

Food for Thought

In economics texts, agricultural markets are often cited as an example of resource allocation in competitive markets—how price signals determine the who, what, where, when and how of production. In practice, however, agricultural markets are a prime example of how, at great cost to consumers and taxpayers, governments misallocate resources by insulating an industry from market forces.

In the first census of the United States, over 90 percent of the population lived and worked on farms. This proportion decreased in every subsequent census through 1930, by which time it had decreased to about 25 percent. The 1940 Census revealed that the proportion was about the same as it was 10 years earlier. High unemployment during the Depression limited opportunities to leave farms (where, despite low cash incomes, food was available). Since then the long-term trend resumed.

At present, only about 2.5 percent of workers are engaged in agriculture. That they are able to feed the other 97.5 percent, and much of the rest of the world besides, reflects a level of productivity that would have astonished our forebears. Moreover, the increase in the productivity of American farmers shows no signs of abating.

As is evident in the accompanying chart of output and labor input in agriculture, farm production has continued to increase even as farm employment has decreased. In 1996, half as many workers grew two-thirds more food than in 1970. Labor requirements in agriculture have declined as improved methods of cultivation have been developed. Technological advances in the form of new and better herbicides, pesticides, fertilizer, and equipment, and the biogenetic revolution have allowed farmers to increase total output, output per worker, and output per acre.

It has never been the prosperous operators that have left agriculture but rather those who were earning less than they could make in other pursuits. Increasing productivity among a declining farm population has always involved “squeezing out” the marginal producers. The time is long gone when small “family farms”

comprised the “backbone” of agricultural production.

Although small farms continue to account for the largest percentage of producers, they contribute a minor fraction of total output. “Forty acres and a mule” would more closely describe a petting zoo than a farm. As shown in Table 1, farms with less than \$50,000 in sales make up roughly three-fourths of all farms but produce less than 10 percent of our food. On the other hand, nearly half of the food supply is produced by the 5 percent of farms that generate sales over \$500,000 on an average 2,773 acres. That large numbers of people, or their children, have not remained in agriculture has not meant that prime farmland has simply been abandoned—holdings have been consolidated into the remaining farms that are, among other things, large enough to provide incomes to their operators that are comparable to what can be earned in non-agricultural pursuits.

Despite a seemingly endless portrayal in print and over the airways of struggling farmers, the farming sector today is financially strong overall. The USDA classifies roughly 6 percent of all farms as “vulnerable,” defined as those with negative net farm income and a debt-to-asset ratio of more than 40 percent. Farmers are actually more likely to remain in business than other independent businessmen. During the 1990s, failure rates have averaged 76 per 10,000 agricultural concerns, considerably less than the rate of 90 per 10,000 for all types of firms.

Average farm household income was \$52,000 in 1997. This was on par with the average U.S. household (as it has been during the past three decades). Like many households, farm households generate income from a variety of sources. Earnings

from farming make an important income contribution for households operating larger farms (sales greater than \$250,000). However, these larger farms account for only 10 percent of all family farms. Farm earnings make up a small share of household income for a large majority of farm operators. According to the USDA, 85 percent of what it considers to be farm households are not affected greatly by changes in farm sector income. This is not surprising: of farm “operators” with sales of less than \$50,000, 39 percent reported a major occupation other than farming, and another 27 percent indicated that they were retired.

A History of Meddling

In an unfettered agricultural market, supply and demand would determine prices, output, and resource allocation. The supply offered for sale in the market would be based on crop prices, input prices, technology, the number of producers, and weather. Demand, or the buyers’ side of the market, would be a function of price, income, tastes and preferences, and the number of consumers. Any factor that increased demand or reduced supply would raise market prices, and vice versa. Prices would then signal resources to flow in or out of the industry.

However, most governments around the world intervene in the operation of their agricultural markets. The reasons for doing so differ, but the intent is always the same—to promote one group’s inter-

Farm Output and Labor Input Indexes
(1992 = 100)

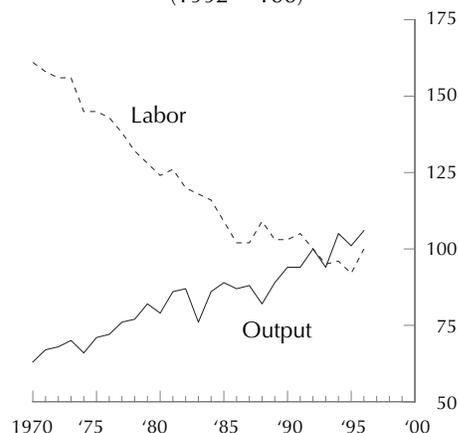


Table 1. Selected Characteristics by Farm Size, 1996

Sales Class ¹	% of Farms	% of Farm Sales	—Average Farm Household Income—			Avg. Govt. Payments
			Farm ²	Nonfarm	Total	
Less than 50	73.9	9.5	-\$3,419	\$45,418	\$41,999	\$1,007
50-249	18.1	26.5	\$17,313	\$36,853	\$54,166	\$7,142
250-500	4.8	19.7	\$53,265	\$22,409	\$75,674	\$15,644
500 or more	3.4	44.2	\$158,847	\$34,951	\$193,798	\$22,324

¹ In thousands of dollars. ² Includes Government payments. Source: *USDA Agricultural Fact Book 1998*.

ests at the expense of another's. In many poor countries, for example, it is the urbanized population that the politicians favor and food prices (and farmers' incomes) are kept artificially low. The end result, of course, is that people flee to the cities and too little food is produced. In Africa, where this practice has been common, many countries that were once food exporters have experienced consistently declining per capita food production throughout the post-colonial period. As a result, such countries have often had to import food or endure famines, and their economies have stagnated or declined.

In richer countries, governments have intervened on behalf of farmers. In the United States, elected officials from agricultural states, bureaucrats inside the U.S. Department of Agriculture, farm interest groups, and even some academics ("agricultural economists") have long advocated policies designed to benefit producers at the expense of consumers and taxpayers.

Populist-minded agrarians passionately advocate subsidies to "family farms," which they portray as microcosms of all things good in America. It is also commonly asserted that intervention is required to prevent domination of the industry by "agribusiness." The former proposition is debatable. With regard to the latter, it should be clear that bureaucratic management of day-to-day farming operations is no more effective here than it was, say, on the collectives of the Soviet Union. Most of the 5 percent or so of U.S. farms owned by corporations are, in fact, closely-held family businesses that are incorporated for legal or tax purposes. It is not corporate farming that is squeezing out marginal operators of "family farms." On the other hand, there is little doubt that the supply of some farm inputs (agricultural chemicals, machinery, hybrid seeds, etc.) is dominated by large corporate interests. For many years, a major incentive to substitute such inputs for the land and labor of the farmer has been government intervention itself.

When government intervention was simply to support farm prices, it became the buyer of last resort whenever prices fell below targeted levels. As a result, the government acquired large and unsalable surpluses of farm products, and policy shifted toward

the principle of "supply management," with the objective of supporting prices by limiting supply. The government made direct payments to farmers not to produce (*i.e.*, to take acreage out of production), and also supported farm incomes directly through cash transfers or "deficiency payments" to farm operators based on the difference between arbitrarily set target prices and market prices. These policies encouraged farmers to apply more purchased inputs to the acreage they did plant than they might have found necessary or economic if marginal farms ceased production.

Total government payments to agriculture in 1996 exceeded \$7.3 billion. (This amount does not include billions more in indirect assistance in the form of subsidized loans, loan guarantees, and tax breaks.) Table 1 shows the average direct dollar transfer each operator received by farm size. In absolute terms, larger operators received more support than smaller farmers, but the payments to smaller farms represented a greater share of their farm and total household income.

In other words, the major effect of government programs has been to perpetuate overcapacity by sustaining farmers who should stop farming. In addition, these programs assist "farmers" who are not even farmers and, even more outrageously, devote most of their funds to benefit large operators that do not need it. Economic efficiency is reduced when marginal producers do not reallocate their resources to other more productive uses. Moreover, for the efficient producers, supply management encourages them to produce for the program as opposed to produce for the market. This behavior creates its own set of problems.

As mentioned above,

the acreage actually planted is farmed more intensively. Soil erosion and environmental damage from agri-chemicals occur as farmers try to squeeze every last bit of yield out of the land. A second problem is that Government payments are capitalized into farmland values to the extent that farmers perceive their windfalls as a permanent part of farm income. Heavy reliance on capital inputs has meant that the industry's rate of return has been very low, which would normally signal that fewer resources should be devoted to agriculture. But many farmers continue to farm with the prospect of an eventual payoff in the form of a gain on the sale of their real estate.

Finally, domestic policies that raise prices and control supply are not sustainable in a global economy. Such policies work against the enormous advantage that the U.S. enjoys vis-à-vis the rest of the world in food production. Higher prices at home reduce world demand for our farm output and force U.S. consumers to pay for their food twice: first through higher prices at the supermarket, and secondly in the form of higher taxes to pay for these programs.

A New Direction?

In 1996 Congress passed the Federal Agricultural Improvement Act (FAIR).

Although it has been argued that subsidies to agriculture in the U.S. are unjustified, these subsidies are quite modest in comparison with subsidy levels in other countries. The table below shows the "producer subsidy equivalent" (PSE) and "consumer subsidy equivalent" (CSE) for several selected OECD countries.

The PSE is the value of transfers to agriculture from domestic consumers and taxpayers resulting from a country's agricultural policies. For example, in 1997 Switzerland's amount of public support was larger than the amount of agricultural value added. The CSE is the value of transfers resulting from a nation's agricultural policies. When negative, the CSE is an implicit tax on consumption. For instance, Swiss agricultural policies more than doubled the price of food to their citizens.

Table 2. Subsidy Equivalents

Country	Producer		Consumer	
	Total ¹	Share of Production	Total ¹	Share of Consumption
Canada	3.1	20.1	-1.6	-14.4
Japan	33.2	69.0	-35.7	-46.4
New Zeal.	0.1	3.0	-0.1	-5.6
Switz.	4.6	76.4	-2.6	-52.7
U.S.	22.8	16.0	-9.2	-7.8
EU-15	72.7	42.0	-35.1	-25.0
OECD	150.8	34.0	-93.1	-23.0

¹ 1997. In billions of dollars. Source: *OECD, 1998*.

The new legislation “decouples” income support from planting decisions and market prices. Participating farmers will now receive fixed, but declining payments over seven years, regardless of market prices or production. After 2002, these payments are scheduled to end, ushering in an era of market-based agriculture. When asked about the ballyhooed change in policy direction, a distinguished University of Chicago economist retorted that FAIR was “much ado about nothing.” A closer look shows why nothing has really changed.

First, not all commodities are subject to the new program. Americans will continue to pay dearly for such commodities as dairy products, sugar, and peanuts, which retain their traditional domestic subsidies as well as protection from foreign competition. Secondly, the cost of the new program is three times the projected cost of the defunct deficiency payment scheme. In all fairness to the new program, deficiency payments were open-ended entitlements that often exceeded their projected costs, while the total seven-year obligation for FAIR is capped at \$35.6 billion. However, FAIR has already been supplemented with “disaster” payments.

Third, the design of the program is faulty. Since these lump-sum payments will be made over and above any marketing receipts, producers will receive an unearned windfall on top of hefty profits when prices are high (as they were in 1996 and 1997). Additionally, larger operators benefit the most because the size of the payment is based on the number of acres under contract in the program. And, although production decisions are now largely independent of subsidies, the payments have not been decoupled from the price of land. Land prices will continue to reflect anticipated benefits from federal subsidies. This will discourage new entrants who can’t afford the inflated land prices and provide welfare for well-to-do farmers (*i.e.*, those owning land).

Finally, the political reality is that agriculture will not become market-oriented after 2002. Arguably, there never was a policy consensus to end support to agriculture. At the time FAIR was passed, increasing market prices made decoupled payments appear superior to supply management for the purpose of maximizing government transfers to farmers. If market prices begin to fall (as they did in 1998), there will be pressure to restore the old safety net that coupled aid to market conditions.

Conclusion

A free society offers a person the freedom to farm and the freedom to fail, as in other lines of work. It is hypocrisy to lay

claim to the former right and then become a chronic special pleader to avoid the latter consequence or expect others to heap unearned and unneeded tax dollars on top of already healthy profit. The decision to plant crops, buy machinery, hire workers, and sell food should be based on econom-

ics, not politics. The policy schemes in support of agriculture—both current and past—are objectionable, inefficient, and costly. Letting markets work would not only benefit consumers and taxpayers, but also the land and those who can economically farm it. □

BUSINESS-CYCLE CONDITIONS

According to the latest data, the current expansion is unlikely to end soon. At 75, the percent of leading indicators expanding remains well within the range that suggests continued expansion and may be presumed reliable, inasmuch as all twelve leaders now have identifiable trends.

There are five new highs this month among our twelve primary leading indicators: *M2 money supply, new orders for consumer goods and materials, new housing permits, the ratio of manufacturing and trade sales to inventories and the index of common stock prices* (stock prices and all other dollar-denominated series are reported in constant dollars.) All five are appraised as clearly expanding.

After two months of decreases in the base data, *initial claims for state unemployment insurance* (inverted) dropped off its peak. This one-month decrease in the series’ moving average was not, however, deemed sufficient to alter its cyclical sta-

tus and it remains clearly expanding.

Contracts and orders for plant and equipment remains appraised as probably expanding as does the *3-month percent change in consumer debt*. Although contracts and orders are down and the change in of consumer debt is up, neither change was enough to alter the status of either series.

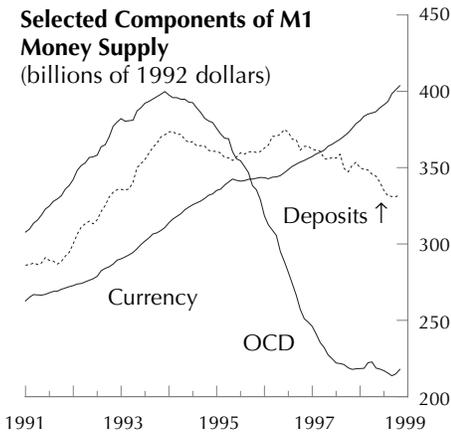
M1 money supply, the narrowest measure of money, increased for the third consecutive month. Both the duration and the magnitude of the increase were enough to warrant upgrading M1’s appraisal from cyclically indeterminate to probably expanding. Chart 1 breaks out the three ma-

Statistical Indicators of Business-Cycle Changes

Change in Base Data				Primary Leading Indicators	Cyclical Status		
Sep.	Oct.	Nov.	Dec.		Nov.	Dec.	Jan.
+	+	+		M1 money supply	?	?	+?
+	+	+		M2 money supply	+	+	+
-	+	-		Change in sensitive materials prices	?	?	-
+	-	+		New orders for consumer goods	+	+	+
-	-	+		Contracts and orders for plant and equipment	+?	+?	+?
-	+	-	+	Index of new housing permits	+?	+	+
+	-			Ratio of manufacturing and trade sales to inventories	+	+?	+
+	-	+	-	Vendor performance	?	-?	-
-	+	+	+	Index of common stock prices (constant purchasing power)	?	?	+
-	+	-	+	Average workweek in manufacturing	?	-?	-?
+	-	-		Initial claims for unemployment insurance (inverted)	+	+	+
-	+	-		Change in consumer debt	+?	+?	+?
				Percentage expanding cyclically	100	78	75
				Primary Roughly Coincident Indicators			
+	+	+	+	Nonagricultural employment	+	+	+
-	+	-	+	Index of industrial production	+	+?	+
+	-	nc		Personal income in manufacturing	?	?	?
+	+			Manufacturing and trade sales	+	+	+
+	-	+	+	Civilian employment to population ratio	?	?	+
+				Gross domestic product (quarterly)	+	+	+
				Percentage expanding cyclically	100	100	100
				Primary Lagging Indicators			
-	+r	-	+	Average duration of unemployment (inverted)	+	+?	+?
+	+			Manufacturing and trade inventories	+	+	+
+	+	+		Commercial and industrial loans	+	+	+
+	+	-		Ratio of consumer debt to personal income	?	?	?
+	-	-		Change in labor cost per unit of output, manufacturing	+	+?	?
-	-	+	+	Composite of short-term interest rates	-	-	-?
nc No change. r Revised.				Percentage expanding cyclically	80	80	75

Under “Change in Base Data,” plus and minus signs indicate increases and decreases from the previous month or quarter and blank spaces indicate data not yet available. Under “Cyclical Status,” plus and minus signs indicate expansions or contractions of each series as currently appraised; question marks indicate doubtful status when shown with another sign and indeterminate status when standing alone.

Selected Components of M1 Money Supply
(billions of 1992 dollars)



major components of M1: currency in circulation, demand deposits (checking accounts), and other checkable deposits (OCDs). OCDs are the sum of deposits in Negotiable Orders of Withdrawals (NOW) and Automatic Transfer Savings (ATS) accounts. In effect, NOW and ATS accounts are checkable savings accounts. A fourth component, travelers checks, accounts for less than 1 percent of total M1.

As indicated by the chart, a significant structural shift has occurred in the components of M1. At the beginning of the current expansion, currency was the smallest portion and comprised about 30 percent of total M1; at 37 percent, OCDs comprised the largest portion. Now currency, comprising 42 percent of M1, is the largest component. OCDs, which dropped off markedly after peaking in early 1994, now comprise only 23 percent of total M1. Much of the decline in M1 since 1994 owes to this significant drop in the use of NOW and ATS accounts, which until recently have offered poor returns relative to similar assets.

Up slightly from last month to 41.7 hours per week, the *average workweek in manufacturing* nevertheless remains appraised as probably contracting. Even so, and as the chart on page 8 makes clear, the average workweek remains near historical highs. Despite its drop off the December 1997 peak, the current workweek still is longer now than at any time during any prior post-war expansion. In this circumstance, it is difficult to know just what a modest “contraction” in this series may indicate—*i.e.*, impending layoffs or employee exhaustion.

Both *vendor performance*, the percentage of purchasing manager reporting slower deliveries from their suppliers, and the *3-month change in sensitive materials prices* are appraised as clearly contracting.

Overall, 75 percent (nine out of twelve) of our primary leading indicators with apparent cyclical trends are expanding. This is in sharp contrast to earlier months when

at one point nine of our leading indicators had no identifiable trends. The percentage of leading indicators expanding has now dropped a full 25 points from the 100 percent reported just two months ago. However, the current AIER leading index captures the cyclical statuses of all twelve of the leading series (in November it included only seven) and therefore provides markedly greater statistical warrant for an outlook of continued expansion than it did then. At 70, the cyclical score, a purely mathematical measurement of the leading indicators, indicates the same: that the economy will continue to expand at least into the second quarter of 1999.

Inasmuch as five of the six primary roughly coincident indicators reached new highs this month, the coinciders confirm the current strength of the economy. Of the six coinciders, only *personal income in manufacturing* failed to reach a new high. Personal income in manufacturing fell, despite no change in its base data, and remains indeterminate. *Nonagricultural employment* increased by 378,000 jobs to a total of 127,156,000 jobs. Again, the lion’s share, 290,000 jobs, were created in the service sector.

The *index of industrial production*, appraised last month as probably expanding, reached a new high and is now clearly expanding. After revisions, *civilian employment as a percentage of the working-age population*, which last month was indeterminate, soared to a new high and also is clearly expanding. Both *manufacturing and trade sales* and *gross domestic product* are at new highs as well. According to the final estimate of gross domestic product, the economy grew at an annual rate of 3.7 percent in the third quarter of 1998. Advance estimates of gross domestic product for the fourth quarter of 1998 will be released at the end of this month. Overall, 100 percent (five out of five) of the primary roughly coincident indicators with apparent cyclical trends are expanding.

Among the six primary lagging indicators, both *manufacturing and trade inventories* and *commercial and industrial loans* again reached new highs and are clearly expanding. The *average duration of unemployment* (inverted) was unchanged at 14.3 weeks, and remains probably expanding. *The ratio of consumer*

debt to personal income fell to 17.95 percent. This slight 0.02 percentage point drop in the data was not sufficient to establish a cyclical trend and it remains indeterminate.

The *percent change from a year earlier in manufacturing labor cost per unit of output*, on the other hand, fell to a negative 0.22 percent. Over the past year, labor costs have been increasing in absolute terms (*i.e.* they have fluctuated above the zero level), and despite a significant drop off its peak the labor cost series has been appraised in recent months as probably expanding. However, this month’s drop into negative territory raised greater doubt about the series’ cyclical trend, which now is indeterminate.

The *composite of short-term interest rates* increased to 5.19 percent. Although slight, this increase was sufficient to raise doubt that the series is contracting and it was upgraded to probably contracting.

Overall, 75 percent (three out of four) of the primary lagging indicators with apparent cyclical trends are expanding—down 5 points from last month’s 80 percent expanding. So far, however, there is little indication among the laggards of the bottlenecks that choke off business expansions.

Taken together, the statistical indicators currently display uncommon strength for an expansion of this duration. What is more, the three leaders now contracting are precisely those in which we have least confidence. The sensitive materials prices series is notoriously volatile and, with a moving average of six months, ranks as the least timely of the leaders. Theoretically, it has uncertain grounding as a leader (*i.e.*, presumably falling prices for producer materials could be *good* for business). Likewise with the vendor performance series: while faster deliveries might indicate reduced demand, they might also reflect improved efficiency. And given the (unsustainable over the long run) levels recently attained by the average workweek series, some reduction in the workweek is, in historical perspective, scarcely reason for alarm.

As Alan Greenspan recently observed, despite worldwide economic turmoil the domestic U.S. economy seems “sparkling.” □

PRICE OF GOLD

	1997 Jan. 23	1998 Jan. 22	— 1999 —	
			Jan. 14	Jan. 21
Final fixing in London	\$348.00	\$293.80	\$285.65	\$287.75

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