Premium Subsidy Changes and Demand for Crop Insurance

Dong Won Lee, Matthew Diersen, Larry Janssen and Cole Gustafson

Agricultural and Rural Finance Markets in Transition
Proceedings of Regional Research Committee NC-1014
Washington, DC
October 2-3, 2006

Premium Subsidy Changes and Demand for Crop Insurance

by

Dong Won Lee, Matthew Diersen, Larry Janssen and Cole Gustafson[•]

Abstract

Crop insurance is widely used on major crops raised in the Northern Plains. Prospective reductions in the crop insurance premium subsidy are commonly expected to result in lower use of insurance. Corn and soybean producers in South Dakota responded to the shift in subsidy levels beginning in 2001 by shifting toward revenue products and higher amounts of insurance. Producers chose a product type depending on the size of the revenue price election level, relative yield and premium rate. Producers chose an amount of liability depending on the relative yield, acres insured, revenue price election level and premium rate.

Keywords: crop insurance, premium rate, yield history

[•] Lee is a graduate student, Janssen is a professor and Diersen is an associate professor in the Department of Economics, South Dakota State University. Gustafson is a professor in the Department of Agribusiness and Applied Economics, North Dakota State University.

Introduction

Crop insurance is widely used on major crops in the Northern Plains. The extensive federal subsidy on premiums is often cited as a reason for the increases in usage and coverage amounts. At the national level the subsidy amounts to $2.7 billion or 58.5 percent of the premiums for crop insurance in 2006. The liability amount is $49.8 billion with indemnities (as of September 25) of $1.5 billion. Citing budget pressures, there have been proposals to reduce the amount of the subsidy.

The increase in the subsidy level has occurred simultaneously with an increased number of products and coverage possibilities. Most notable has been the introduction and adoption of revenue insurance products. Revenue insurance products can substantially increase the amount of insurance available in a given year. Revenue insurance also facilitates hedging and forward pricing of a crop. Yield trends have also been pronounced in the Northern Plains. There have been steady increases of yields on corn, while steady or declining yields have occurred in spring wheat. A producer's response to these myriad factors may exceed any response to subsidy amounts or changes.

Our objective is to examine how policy changes influence insurance coverage in the region. We will model behavior under a regime that has a choice among types of insurance products. We will also quantify the likely response to a change in the premium subsidy and attempt to forecast outcomes.

The implication of crop insurance usage goes beyond the farm-level. Because of the close tie to revenue insurance, marketing behavior is also affected. Reducing the amount of revenue insurance used could reduce forward pricing activity affecting elevators and end-users. A change in insurance purchasing behavior would also affect the repayment capacity of producers with carryover into the lending environment.

Literature Review

A historical perspective on crop insurance is given by Glauber and Collins (2002). They document the presence of some type of subsidy since the inception of federal crop insurance in the late 1930s. Substantial changes in the premium subsidy occurred with the Agricultural Risk Protection Act (ARPA) of 2000. The subsidy levels at coverage amounts above the 65 percent level were increased starting with the 2001 crop year. The premium subsidy was also extended to the price portion of revenue insurance, reducing its cost relative to yield insurance. The prominence of the subsidy amount has received media coverage as a public policy problem, e.g., Wirtz (2004). The absolute amount of the subsidy is seen as large, especially when coupled by the failure of the subsidy to stop disaster aid.

Several studies have examined factors that influence producers' demand for crop insurance. The studies done in the late 1990s focused on the decision whether to adopt insurance. Those works often focused on a survey or similar analysis of farm level information. Smith and Baquet (1996), for example, used a Heckman two-stage procedure and farm-level data from Montana wheat producers who could have purchased yield insurance. They examined factors determining both participation and coverage level choices. Their results show producers did not respond to the premium rate when making the participation decision. However, they found an inverse relationship between the premium rate and the coverage levels chosen. Only producers with little expected benefits from insurance were likely to lower their coverage levels as premium rates rise.

Mishra and Goodwin (2003) analyzed what factors influenced a producer's choice between yield and revenue insurance. Using farm-level data and a logit model, they show that off-farm income and farm productivity was negatively related to the purchase of insurance. Other aspects, such as the amount of debt and the use of contracting had a positive relation with the purchase of insurance. The premium subsidy and the liability amount were also positively related. Producers that purchased revenue insurance had a higher debt level and a greater level of education.

Similarly, Serra, Goodwin, and Featherstone (2003) modeled the purchase decision of Kansas producers. Lagged insurance expenditures and acres planted were positively related to the participation decision. Wealth and net income were negatively related to the purchase decision, as was the county average premium rate. The study covered 1993 through 2000, so the effects of ARPA were not addressed.

Sherrick et al.(2004), using a survey of producers from Illinois, Indiana, and Iowa, found that age, debt levels, and farm size are positively related to purchasing insurance and favoring revenue products. Yield risk was also associated with buying insurance.

Using county-level data from California grape growers over the period 1986 to 1996, Richards (2000) analyzed a two-stage econometric model where the choice of coverage level and the amount of insurance are considered. The result shows that the demand for insurance at the 50 percent yield coverage level is elastic whereas inelastic demand is found from higher coverage levels.

Subsidy effects on insurance decisions were not directly considered in the above studies. However, a number of studies have begun to address the role of premium subsidy, which positively affects producer demand for crop insurance. Makki and Sonwaru (2001) model factors that influence producer choices of insurance products and alternative coverage levels. They used an income level variable as a factor in the choice of an insurance product, along with other insurance factors found from previous research. Yield span, a risk of loss measure, and loss history determine coverage levels. They also demonstrated presence of adverse selection in the Iowa corn insurance market from an empirical finding that the higher farmers' risk and income, the greater their willingness to select revenue insurance and higher coverage levels.

The current insurance situation is heavily influenced by the subsidy changes from ARPA. In the President's Budget for Fiscal Year 2007, the administration listed lowering the premium subsidy on crop insurance as a potential budget reducing measure. This generic proposal is not a statement to repeal ARPA. Similarly, Babcock, Hart and Hayes (2004) argue the use of relativity factors when setting premium rates may have encouraged use of the low coverage levels observed before ARPA. After ARPA the new subsidy structure may still influence coverage levels chosen across product types. Wang, Hanson, and Black (2003) show the subsidy structure in place under ARPA may lead producers to make hedging and insurance choices at different levels than they would under different structures.

Conceptual Framework

In the literature the main avenues to analyze the insurance decision were surveys or use of insurance policy data. The models were primarily conducted at a time when insurance was not as widely used as it is at this time. Another implication from the literature was that a variety of potential policy changes were possible suggesting a general framework is necessary to model the decisions.

The insurance situation in the Northern Plains has differed from the national situation. Producers in the Northern Plains tended to purchase insurance on the principal cash crops raised by the late 1990s. Thus, the insurance adoption decision was not seen as relevant for analysis. The type of coverage used has varied across crops and years.

In South Dakota producers insured a large portion of corn acres during the study period of 1997 to 2004. The corn acres insured did not vary much while the liability level fluctuated with the price election level available on insurance (table 1). The impact of ARPA is evident in the substantial increase in the subsidy between 2000 and 2001; the latter being the first year ARPA would have influenced the purchase decision. The use of revenue insurance seems to support the subsidy shift of ARPA, but this is not universal across crops.

Producers in South Dakota that insured soybeans have a tendency to mirror the insurance decisions made for corn. A large portion of planted acres were insured during the sample period (table 2). There was a shift toward more total acres planted rather than a greater portion being insured. The ARPA effect on the subsidy is clearly evident in the change from 2000 to 2001. The used of revenue insurance fluctuated widely over time for soybeans. In 2001 only 16 percent of soybean acres were insured with a revenue product.

The pattern of insurance purchased in North Dakota on wheat is similar to the pattern observed for corn in South Dakota (table 3). North Dakota is the focus of wheat insurance because in South Dakota both winter and spring wheat are planted and insured, making analysis difficult to interpret. In addition, looking at wheat coverage in North Dakota allows for potential insight into the yield drag problem.

Aside from anecdotal evidence about the insurance purchase decisions a short survey was administered at several Extension workshops in South Dakota. Producers were asked to rate several factors suspected of being relevant to insurance decisions. A total of 72 producers and insurance representatives rated insurance factors on an importance scale from 1 (for not important) to 5 (for very important). Participants rated premium cost as the most important factor (table 4). However, each factor was rated as important to varying degrees. The survey results support the inclusion of several factors in explaining the insurance decision, i.e., the subsidy is not the only thing that matters.

Participants were then read a statement summarizing the typical portion of premiums subsidized under current legislation. We then told them about the budget proposal without quantifying how much the subsidy would be reduced. The participants then responded with a rating of likely responses to a lower subsidy premium. Participants rated reducing the coverage level as the most likely outcome (table 5). Overall the ratings are not as high as in the first question, suggesting more uncertainty about future behavior. There was some disparity as far as a willingness to switch product types. Also, there was a general reluctance to pay the higher premiums.

Conceptually, a model was needed that addressed the choice among the main product types, revenue and yield insurance. The price election level available across the types was suspected of being a driving factor in the choice, especially for soybeans. The subsidy has also had a large enough effect to be explicitly accounted for in the analysis. The subsidy was tied with not only the choice of product type, but the amount of insurance purchase. A model that measures the amount of insurance was also necessary. Simultaneity is expected, in part because the decisions producers make are done in tandem with one another. They pick a type and level of coverage at the same time. Another source of simultaneity comes from the premium structure. Generally revenue insurance costs more than yield insurance.

Empirical Models and Data

A preliminary county-level model was set up with two parts. The first part was a probit model where the type of insurance product purchased was a function of the relative yield (defined below), the acres insured, the premium rate, the price election level on revenue insurance, and a dummy variable for after 2000. The second part was a linear regression of the maximum indemnity purchased as a function of the same variables. The main premise was to assess whether the revenue price dictated the type of product chosen and what may explain the amount of insurance purchased.

The relative yield variable is defined as the policy-level yield for a given producer relative to the county yield. The ten-year average yield for the county was computed and then for each policy and year, the difference between the policy yield history and the county yield was divided by the county yield. The variable is a proxy for the risk of loss commonly used in the literature. A farm with the lower average yield than its county level expected yield is likely to be more risk averse than otherwise.

To measure individuals' demand for crop insurance, policy-level data are used. Product type, premium outlay, indemnity amount, price election level, insured acres, and actual yield history for APH (Actual Production History), CRC (Crop Revenue Coverage), and RA (Revenue Assurance) products were selected by policy. In this paper, the analysis only includes corn and soybeans in South Dakota. The insurance data are from USDA-RMA which maintains records of all individual producers who buy federally-backed crop yield or revenue insurance. The data are at the unit level and were aggregated to the policy level. The data scope used in this study is the set of crop years from 1997 through 2004.

County yield data are from USDA-NASS and a longer history is used. For example, for 1997 the expected yield at the county level was averaged from 1987 to 1996.

The sample means for Kingsbury County in South Dakota show the typical levels for the variables (table 6). The premium rate is the premium outlay (after the subsidy), divided by the maximum indemnity. The results are discussed in the next section. The main concern with the preliminary analysis was the unexpected positive relationship between the premium rate and the indemnity amount. The heavy weighting in the sample of a common purchasing pattern within a county is likely responsible.

Moving to the state level model, a system of equations is considered to account for potential simultaneity among the product type, the indemnity amount, and the premium rate. The equations are all initially set up to be run with ordinary least squares. Then, three stage least squares estimation is used to address simultaneity. The three regression models are specified as follows:

$$PT_i = a_{1i} + b_1 RY_i + c_1 AC_i + d_1 PD_i + e_1 PR_i + D_{1i} + e_{1i} \quad (1)$$
$$MI_i = a_{2i} + b_2 RY_i + c_2 AC_i + d_2 PR_i + e_2 PE_i + D_{2i} + e_{2i} \quad (2)$$
$$PR_i = a_{3i} + b_3 PT_i + c_3 EY_i + d_3 PE_i + e_3 MI_i + D_{3i} + e_{3i} \quad (3)$$

where PT_i = product type, 1 = revenue insurance, 0 = yield insurance
RY_i = relative yield
AC_i = total acres insured
PD_i = difference of price elections of revenue and yield products
PR_i = premium rate (premium outlay / maximum indemnity)
MI_i = maximum indemnity (liability)
PE_i = price election of chosen product type
EY_i = expected yield at each county
i = year (1997-2004)
D_i = 1 for observations in 2001-2004
= 0, for observations in 1997-2000
e_{Ti} = error term

Results

At the county level, the importance of the independent variables is evident in the probit results (table 8). Several of the variables are significant in the model of choosing revenue insurance. The greater the relative yield, the more likely a producer will purchase revenue insurance. The higher the revenue price election the more likely also. The acres insured variable was not significant, suggesting size was less important than in other studies. The premium rate has a positive sign, indicating the higher the outlay for insurance the more likely the producer is to purchase revenue insurance. These variables were similar for each crop. The exception is the indicator variable for pre- and post-2000 act. The coefficient is significant in the corn model, but not in the soybean model. For corn coverage, there was a greater tendency to purchase revenue insurance during the latter sample time.

The variables were also important when modeling the amount of insurance purchased using ordinary least squares (table 8). Producers with higher relative yields purchased more insurance. Acres insured also had a positive relation with the amount of coverage; larger farms insured more acres. Acres did not affect the type of coverage, but the overall amount purchased. There could also be a positive correlation between policy acres and time that is being captured by the model. The revenue price election level had different signs for corn and soybeans. For corn, the positive sign is as expected. The greater the price level the larger the incentive to purchase more insurance for hedging purposes. For soybeans, the negative sign could be a function of large amounts of yield insurance being purchased in low revenue election level years. Thus, a simultaneous estimation may clarify the disparity. The indicator variable is positive and significant for both crops, suggesting that even for soybeans where there was not a pronounced shift to revenue insurance producers purchased larger amounts of coverage.

At the state level the model is less susceptible to the sample problem experienced at the county level. The effect of ARPA is evident in each equation and each crop (tables 9 and 10). The coefficient estimate is positive in the product type equation, signifying more revenue insurance is purchased after ARPA. The premium rate has a positive coefficient in the product type equations, reflecting a greater likelihood of purchasing revenue insurance when premium rates are higher. Causality, however, cannot be discerned from the relationship. ARPA also caused a shift in the amount of coverage purchased. The coefficient estimate is positive and significant across crops for the indemnity model. These relationships hold across corn and soybeans.

The premium rate coefficient has a negative sign on the maximum indemnity equations, consistent with the previous literature. Thus, reducing the subsidy would increase the premium rate and reduce the amount of coverage purchased.

In the premium rate models there are differences between the corn and soybean models. The ARPA variable, Post2000, has a negative sign in the corn models and a positive sign in the soybean models. The implication is that producers purchased more corn insurance (as the shift was positive in the maximum indemnity models), but they settled on a level at a lower per-unit cost of coverage. In soybeans ARPA resulted in a shift to a higher premium rate. Across crops, the sign of the product type coefficient changes signs in the 3SLS model compared to the OLS model.

Conclusion

The premium subsidy, especially in the shift after ARPA, has an effect on the type and amount of insurance purchased. A reduction in the subsidy would likely result in a lower indemnity amount and an unclear shift among product types. Additional analysis is necessary to fully explore and explain the simultaneity in the systems of equations. Further, the model should be expanded to North Dakota wheat to assess the full scope of any subsidy change.

References

Babcock, B.A., C.E. Hart, and D.J. Hayes, "Actuarial Fairness of Crop Insurance Rates with Constant Rate Relatives." *American Journal of Agricultural Economics*, 86(2004): 563-575.

Glauber, J.W. and K.J. Collins. "Crop Insurance, Disaster Assistance, and the Role of the Federal Government in Providing Catastrophic Risk Protection." *Agricultural Finance Review* 62 (2002): 81-101.

Goodwin, B.K., "An Empirical Analysis of the Demand for Multiple Peril Crop Insurance." *American Journal of Agricultural Economics*, 75 (1993): 425-34.

Makki, S.S. and A. Somwaru, "Evidence of Adverse Selection in Crop Insurance Markets." *The Journal of Risk and Insurance*, 68 (2001): 685-708.

Mishra, A.K. and B.K. Goodwin, "Adoption of Crop versus Revenue Insurance: A Farm-Level Analysis." *Agricultural Finance Review* 63 (2003): 143-155.

Richards, T.J. "A Two-State Model of the Demand for Specialty Crop Insurance." *Journal of Agricultural and Resource Economics*, 25 (2000): 177-194.

Sherrick, B.J., P.J. Barry, P.N. Ellinger, and G.D. Schnitkey, "Factors Influencing Farmers' Crop Insurance Decisions." *American Journal of Agricultural Economics*, 86 (2004): 103-114.

Smith, V.H. and A.E. Baquet, "The Demand for Multiple Peril Crop Insurance: Evidence from Montana Wheat Farms." *American Journal of Agricultural Economics*, 78 (1996): 189-201.

Serra, T., B.K. Goodwin, and A.M. Featherstone, "Modeling Changes in the U.S. Demand for Crop Insurance during the 1990s." *Agricultural Finance Review* 63 (2003): 109-125.

Wang, H., S.D. Hanson, and J.R. Black, "Efficiency Costs of Subsidy Rules for Crop Insurance." *Journal of Agricultural and Resource Economics*, 28(2003): 116-137.

Wirtz, R.A. "Crop insurance turning dry fields into cash crop." *Fedgazette,* March (2004).

Table 1. Insurance History in South Dakota Corn

Year	Premium ($ million)	Subsidy ($ million)	Liability ($ million)	Acres (million)	Percent Revenue
1997	35.4	15.9	365	3.5	20
1998	37.6	16.9	430	3.4	19
1999	41.8	15.0	401	3.5	30
2000	50.5	15.3	512	3.9	48
2001	62.5	36.8	562	3.9	67
2002	64.2	37.4	623	4.1	72
2003	82.1	47.3	683	4.1	80
2004	114.1	66.1	865	4.4	84

Source: USDA-RMA

Table 2. Insurance History in South Dakota Soybeans

Year	Premium ($ million)	Subsidy ($ million)	Liability ($ million)	Acres (million)	Percent Revenue
1997	25.6	9.7	353	3.1	44
1998	26.8	9.9	371	3.2	49
1999	31.7	10.5	399	3.7	37
2000	37.7	11.9	475	4.2	47
2001	42.9	24.6	524	4.5	16
2002	38.6	21.9	479	4.1	20
2003	52.4	29.6	518	4.0	56
2004	73.6	41.9	629	4.0	87

Source: USDA-RMA

Table 3. Insurance History in North Dakota Wheat

Year	Premium ($ million)	Subsidy ($ million)	Liability ($ million)	Acres (million)	Percent Revenue
1997	60.8	27.4	719	10.8	7
1998	53.8	23.5	631	9.3	10
1999	128.9	25.8	869	10.6	54
2000	85.7	23.8	722	9.8	54
2001	88.4	50.2	717	9.8	79
2002	74.5	42.7	633	8.9	83
2003	97.7	55.3	697	8.6	92
2004	113.2	65.1	738	8.5	94

Source: USDA-RMA

Table 4. Importance of Factors Influencing Producers' Crop Insurance Decisions

County	Product Type	Coverage Level	Premium Cost	Yield History	Liability Amount	Agent Advice
Brookings	4.10	4.10	4.40	4.05	4.00	4.30
Hamlin	3.56	4.28	4.50	4.11	4.06	3.78
Minnehaha	4.40	4.20	4.40	4.20	4.00	3.40
Roberts	3.53	4.06	4.35	4.00	3.71	3.65
Sanborn	3.92	4.33	3.50	4.67	4.42	4.33
Average	3.82	4.18	4.26	4.17	4.01	4.00

Note: Importance rating is based on a Likert scale (1 = not important, 5 = very important).

Table 5. Likelihood of Considering Alternatives under a Lower Subsidy

County	Switch Product Type	Reduce Coverage Level	Pay Higher Premiums
Brookings	3.75	4.00	2.45
Hamlin	3.50	3.67	2.56
Minnehaha	2.80	3.60	2.80
Roberts	3.29	3.29	3.18
Sanborn	2.67	3.08	3.08
Average	3.33	3.57	2.78

Note: Likelihood rating is based on a Likert scale (1 = not likely, 5 = very likely).

Table 6. Variables and Sample Means: Kingsbury County, South Dakota

	Corn	Soybeans
Dependent Variables		
Type (1=Revenue, 0=Yield)	0.56	0.44
Maximum Indemnity ($/acre)	146.58	120.90
Independent Variables		
Relative Yield	-0.45	-0.40
Acres Insured	51.25	57.74
Revenue Price ($/bushel)	2.56	5.56
Premium Rate ($/acre)	0.062	0.055
Post2000 (0 for 1997-2000, 1 otherwise)		
Number of observations	4,858	5,065

Table 7. Sample Means during Each Period for South Dakota

	Soybeans		Corn	
	1997-2000	2001-2004	1997-2000	2001-2004
Yield	32.32	35.25	92.08	106.93
Acres insured	374.39	486.90	322.53	403.58
Max indemnity	118.21	131.75	133.46	174.42
Coverage level	0.66	0.70	0.64	0.69
Premium outlay	4.73	5.05	6.64	7.97
Revenue price	5.97	5.21	2.61	2.51
Yield price	5.62	5.28	2.25	2.17
Relative yield	0.07	0.06	0.05	0.03
Premium rate	0.04	0.04	0.06	0.05

Table. 8. Parameter Estimates for Kingsbury County, South Dakota

	Probit		OLS	
Variable	Corn	Soybeans	Corn	Soybeans
Intercept	-2.00*	-4.19*	-278.66*	100.80*
Relative Yield	0.34*	0.30*	74.89*	20.08*
Acres Insured	0.00	-0.00	0.47*	0.14*
Revenue Price	0.64*	0.70*	107.88*	-13.06*
Premium Rate	1.33*	0.87*	1,705.35*	1,772.37*
Post2000	0.88*	0.04	194.97*	83.05*
Log-Likelihood	-2,882	-2,930		
R^2			0.78	0.87

Note: * denotes statistical significance at the 5% level.

Table 9. Results for South Dakota Corn Models

	OLS		3SLS	
	Coefficient	Standard Error	Coefficient	Standard Error
Product Type				
Intercept	-0.2128	0.0028	-0.6997	0.0041
Relative Yield	0.4951	0.0041	0.7228	0.0049
Acres Insured	0.0001	1.604E-6	0.0001	1.331E-6
Price Difference	0.6428	0.0059	0.9541	0.0060
Premium Rate	4.8985	0.0241	11.3407	0.0556
Post2000	0.4851	0.0014	0.5530	0.0016
Max Indemnity				
Intercept	-36.484	0.4546	-178.65	0.8707
Relative Yield	111.006	0.2934	4.6884	0.6725
Acres Insured	0.0030	0.0001	0.0076	0.0001
Premium Rate	-342.46	1.7758	-2830.64	8.8576
Price Election	76.413	0.1973	195.212	0.4465
Post2000	37.098	0.0990	8.6861	0.2162
Premium Rate				
Intercept	0.0436	0.0006	-0.1179	0.0007
Product Type	0.0172	0.0001	-0.0007	0.0002
Expected Yield	-0.0005	4.461E-6	0.0002	4.803E-6
Price Election	0.0324	0.0002	0.0830	0.0002
Max Indemnity	-0.0002	1.375E-6	-0.0003	1.91E-6
Post2000	-0.0005	0.0001	-0.0013	0.0001

Notes: Each coefficient is statistically significant at the 5% level.
The OLS R^2 levels are 0.30, 0.61, and 0.30 for the respective equations.
The system-weighted R^2 for the 3SLS estimation is 0.40.
There are 370,150 observations in the sample.

Table 10. Results for South Dakota Soybeans Models

	OLS		3SLS	
	Coefficient	Standard Error	Coefficient	Standard Error
Product Type				
Intercept	-0.0889	0.0019	0.2760	0.0046
Relative Yield	0.5597	0.0048	0.1745	0.0064
Acres Insured	-0.00002	1.221E-6	0.0001	1.126E-6
Price Difference	0.2195	0.0013	0.2358	0.0015
Premium Rate	9.9658	0.0372	0.6583	0.1090
Post2000	0.1131	0.0015	0.0647	0.0016
Max Indemnity				
Intercept	4.3254	0.2531	10.4262	0.5812
Relative Yield	106.33	0.1992	42.0512	0.6045
Acres Insured	-0.0013	0.0001	0.0062	0.0001
Premium Rate	-120.22	1.5798	-1890.39	11.1221
Price Election	19.325	0.0451	31.5504	0.1345
Post2000	21.770	0.0585	17.8948	0.1390
Premium Rate				
Intercept	0.0670	0.0004	-0.1735	0.0013
Product Type	0.0158	0.00005	-0.0996	0.0011
Expected Yield	-0.0018	0.00001	0.0012	0.00002
Price Election	0.0070	0.00004	0.0412	0.0002
Max Indemnity	-0.0002	1.198E-6	-0.0001	3.708E-6
Post2000	0.0070	0.0001	0.0064	0.0001

Notes: Each coefficient is statistically significant at the 5% level.
The OLS R^2 levels are 0.24, 0.58, and 0.34 for the respective equations.
The system-weighted R^2 for the 3SLS estimation is 0.18.
There are 409,355 observations in the sample.