In short ■ by Gerald Schluter

Is the farm income multiplier seven?

Does strengthening the farm sector lead to growth in the general economy? Proponents of the farm sector as an engine of growth often cite a 7:1 multiplier indicating a seven dollar increase in national income for every dollar increase in the sales of farm products. If this multiplier is correct, a quick way to invigorate a sluggish economy is to pump money into agriculture: higher loan rates, higher payments, and more commodities eligible for price supports. This 7:1 multiplier has both an historic and an economic foundation. The former cannot be denied: the latter appears to have failed the test of time.

In 1944, Carl Wilken, an economic analyst with the Raw Materials National Council of Sioux City, Iowa, published a pamphlet, "A Prosperous Post-War Era is Possible." He showed a 7 to 1 average ratio between nominal national income and farm marketings. Wilken interpreted the ratio to mean that "each dollar of agricultural income translates into seven dollars in national income or purchasing power." Although later academic and profes-

Gerald Schluter is head of the National Aggregate Analysis Section, Economic Research Service.

sional reviews were extremely critical of Wilkin's interpretation of the 7:1 ratio, this 7:1 multiplier has become part of the lore of agricultural policy. Various farm groups have periodically cited the ratio. Examples include Mr. Wayne Meyer, (a California farmer testifying before the House Agriculture Committee in 1978), numerous speeches to farm audiences in the midwest, and occasional (but recent) letters to the Secretary of Agriculture and to members of Congress.

The empirical record since 1944 demonstrates the precarious base for this multiplier. The numbers in the table show that the relationship between national income and farm marketings has not remained constant nor has it been close to 7:1 since Wilkin first talked of it. Furthermore, the share of national income originating on farms has declined from 7.9 percent in the 1930–50 period to less than two percent in the early 1980s. This decline causes the multiplier, as estimated by Wilkin's methods, to increase sharply. Applying Wilkin's reasoning to the 1980s yields a multiplier of about 23.

These observations suggest the fundamental problem with Wilkin's multiplier argument. Did he understand the direction of causation? The cause and effect relationship is more likely just the reverse of what Wilkin assumed—an expanding national income provides an increasing market for farm products rather than the other way around. Even an expanding national income doesn't pull the farm sector along proportionately. Demand for farm products does not grow as fast as income. Thus, as national income rises, the farm sector becomes a smaller and smaller part of the national economy. What Wilkin noted is not a multiplier at all. It is only an accounting relationship with no promise of being stable over time.

This is not a recent discovery about the 7:1 ratio for agriculture. In 1945, Marion Clawson, now Senior Fellow Emeritus at Resources for the Future but then an economist with the USDA's Bureau of Agricultural Economics, did a tongue-in-cheek (unpublished but informally circulated) paper responding to a pro-Wilkin article that had appeared in *The Country Gentleman*, a popular farm magazine of the era. Clawson worked out a Wilkin-type multiplier and found farm marketings for cranberries tracked even better than total farm marketings. Clawson's cranberry multiplier was approximately 15,000! A cranberry price support program would, therefore, be more than 2,000 times as efficient as a general support program for all farm commodities. For 1991, the cranberry-to-national income multiplier was 23,465. On these terms, a $1 per barrel subsidy to this delicacy would have pumped no less than $98.6 billion into the national economy.

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There are lessons here. Abandoning economic logic to use accounting ratios can yield outrageous and dangerous conclusions. As the debate gets underway for the 1995 farm bill, farm leaders, agricultural economists, and policy makers should be wary: lore passed down from an earlier generation is not a substitute for a clear understanding of cause and effect. ■

Farm marketings, national income, and national income as a multiple of farm marketings, selected periods, 1921-1991.

	Average farm marketings	Average national income	National income / Farm marketings
	$ million		*ratio*
1921-38	9,478	66,256	6.99
1935-49	16,520	144,080	8.67
1940-59	26,036	263,870	10.13
1950-69	35,491	463,970	13.07
1060-79	63,322	953,710	15.06
1970-89	115,247	2,241,290	19.45
1980-91	147,844	3,382,958	22.88