agricultural Economic Report Number 712.

The model controls for county urbanization using the Beale Code, an index of urbanization that can take a value between zero (the most urbanized counties) and nine (the most rural counties) as compiled by ERS.[36] Two dummy variables (D1 and D2) are used to indicate the Beale classification for each county. D1 is set equal to "1" if the county's Beale Code was 0 to 3, which denotes counties of varying population (0 denoting counties with the largest population) that lie within statistical metropolitan areas.[37] D2 is set equal to "1" if the county Beale Code was 4, indicating a county with a population of 20,000 or more located adjacent to a metropolitan area. These variables are included in order to capture the opportunity cost associated with cultivating land in areas in which agricultural land is also in demand for development. In more urbanized counties, this land is likely to have a higher alternative use value than in rural counties.[38] The Beale Codes are compiled

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[36] These data were obtained from ERS (2003b).

[37] A statistical metropolitan area is defined by the Office of Management and Budget as a county or group of counties containing a central urban area with a population of at least 50,000 persons, including any adjacent counties that are economically or socially tied to the central urban area.

[38] Beale Code values 5 through 9 indicate counties that either are not adjacent to metropolitan areas, or are of a smaller population, which would tend to suggest lower demand for land for development.

Table 4.

Summary Statistics

Variable		Mean	Standard Dev.	Min	Max
Acres planted in wheat per county	A	27,878.53	59,981.51	0	764,400
Price of Wheat (1996 dollars)	P	4.45	0.93	2.26	8.53
Wheat Base Acres Enrolled in CRP (nationally, zeroes excluded)	R	7,842,735.25	3,483,665.14	554,256	10,833,470
Production (bushels)	Q	623,830.70	1,656,531	0	33,900,000
State Exports (metric tons)	E	1,078,670	1,332,043	3,707.11	7,480,416
Total Foreign Exports (millions of bushels)	F	2,780.93	355.10	2,047	3,248
State Per Capita Personal Income (1996 dollars)	I	17,170.33	3,790.57	4,504.09	52,003.32
Price of Oats (1996 dollars)	O	2.33	0.63	1.06	6.01
Price of Rye (1996 dollars)	Y	3.31	0.90	1.13	7.40
Price of Corn (1996 dollars)	C	3.62	0.87	1.55	7.49
Price of Barley (1996 dollars)	B	3.04	0.72	1.30	6.49
Target Price of Wheat (1996 dollars)	T	5.76	0.78	4.53	6.71
Number of Counties (i)		2,681			
Time Periods (t)		14			
Total Observations		37,534			
Time Periods (t) – with lags		12			
Total Observations – with lags		32,172			

every ten years, so that the data are only available for two years – 1983 and 1993 – of the study period, although data for a number of counties are not available for 1983. The values for 1993 are used because counties that were urbanized at the end of the study period would likely experience increasing demand for land for development during the study period.

<u>Results</u>

Using the Likelihood Ratio test, the null hypothesis of homoskedasticity was not rejected for the first stage variables, but it was rejected for the second stage. Heteroskedasticity in the second stage is possibly arising from sampling error in the NASS data; although the data are inclusive, there are likely to be some sampling errors at the county level due to aggregation of the data, rather than maintaining inventories of individual plots of land (Roberts & Bucholtz, 2002). These errors will likely tend to vary with size and the amount of agricultural activity within each county (Roberts & Bucholtz, 2005).[39] Autocorrelation was also detected using the Wooldridge test for autocorrelation in panel data. As such, the model was run using heteroskedastic and autocorrelation (HAC) robust standard errors using

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[39] Note that Roberts and Bucholtz (2005) discussed this problem as regarding the National Resources Inventory, which is a less exhaustive inventory than the NASS data. It is reasonable, however, to extend the caveat to the NASS.

Table 5.

Model I Results

	First Stage P (instrumented) (z statistic) Centered R^2 = .7222	Second Stage A (z statistic) Centered R^2 = .5675
CRP Enrollment (lagged)	2.38×10^{-8} (22.36***)	
Share of Exports	6.06×10^{-8} (28.54***)	
Foreign Exports	-3.69×10^{-4} (-25.48***)	
Per Capita Personal Income	5.50×10^{-6} (7.23***)	
Price of Oats	0.2384 (36.48***)	
Price of Rye	4.95×10^{-2} (11.68***)	
Price of Corn	0.3502 (66.53***)	
Price of Barley	0.4824 (57.00***)	
Price of Wheat (lagged)		1,040.920 (5.95***)
Quantity Produced (lagged)		3.11×10^{-2} (76.69***)
Target Price		-6,022.492 (-17.14***)
Beale = 0 to 3		-4,946.058 (-10.84***)
Beale = 4		-6,849.359 (-5.66***)
Intercept	1.766 (39.48***)	33,374.760 (16.42***)
n = 2,681		

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Huber/White/sandwich and kernel-based estimators.[40] In addition, the model

was run using general method of moments which tends to yield consistent

estimators regardless of heteroskedasticity and autocorrelation (Vogelsang,

2001).

Three models were run with the data. Model I utilizes the entire

dataset. Model II was run excluding the bottom ten percent of counties

according to average number of acres planted in wheat across the study period.

These counties are excluded in Model II in order to test the robustness of the

results with more perennial wheat-producing counties. Model III was run

with only the top ten percent wheat producing counties.[41]

Model I

The results of Model I are presented in Table 4. All of the coefficients

in the two-stage model have the expected signs except for target price (T),

which will be discussed in the following paragraph. The coefficient of the

price of wheat is positive and significant in the second stage regression. In the

first stage regression, the coefficient for acres enrolled nationally in the CRP is

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[40] This was done using the "robust" and "bw(#)" options in conjunction with the "ivreg2" command in Intercooled Stata 8.0.

[41] These top-producer counties were located in Arkansas, Colorado, Idaho, Illinois, Indiana, Kansas, Kentucky, Minnesota, Missouri, Montana, Nebraska, New Mexico, North Dakota, Ohio, Oklahoma, Oregon, South Dakota, Tennessee, Texas and Washington.

positive and significant, indicating that increasing the number of acres in the program exerts upward pressure on the price according to predictions discussed earlier. The coefficient for CRP enrollment is understandably small, given that the model reflects marginal changes. In other words, increasing program enrollment by one acre will have a minuscule impact on the market price at the state or national level simply due to magnitude. However, as program enrollment increases more, the effect on price will naturally be proportionally larger. For example, national wheat-base CRP enrollment increased by approximately 3.6 million acres in fiscal year 1987. According to the model, such an increase in program enrollment can be expected to result in a 9 cent increase in wheat price, all else equal.

The seemingly counter-intuitive sign on the coefficient for target price is in itself an interesting finding, as the magnitude and significance level of the coefficient for target price exceeds that of lagged wheat price. As alluded to in the previous section, it can be explained by the presence of the 0/92 program. This provision was a voluntary acreage diversion program which allowed farmers to plant between zero and 92 percent of their allotted acres in wheat and continue to receive up to 92 percent of the applicable deficiency payments on the uncultivated land, so long as conservation measures were carried out on

the diverted land, or if planted in approved non-program crops.[42] This being

the case, the greater the amount by which the target price was anticipated to

exceed the market price in a given cropping year, the greater the incentive for

farmers to divert land from production.[43]

    As discussed in the previous section, slippage can be estimated by

combining the preceding results with those for the price of wheat in the

second stage regression, as the CRP enrollment variable is endogenous. Based

on the definition for slippage given in Equation 3, percent of price-feedback

LLS can be estimated by directly measuring the price-feedback effect at the

county level, as follows:

$$\frac{\delta A}{\delta R} = \frac{\delta A}{\delta P} \cdot \frac{\delta P}{\delta R} = \beta_P \beta_R. \qquad \text{(Eq.12)}$$

Multiplying by the number of counties (n) in the dataset yields the estimated

slippage at the national level:

$$n\beta_P \beta_R. \qquad \text{(Eq.13)}$$

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[42] This provision was reauthorized in section 301 of the 1981 Farm Bill and section 308 of the 1985 Farm Bill. The program was altered in 1993, which allowed farmers to collect only 85 percent of deficiency payments on diverted land (see Hoffman, Schwartz & Chomo, 1995, pp.22-23).

[43] This coincides with the negative relationship between "diversion payments" and acres planted in corn found by Houck and Ryan (1972).

Table 6.

Model II Results

	First Stage P (instrumented) (z statistic) Centered R^2 = .7180	Second Stage A (z statistic) Centered R^2 = .5633
CRP Enrollment (lagged)	2.41x10⁻⁸ (21.55***)	
Share of Exports	6.03x10⁻⁸ (27.80***)	
Foreign Exports	-3.75x10⁻⁴ (-24.63***)	
Per Capita Personal Income	6.43x10⁻⁶ (8.12***)	
Price of Oats	0.2332 (33.55***)	
Price of Rye	4.47x10⁻² (9.86***)	
Price of Corn	0.3449 (62.21***)	
Price of Barley	0.4920 (55.40***)	
Price of Wheat (lagged)		1,451.748 (6.08***)
Quantity Produced (lagged)		3.08x10⁻² (75.74***)
Target Price		-6,754.920 (-17.32***)
Beale = 0 to 3		-5,793.271 (-11.63***)
Beale = 4		-7,899.628 (-5.72***)
Intercept	1.7837 (37.98***)	37,678.400 (16.69***)
	n = 2,413	

The model therefore indicates a national slippage rate of 8.13 percent for wheat due to price feedback effects for any ΔR.

Model II

The results for Model II are presented in Table 5. Excluding the bottom ten percent of wheat-producing counties over the study period increased the slippage rate, albeit only slightly, to 8.44 percent. The remainder of the coefficients are also consistent with Model I. This indicates that the model's findings are indeed robust.

Model III

Model III, presented in Table 6, generated rather striking results. The counties included in this model comprised the top ten percent wheat-producing counties in the nation during the study period. As such, these counties can be expected to have land and climates most suitable for wheat production relative to the remainder of the nation, and they can be expected to have the advantage of external economies of scale; both of these factors constitute an availability of resources for output expansion, which corresponds to a greater own-price elasticity of supply. The coefficient for price of wheat is therefore considerably higher for the counties in this sample than in the previous models.

Table 7.

Model III Results

	First Stage P (instrumented) (z statistic) Centered R^2 = .6944	Second Stage A (z statistic) Centered R^2 = .3966
CRP Enrollment (lagged)	5.72×10^{-8} (14.02***)	
Share of Exports	6.05×10^{-8} (11.93***)	
Foreign Exports	-8.61×10^{-4} (-16.71***)	
Per Capita Personal Income	-1.74×10^{-5} (-6.63***)	
Price of Oats	0.1976 (8.62***)	
Price of Rye	-6.41×10^{-3} (-0.41)	
Price of Corn	0.3943 (17.95***)	
Price of Barley	0.5057 (17.11***)	
Price of Wheat (lagged)		14,746.360 (10.27***)
Quantity Produced (lagged)		1.96×10^{-2} (31.22***)
Target Price		-42,072.730 (-16.99***)
Beale = 0 to 3		-16,296.780 (-2.68***)
Beale = 4		-36,538.930 (-2.71***)
Intercept	3.5560 (22.97***)	263,050.000 (19.52***)
	n = 268	

The calculated slippage rate for this group of counties is 22.6 percent, which is quite substantial. The precise level to which this slippage offsets the stated environmental goals of the program, of course, is dependent on the sensitivity of the land in these areas. The effect is significant, however, particularly as these counties produce approximately 55 percent of the nation's wheat and a majority of these counties are located within the top fifteen states in terms of acres enrolled in the CRP (see Appendix), with the exception of Iowa and Mississippi.[44] In short, the greatest slippage rates are seen in the states that have the greatest CRP enrollment.

Interestingly, the coefficient for target price is significantly higher in Model III than in previous models as well. This is consistent with the income-enhancing aspects of the 0/92 program discussed earlier and the sensitivity of these counties to downturns in the commodity market due to the relative importance of commodity production to the local economy.

The goodness of fit of the second stage regression and the significance levels of most of the variables decrease in Model III; this decrease in statistical significance is particularly true for the Beale Code parameters and for the substitute commodity variables. This is likely due to the increased

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[44] Also note that 165 of the 268 counties in this dataset are located in nine of the twelve states studied in Wu (2000; 2005) and Roberts and Bucholtz (2002; 2005).

homogeneity of the counties in the smaller sample in terms of urbanization

and in commodity production.

<center>Conclusion</center>

This analysis used cropping data from all contiguous United States

counties that planted wheat in any of the six years prior to implementation of

the Conservation Reserve Program and eight years after. The price of wheat

was instrumented with aggregate enrollment in the CRP treated as an

endogenous variable in order to detect increases in acres planted, a

phenomenon referred to as land loss slippage, resulting from price increases

brought about by reduction in supply due to land retirement under the

program. The model finds a positive and significant correlation between

aggregate CRP enrollment and the price of wheat at the state level. Using this

estimate of the increase in wheat price resulting from a given increase in CRP

enrollment and the estimate of the effect of this price increase on acres planted

in wheat, the rate of slippage was estimated to fall within the range of 8.13 and

22.6 percent.

Offsetting increases in land use resulting from a program designed to

reduce land use for environmental purposes carries potentially serious policy

implications. If the land being activated is highly erodible, then any

environmental benefits of land retirement under the program will be

<center>133</center>

significantly compromised. Any estimate of the degree of damage done to the program's stated conservation goals would require numerous assumptions as to the type of land being activated – the degree to which the highest quality land, which as previously discussed will be the first used by profit-maximizing farmers, is already in use, thus indicating whether land being activated is high or low quality and the degree to which this is an indicator of erodibility.

However, putting aside questions of magnitude, any activation of new land or of land previously left fallow carries environmental consequences, be it loss of soil productivity due to interruptions in crop rotation, wind erosion due to tillage, or clearing of land cover resulting in water erosion and potential loss of wildlife habitat. As stated by Laycock (1988): "Plowing new land… following retirement of substantial amounts of erodible land would negate the effects of a very expensive conservation program" (p.7). These results would therefore clearly be problematic to the putative environmental thrust behind the CRP. However, if the primary intent of the program was to generate largesse through program rental payments, the results of the preceding model would not create a significant hindrance to achieving that goal.

CHAPTER 7

CONCLUSIONS

Summation

Unintended effects often accompany public policy. In this study, the

presence of price-feedback land-loss slippage (LLS) for wheat in the

Conservation Reserve Program has been indicated. Previous studies

investigating the presence of other types of slippage have been carried out

with varying results. However, when such effects are investigated, the

question of relevance should be raised.

LLS in particular has potentially serious ramifications for a program

aimed at diminishing soil erosion through the reduction of cultivated lands; as

was stated in a USDA (2006) report: "[I]f payments are structured largely for

income support (albeit with the condition that recipients must meet some

environmental standards), a given level of conservation program funding is

likely to produce less environmental gain" (p.28). Activation of new land,

particularly if that land is itself environmentally sensitive, can result in an

offset of any environmental benefits generated by the program. This being the

case, the relevance of the slippage question is evident. If policies are intended

to fulfill some purpose, effects that directly conflict with that purpose should be detected so that they can be dealt with or compensated for to the extent possible. All of this assumes, however, that the policy is intended, primarily at least, to carry out the purpose stated.

The question of relevance takes on a different tenor when joined with the question of "purpose in fact" (Posner, 1971). If the intendment of the policy is not conservation but rather distribution of income to landowners, particularly utilizing rental payments for program enrollment, slippage becomes a far less relevant issue for this study as well as for all previous treatments of the question. Therefore, in this case study, the presence of an unintended effect provides an arrow that points to the question of purpose in fact.

This research endeavor argued that the purpose in fact of the CRP when it was formulated and adopted in 1985 was primarily to provide income support to financially strapped farmers. This position was supported using a three-pronged argument. First, an historical perspective on the relationship between conservation policy and farm policies explicitly aimed at supporting farm income was provided. The 1956 Soil Bank Act, which authorized a program virtually identical to the 1985 CRP and was framed as intended to aid farmers by reducing surpluses created by wartime stimulative agricultural programs, was pointed out as particularly noteworthy.

Next, the CRP was scrutinized in terms of policy typology. The argument was proffered that the CRP, like farm commodity programs before it, is better described as distributive (Lowi, 1964) or clientele (Wilson, 1973) than as regulatory, due to the concentration of benefits with farmers and diffuseness of any benefit accrued to the environment.

Lastly, the agricultural lobby's response to a change in its policy environment was examined. Farm interests held nearly absolute sway in the agricultural policy arena for much of the twentieth century, but the rise of the environmental lobby as a national political force with the backing of increasing public awareness and sentiment created a threat to the dominance of the farm lobby. Additionally, agriculture was being faced with the political climate created by the Reagan Administration that favored decreased federal involvement in the marketplace, including the agricultural market. The farm lobby acted preemptively by advocating a program with a conservationist policy image but that accomplished their own purposes. This not only provided farmers with income support in an adverse market, but it gave the environmental lobby a large symbolic victory and allowed lawmakers to claim a proactive stance on conservation, in effect serving as an attempt to inoculate the agriculture policy subsystem against incursion by potentially harmful pressure from conservationists. In the case of the CRP, soil erosion reductions have been realized, although the extent to which they may have been offset by

slippage (of all types) remains an open question. This study found LLS from price feedback effects that ranged from moderate but statistically significant in the broader models to quite large and significant in the narrower model of the top wheat-producing counties. Although the precise amount by which this price-feedback LLS offset soil conservation benefits was not examined in this research, previous research (Wu, 2000) adduced reductions in soil conservation benefits between 9 to 14 percent due to LLS resulting from substitution effects.

Taking all of the foregoing factors into account creates a strong case for the position that the CRP was formulated and adopted in 1985 primarily for the purpose of supporting farmer incomes with conservation goals being of secondary concern. With this in view, slippage becomes likewise of secondary import. LLS has potential deleterious effects on erosion reduction and the protection of natural habitats, as well as upon surplus reduction goals. However, LLS poses no threat to the stream of rental payments to program land.

As demonstrated by Shoemaker (1989a), Johnson, Wolcott and Aradhyula (1990), Shaik, Helmers and Atwood (2005) and Lambert, Sullivan, Claassen and Foreman (2006), farmers garner significant benefits from the payment stream both from immediate income supplementation and from increases in land value. The activation of new cropland would allow the

agricultural industry to enjoy the benefits of both sustaining the income levels

of struggling farmers – even allowing the removal of some small farm

operations from production entirely, as found by Lambert et al (2006), which

itself yields benefits to remaining producers through a reduction in

competition – and potentially of garnering economic rents from selling the

additional commodities produced on the newly activated land at inflated

prices.

<u>Addenda</u>

This research follows the timeframe of Wu (2000; 2005) and Roberts

and Bucholtz (2002; 2005) and focuses on the CRP as it was initially

authorized in the 1985 Farm Bill. However, the CRP was subsequently

reauthorized in 1990, 1996 and 2002 with incremental changes. These

changes may serve either to sustain or refute the theory laid out in this work.

A theory is presented in this study to explain the interaction between

farm and conservation interests during the formulation and adoption of the

CRP. According to this theory, a subsystem that is threatened with incursion

can act preemptively and disarm the threat by co-opting the language of its

opponent in order to frame a policy favorable to its own interest as already

friendly to that represented by the incurring group. Doing so not only

deprives the new opponent of a target for its attacks on the status quo of the

subsystem, but it allows the enactment of a policy that incurs benefits on the existing powers that be in the subsystem.

The sustainability of this theory can be tested by examining the behavior of the farm and conservation interests at the time of the subsequent reauthorizations of the CRP and by evaluating who enjoys the greatest benefit from the incremental changes that occurred with these reauthorizations.

In the 1990 reauthorization (104-Stat-3359), wetland and wildlife habitat restoration was added to the list of objectives for the program. This provision potentially expanded the positive environmental impacts of the program, but also expanded the types of land that could be enrolled, potentially benefiting landowners. In the 2002 reauthorization (116-Stat-134), enrollment was limited to land that had been cropped in three of the previous six years. While clearly a provision intended to prevent abuse of the program, this did constitute a restriction on landowner behavior. Additionally, USDA proposals for the 2007 reauthorization (USDA, 2007) call for the use of program land for the growth of perennial vegetation that can be harvested, with the proviso that harvesting not interfere with wildlife nesting seasons, for use as biomass fuel. This would also have impacts both on landowners and on soil conservation.

If these changes can be demonstrated to primarily benefit farmers as did the CRP as originally authorized, then this would indicate that the farm

lobby has been successful at using preemptive policymaking to preserve their position of dominance. If the opposite proves to be the case, it would be evidence that conservationists have been successful at gaining ground within the agricultural policy arena. The outcome that is predicted is that the farm lobby has continued to advocate favorable changes to the program with some increasing success on the part of conservation interests to expand the environmental benefits of the program as these interests gain an increased foothold within the subsystem. As was the case in 1985, other forces can be expected to be seen at work as well. Spending on programs was a major issue when the 1985 Farm Bill was being formulated; pressure to control expenditures on the CRP can be expected to continue to be a force influencing later reauthorizations. One might expect the 2002 provision limiting enrollment to be a response to such pressure.

In conclusion, if study of the subsequent reauthorizations indicates growing discord between conservation and farming interests accompanied by waning benefits to farmers, it would tend to refute the preemptive policymaking theory laid out above. However, if farm interests continue to maintain their dominance in garnering increased benefits for their members and there continues to be friendliness toward conservation issues on the part of farmers with little conflict observed with conservation interests, the theory is sustained.

APPENDIX

Table A-1.
State CRP Enrollment (Total), Ranked by Number of Contracts
March 1986 – June 1992

Rank	State	Contracts	Rank	State	Contracts
1	Iowa	35,667	25	Idaho	3,907
2	Kansas	31,020	26	Arkansas	3,418
3	Minnesota	27,224	27	Virginia	3,186
4	Missouri	22,804	28	Pennsylvania	2,649
5	Wisconsin	20,789	29	Florida	2,497
6	Texas	19,762	30	Oregon	2,012
7	Illinois	19,685	31	Louisiana	1,785
8	North Dakota	18,520	32	New York	1,729
9	Georgia	14,718	33	New Mexico	1,518
10	Nebraska	14,449	34	Utah	997
11	Mississippi	13,567	35	Maine	941
12	South Dakota	12,476	36	Wyoming	795
13	Indiana	11,539	37	Maryland	707
14	Tennessee	10,830	38	California	511
15	Alabama	10,113	39	West Virginia	35
16	Oklahoma	8,688	40	Delaware	30
17	Ohio	8,542	41	New Jersey	30
18	Kentucky	8,102	42	Nevada	10
19	Michigan	8,039	43	Vermont	10
20	Montana	7,925	44	Massachusetts	5
21	South Carolina	6,737	45	Connecticut	1
22	North Carolina	6,497	46	Arizona	0
23	Colorado	6,207	47	New Hampshire	0
24	Washington	4,483	48	Rhode Island	0

Source: ERS Statistical Bulletin 925

Figure A-1. Number of Contracts

Table A-2.
State CRP Enrollment (Total), Ranked by Number of Acres
March 1986 – June 1992

| Rank	State	Acres	Rank	State	Acres
1	Texas	4,150,485	25	Michigan	332,853
2	North Dakota	3,180,569	26	South Carolina	278,071
3	Kansas	2,937,863	27	Arkansas	260,006
4	Montana	2,854,307	28	Wyoming	257,224
5	Iowa	2,224,834	29	Utah	233,978
6	South Dakota	2,120,255	30	California	187,499
7	Colorado	1,978,390	31	North Carolina	151,008
8	Minnesota	1,928,954	32	Louisiana	146,571
9	Missouri	1,726,835	33	Florida	134,860
10	Nebraska	1,425,423	34	Pennsylvania	101,078
11	Oklahoma	1,192,504	35	Virginia	79,556
12	Washington	1,047,029	36	New York	64,498
13	Idaho	877,059	37	Maine	38,490
14	Mississippi	841,826	38	Maryland	20,392
15	Illinois	811,926	39	Nevada	3,123
16	Wisconsin	746,530	40	Delaware	995
17	Georgia	706,459	41	New Jersey	723
18	Alabama	573,190	42	West Virginia	618
19	Oregon	530,766	43	Vermont	193
20	New Mexico	483,181	44	Massachusetts	32
21	Tennessee	475,625	45	Connecticut	10
22	Indiana	462,649	46	Arizona	0
23	Kentucky	451,317	47	New Hampshire	0
24	Ohio	377,089	48	Rhode Island	0

Source: ERS Statistical Bulletin 925
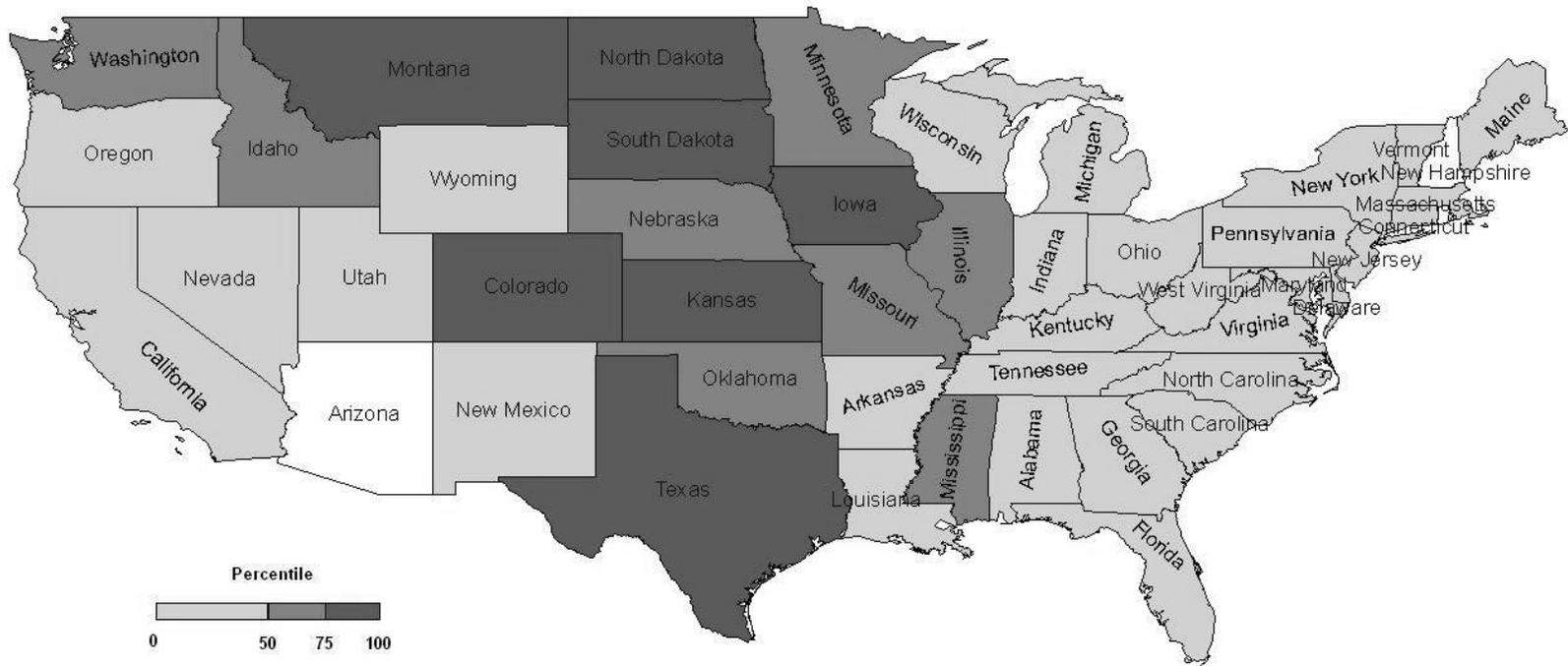
Figure A-2. Total Number of Acres Enrolled

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