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A Farm Policy Experiment: A Differentiated Rice Commodity Program

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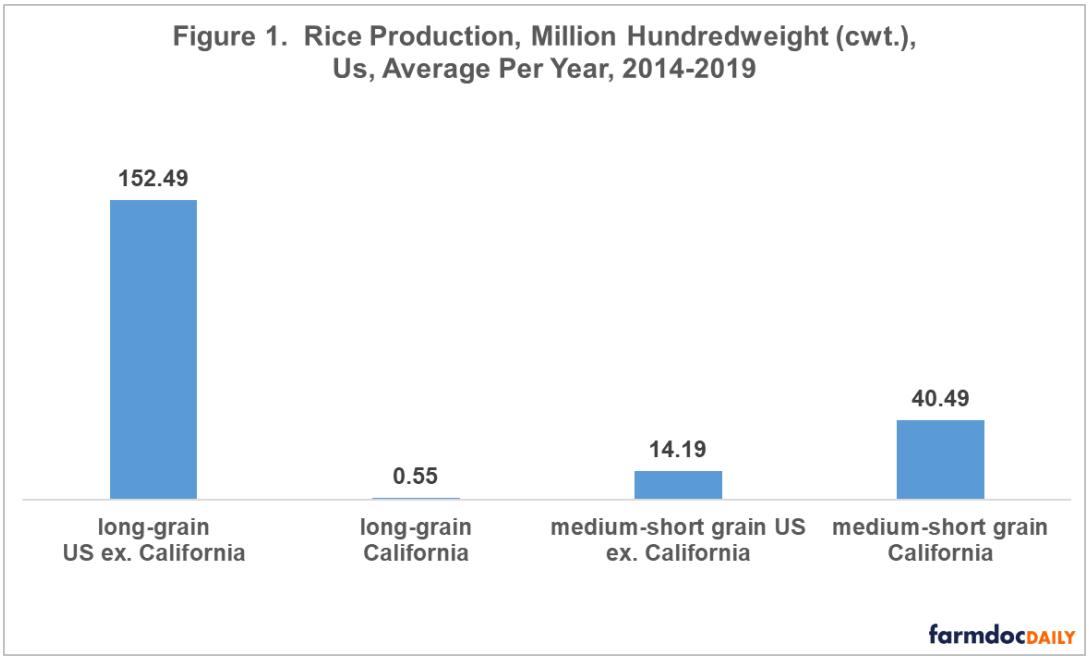
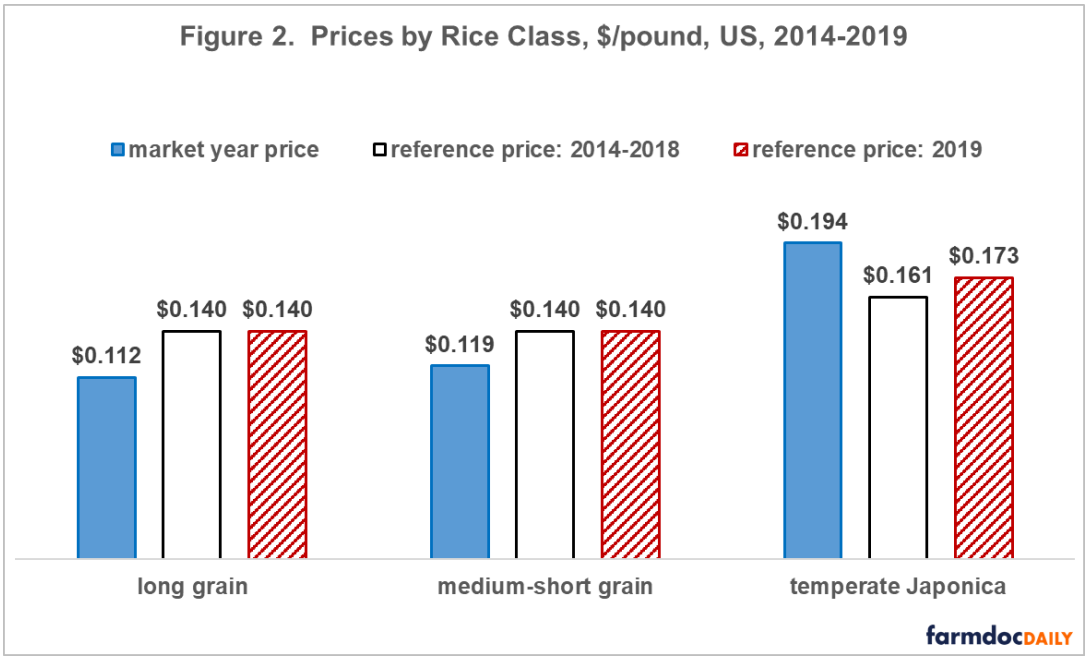
Farm bills, like most legislation, contain policy experiments. Usually they are small pilot programs or a variation on existing programs. Some experiments evolve into larger programs or become the standard program. A current farm bill experiment is the price of rice used in the PLC (Price Loss Coverage) and ARC (Agriculture Risk Coverage) programs. It is differentiated by long-grain rice, medium and short grain rice excluding California, and temperate Japonica rice, the medium and short grain rice grown in California. Prior to the 2014 farm bill the all US rice price was used. All US prices are used for all other program commodities. This article compares payments by the current differentiated rice PLC program with payments by a simulated PLC program using the US all rice price. The differentiated PLC program has resulted in notably less payments to temperate Japonica rice but notably more payments to long grain rice. Payments to rice in total have been higher.

Background

USDA reports rice production for 6 states. They, along with their share of US production during 2014-2019, are: Arkansas, 48%; California, 20%; Louisiana, 14%; Missouri, 7%; Texas, 6%, and Mississippi, 5%. Of the rice produced in the US, 72%, 27%, and 1% were, respectively, long grain, medium grain, and small grain rice (see Figure 1). California differs from the other states – 92% was medium grain and 6% short grain. Next highest is Arkansas at 14% and 0.1%, respectively.



California medium and short grain rice is also temperate Japonica rice. It commands a price premium (see Figure 2): Average 2014-2019 price of temperate Japonica rice was 74% and 64% higher, respectively, than for long-grain rice and non – temperate Japonica medium and short grain rice (prices from FSA, Farm Service Agency). The PLC reference price set by Congress was below the average price for temperate Japonica rice but above the average price for the other 2 rice types.



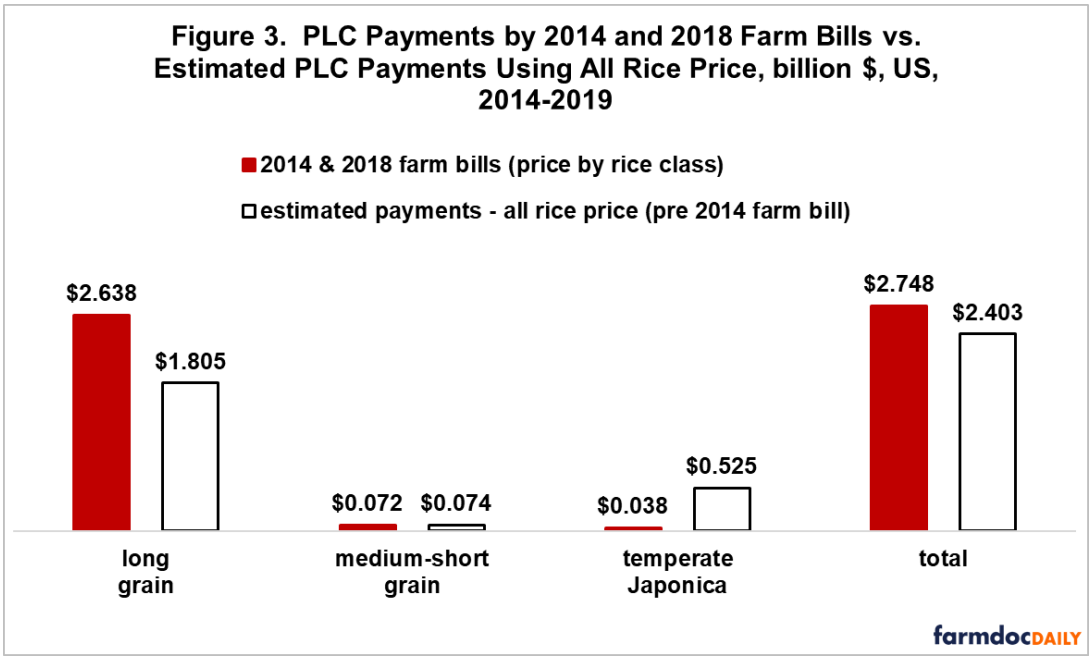
PLC Payments

Ninety seven percent of rice base acres were elected into the PLC program during the 2014 and 2018 farm bill sign ups. Long grain rice accounted for 96% of PLC payments reported by FSA for the 2014-2019 rice crops (see Figure 3).

Payments were computed using the US all rice price reported by the National Agriculture Statistical Service instead of prices for the 3 classes of rice. Given long grain rice's market dominance, the

reference price for all rice was assumed to be the $0.14/ pound reference price set by Congress for long grain rice. Base acres and program yield are those reported by FSA for the different rice classes for the 2014-2019 crops. Payments are reduced by the 85% payment acre factor used for commodity programs and by a 93.5% budget sequestration factor. Any difference in PLC payments is due to different market and reference prices.

Payments made by the current differentiated PLC rice program exceed estimated PLC payments using the all rice price by $0.34 billion, or 13%. Notable differences, however, exist by rice class. Actual payments to temperate Japonica rice are $0.49 billion, or 93%, less than estimated payments by the all rice program. On the other hand, actual payments to long grain rice are $0.83 billion or 46% larger than estimated payments by the all rice program.



Concluding Observations

This analysis suggests the policy experiment of differentiating rice price by class has resulted in higher payments by PLC to rice. Moreover, the distribution of payments by rice class was impacted. Long grain rice gained; temperate Japonica rice lost.

It remains to be seen if price differentiation will catch on for other program commodities. Barley, peanuts, and wheat would appear to be the next potential candidates. They have distinct categories already recognized by the US market (feed vs. malting barley, Runner, Virginia, Spanish and Valencia peanuts, and hard red winter, soft red winter, hard red spring, white, and durum wheat).

The price differentiation experiment with rice clearly underscores (unsurprisingly) that a critical policy transition issue is setting the price support parameter by type of the covered commodity.

References and Data Sources

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