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CARD Briefing Paper 98-BP 00-20

Are Loan Deficiency Payments Too Low in Iowa?

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December 1998

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Loan deficiency payments (LDP) are designed to compensate producers for extremely low prices. When a county's posted county price (PCP) falls below the county's loan rate, USDA agrees to pay the producer the difference between the two. LDPs are designed to compensate producers for low prices without artificially increasing grain stocks. The LDP program was included in the 1996 FAIR act. Until this year market prices had not fallen below the loan rate so (LDPs) had not come into use in the Corn-Belt before now. This year corn and soybean prices have, fallen below the loan rate throughout the Corn Belt, and grain farmers in these counties will rely on LDPs for a significant proportion of their income.

If calculated properly, LDPs should be the same in every county in every state. Loan rates are set to reflect actual market price conditions, so they vary across county boundaries. The differentials used to calculate the PCPs are also supposed to reflect actual market conditions so they too vary across counties. Given that both adjustments are designed to reflect the same market conditions, the cross-county pattern for PCPs should be identical to the cross-county pattern for loan rates. Thus, the difference between these two identical patterns (the LDP) should be constant.

An identical LDP pattern makes sense. Farmers in counties where grain prices are usually high will bid these prices into land rents and so their breakeven prices will be higher than in counties where grain prices are usually lower. A program that ignored these traditional price patterns would tend to overcompensate producers in low-price

counties and undercompensate producers in high-price counties. By comparing actual market conditions (as measured by the PCPs) with the breakeven prices (as proxied by the loan rates), the LDP should compensate all producers in a similar manner.

Figure 1 shows the soybean LDPs on September 21 of this year. The size of the LDP will vary from day to day, but the cross-county pattern of LDPs will not change as long as the government uses the same differentials from day to day. It is apparent (with a very few exceptions) that the same differentials were used to calculate PCPs and loan rates for each county within state boundaries. All soybean LDPs in Iowa were \$39 per bushel. All LDPs in Illinois and Indiana were \$.50 per bushel. And all LDPs in Minnesota were \$.45 per bushel. (All data displayed in this report are presented in the appendix.)

Figure 2 shows a similar pattern for corn LDPs. With the exception of Wisconsin, which is not a major corn-producing state, Iowa has the lowest LDPs. The corn LDPs in almost all Iowa counties on this particular day equaled 32 cents per bushel. The payments in Minnesota and South Dakota equaled 41 cents, while those in Kansas equaled 38 cents. There is substantial cross-county variation in Nebraska, South Dakota, and Illinois, with a minimum LDP equal to that in Iowa (with the exception of a small number of eastern Illinois counties). However, most of the counties in these states had LDPs which were \$.06 to \$.08 above Iowa, with some Nebraska counties getting \$.12 more than in Iowa.

As discussed above, a constant LDP pattern makes sense because variations in both loan rates and PCPs are meant to capture variations in cash grain prices. Therefore, variations in LDPs must mean that different price differentials are used to calculate loan rates and PCPs. The PCPs should reflect differences in transportation costs: the further a county is away from river transportation, the higher the transportation cost and the lower should be the PCP. Figure 3 and figure 4 show that the PCPs for soybeans and corn are generally higher the closer a county is to the Gulf of Mexico and the Mississippi River. Figure 5 and figure 6 show that a similar pattern exists for soybean and corn loan rates. As can be seen, the cross-county patterns of loan rates and PCPs do not show the abrupt changes that occur with the LDPs at state lines. The explanation for this difference is that USDA uses slightly different rules to calculate PCPs and loan rates, and these rules vary by state. These state-specific patterns emerge in

the LDPs and not in the data that was used to calculate the LDPs.

Examination of the data indicates that the differences between Than rates for Iowa and surrounding states are greater than the corresponding differences in PCPs. This suggests that Iowa PCPs are too high in the sense that if USDA's method of estimated grain transportation costs for surrounding states was used in Iowa, then Iowa PCPs would be lower than they actually are.

What difference does this make? Table 1 shows the average LDP available in Iowa and surrounding states and the change in net farm income that would result if the LDPs available in other states were available to Iowa farmers. As can be seen, with the exception of Wisconsin, which is not an important grain-producing state, Iowa farmers would obtain significant income increases-ranging from \$35.5 to 189 million-by using other states' LDP rates.

Table 1. Average Loan Deficiency Payments by State on September 21, 1998

	Corn \$/bu	Soybeans \$/bu	Change in Net Farm Income* \$ million
Illinois	0.34	0.50	89.5
Indiana	0.34	0.50	89.5
Iowa	0.32	0.39	
Kansas	0.36	0.39	70.9
Minnesota	0.41	0.45	189.0
Missouri	0.35	0.39	53.2
Nebraska	0.34	0.39	35.5
North Dakota	na	0.34	na
South Dakota	0.41	0.41	169.4
Wisconsin	0.28	0.45	-41.5

*Change in net farm income equals the increase in total payments to Iowa farmers if the indicated state's LDPs were applied to expected production of Iowa corn and soybeans.

Figure 1.
Soybean Loan Deficiency Payment on Sept 21, 1998

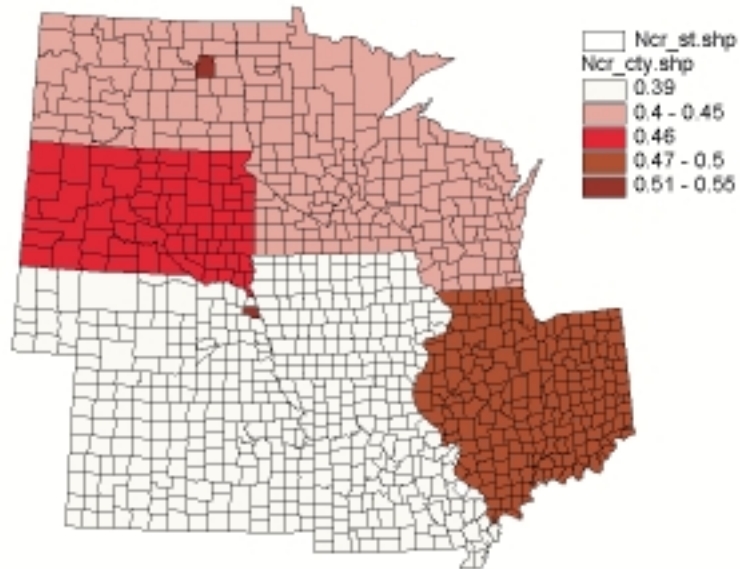


Figure 2.
Corn Loan Deficiency Payments on September 21, 1998

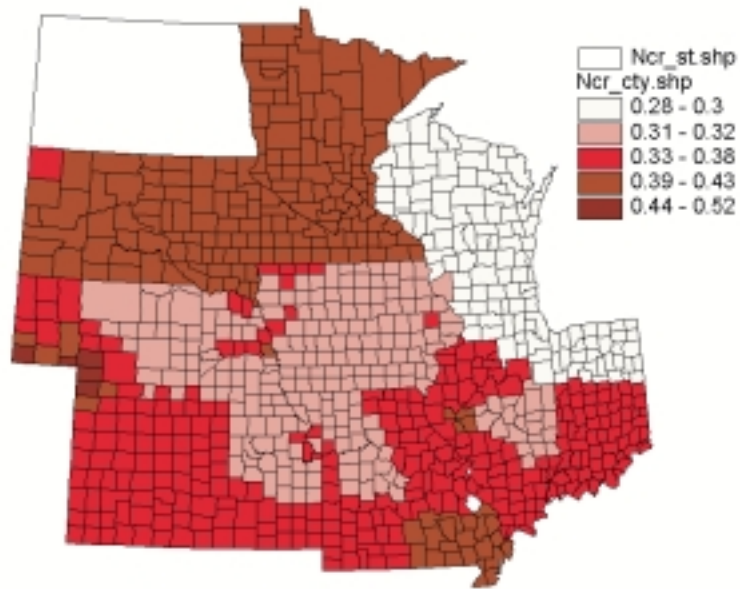


Figure 3.
Soybean Posted County Prices on September 21, 1998

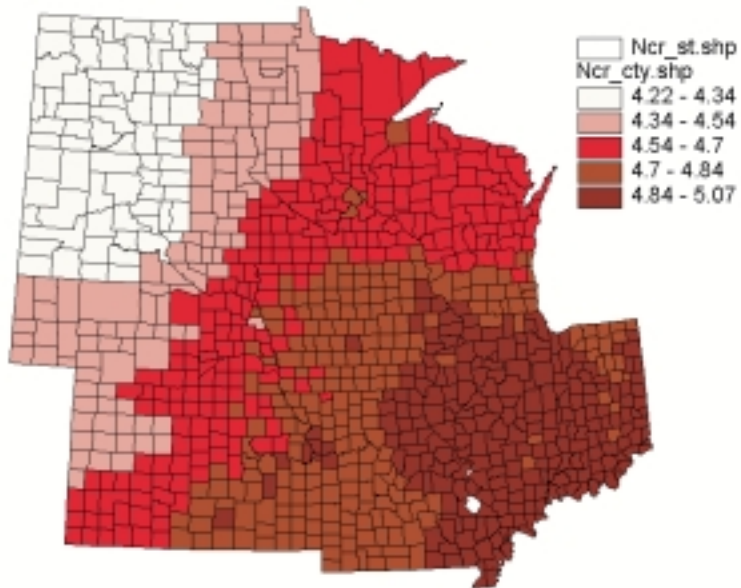


Figure 4.
Corn Posted County Prices on September 21, 1998

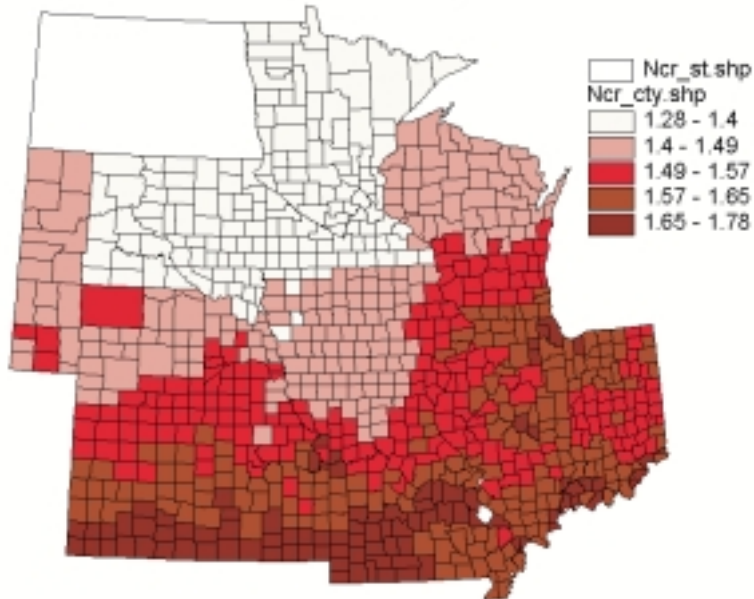


Figure 5.
Soybean Loan Rates for 1998

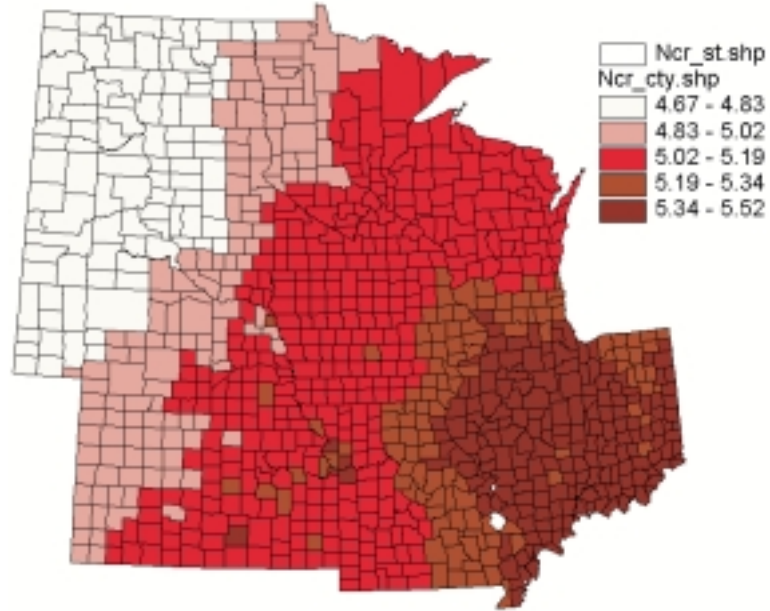


Figure 6.
Corn Loan Rates for 1998

