GOVERNMENT IMPACTS ON THE BEEF INDUSTRY IN THE FUTURE

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Government actions have massive impact on the beef industry and take numerous forms including agricultural commodity programs, taxes, regulations, tariffs, quotas and embargoes. In keeping with the theme of this session, I focus mainly on the impact of federal fiscal-monetary policy on the beef industry. Because national monetary-fiscal policy may be the single most important economic issue facing cattle feeders in the future, it is imperative that feeders understand how such policy influences individual producers and the industry, and also what measures can be taken to restore vigor to the economy without inflation.

Cattle feeders frequently point to high inflation rates as the single most important economic problem faced the industry and the nation. However, it is not possible to separate inflation from unemployment, under-utilized production capacity, slow real income growth, foreign trade deficits and weak value of the dollar in world markets. Because the economy is troubled in general rather than in a single category, it is possible to resolve one difficulty such as inflation only at the cost of expanding unemployment and idle industry.

I find an analogy with drug addiction helpful. This nation has become an economic junkie, indulging itself for several decades in monetary-fiscal injections that initially provided a rush of economic euphoria in the form of higher employment and production. But each successive injection of monetary-fiscal stimulus provided ever smaller "highs" until injections now bring mostly unwanted side-effects, most notably inflation. These unwanted side-effects are slowly destroying the economic and social tissues of the nation, but in the mind of the junkie the only thing worse than continuing the injections (which no longer produce highs) is kicking the habit.

The first injection of "morphine" caused no harm to the body and seemed like a small price to pay for relief from the severe pain of economic depression. But the old nostrums no longer work; they only damage vital organs. Deficit spending and expansion in the money supply no longer provide relief from unemployment but instead produce mostly inflation. There is no painless cure for addiction and we can only look for the least painful methods of withdrawl. Before discussing possible remedies for the addiction, it is well to examine how existing monetary-fiscal policy damages the economic tissue of the cattle industry, the farming economy, and the nation.

IMPACT OF MONETARY-FISCAL POLICY ON THE CATTLE INDUSTRY

A case can be made that unsound monetary-fiscal policy impacts more adversely on the cattle industry than on any other component of

agriculture. The income elasticity of demand for beef is relatively high, hence the beef industry especially feels the effects of policies that retard growth of real disposable income. Similar reasoning applies to unemployment - - unemployed consumers are not good customers for beef.

High inflation and interest rates pose special difficulties for the capital intensive cattle business. Inflation threatens to deny the industry an otherwise rosey long-term outlook. The future economic success of the cattle industry and that of the farming industry are closely aligned. Investors will shift funds from one investment to another in search of favorable investment opportunities until returns on investment are somewhat comparable among commodities. (Of course, investors can misjudge for a considerable period of time as evident from losses incurred 6 out of the past 8 years in cattle feeding.) Thus to gauge the future of the cattle industry we must assess the future of the farming industry as a whole. I have discussed that outlook at some length elsewhere. My expectations are that demand for farm output will increase on the average about 2 percent a year for the next decade whereas productivity is likely to increase at a somewhat slower rate, about 1.5 percent per year. With demand growing faster than supply due to productivity gains, the result will be increasing real prices over the years attended of course by year to year and cyclical variation around that favorable long-term trend.

This optimistic outlook is dampened or conditioned by several considerations that arise from inflation and federal monetary-fiscal policy. These affects are (a) instability, (b) cost-price squeeze, (c) cash-flow squeeze, and (d) real wealth effects (see Tweeten, November 1981).

Instability

"On again - off again" monetary-fiscal policy has created instability in the economy that in turn has caused cattlemen substantial hardship. Ironically, much of this instability has been the result of attempts to "fine tune" the economy. Part of the difficulty arose because the Federal Reserve Board tried to stabilize interest rates rather than the money supply. Attempts to hold down the interest rate led to adding excessive reserves of money to the economy which in turn caused overexpansion of business activity and inflation. Eventually the high rates of inflation had to be halted by restricting the money supply and by inducing recession. This process of expanding the economy to reduce unemployment and stabilizing the economy to halt inflation is called the inflation cycle. The expansionary phase is characterized by deficit spending and expansion of the money supply at a rate in excess of aggregate output. The expansion in aggregate demand increases product prices which spurs production and employment. In time, workers and other suppliers of inputs realize that product prices have increased relative to prices they are receiving for inputs. Less input and output is supplied and the ratio of input to output prices is restored but at a higher general level of prices.

The stabilization phase sets in as output is reduced. Even if the monetary-fiscal stimulus is continued, employment tends to return to the initial level. If monetary-fiscal restraint is deemed necessary to restore the initial price level, a recession sets in which may be protracted.

Demand for beef, more responsive than demand for most farm and food products to changing income and employment, is buffeted by the changes in employment, income and prices that attend this inflation cycle. Someone has said that the beef industry can adjust to high prices and even to low prices, but not to unstable prices.

In recent years, the Federal Reserve Board has attempted to steady the money supply rather than the interest rate. The difficulty with this policy is that, even if supply of money does not change, shifts in demand for money give rise to substantial changes in interest rate which buffet the beef industry and cause substantial financial hardship to feeders.

Cost-Price Squeeze

Expansionary monetary-fiscal policy increases aggregate demand and product prices in the economy but not at a uniform rate among sectors. Highly competitive sectors such as the cattle feeding industry are in a less favorable position to pass inflated costs to the next link in the market chain than are imperfectly competitive sectors characterized by negotiated or administered prices. The result for the cattle industry is a cost-price squeeze resulting from inflation. Although I have not quantified the impact for the cattle feeding industry as such, I have estimated for the farming industry as a whole that prices received by farmers increase only about 75 percent as much as prices paid by the farmers because of inflation (Tweeten, December 1980). Thus inflation reduces real prices for farm products. In time, producers restrain input use and output to restore real prices and buying power, but the process of adjusting to inflation can be costly and lengthy.

Cash-Flow Squeeze

Many cattle feeders experience low rates of return on their resources because of being in the low-price phase of the cattle cycle, because of bad weather, pests and disease, or because of inadequate scale of operations. But these difficulties are intensified by the problem of cash-flow arising from inflation. I will illustrate using the case of farmland. According to economic theory, the current rate of return on farm land (ratio of rent to current land value) is not affected by the inflation rate (Tweeten, June 1981). That proposition is supported at least mildly from the data in Table 1, which unfortunately are available for Oklahoma only since 1973. The current rate of return on pasture in Oklahoma fell from 3.4 percent in 1973 to 2.4 percent in 1981 and on cropland fell from 5.1 percent in 1973 to 3.7 percent in 1981. Data for Kansas for the same period displayed a

Table 1. Rent, Land value, current return and capital gain on pasture and cropland in Oklahoma and Kansas from 1973 to 1981.

Year	Rent		Value		Current return (Rent/value ratio)		Capital gain		Total return	
	Pasture	Cropland	Pasture	Cropland	Pasture	Cropland	Pasture	Cropland	Pasture	Cropland
	(Dollars per acre)				OKLAHOMA (- - - - - - - - - - Percent of land value - - - - - - - - - -)					
1973	6.10	15.10	179	296	3.4	5.1	4.8	14.2	8.2	19.3
1974	7.00	18.80	210	376	3.4	5.0	17.3	27.0	20.7	32.0
1975	7.50	20.50	242	409	3.1	4.9	15.2	8.8	18.3	13.7
1976	8.00	22.50	267	469	3.0	4.8	10.3	14.7	13.3	19.5
1977	8.30	25.70	286	535	2.9	4.8	7.1	14.1	10.0	18.9
1978	8.40	24.60	323	559	2.6	4.4	12.4	16.3	15.1	8.9
1979	9.80	28.00	363	650	2.7	4.3	12.4	16.3	15.1	20.6
1980	11.00	26.50	440	757	2.5	3.5	21.2	16.5	23.7	20.0
1981	10.90	29.90	454	808	2.4	3.7	3.2	6.7	5.6	10.4
AVERAGE					2.9	4.5	11.6	13.4	14.5	18.0
					KANSAS					
1973	7.00	16.70*	150	232	4.8	7.2*	4.8	15.3	9.6	22.5
1974	8.60	21.60*	187	309	4.6	7.0*	24.7	33.2	29.3	40.2
1975	9.30	25.10*	216	380	4.3	6.6*	15.5	23.0	19.8	29.6
1976	9.40	23.30	254	376	3.7	6.2	17.6	-1.1	21.3	5.1
1977	9.10	24.80	260	413	3.5	6.0	2.4	9.8	5.9	15.8
1978	9.60	25.40	267	462	3.6	5.5	2.7	11.9	6.3	17.4
1979	11.60	27.90	305	517	3.8	5.4	14.2	11.9	18.0	17.3
1980	12.40	30.60	354	588	3.5	5.2	16.1	13.7	19.6	18.9
1981	12.50	31.70	371	647	3.4	4.9	10.0	10.0	13.4	14.9
AVERAGE					3.9	6.0	12.0	14.2	15.9	20.2

* Based on irrigated and nonirrigated land. Other years for dryland only.

Source: U.S. Department of Agriculture (August 1981 and earlier issues.)

similar trend. The mid-1970's were unusually favorable years for farm earnings and rents. If an adjustment is made for the unusually favorable economic conditions in the mid-1970's, the rate of return on cropland and pasture would show little if any downward trend.

Capital gain added to current returns brings total returns averaging 14.5 percent on pasture and 18.0 percent on cropland in Oklahoma from 1973 to 1981. Again, total returns in Kansas are somewhat comparable. (The higher current rate of return in Kansas is explained in part by property tax rates double those in Oklahoma which need to be subtracted out of current return to arrive at a net return to investment in Kansas farmland.)

The market operates to raise land prices to the point where earnings to land are about 3-4 percent of land value - - near the levels shown in Table 1 for Oklahoma in recent years. Farmland owners are compensated for inflation by capital gains. But these capital gains are deferred earnings which cannot be realized until the land is sold. Selling land to handle cash flow is not feasible for the typical farm operator because it removes him from his occupation. Some of the accumulated capital gains may be "mined" by refinancing but lenders in general are reluctant to use capital gains as collateral because land appreciation is uncertain "paper" profit not easily measured or confiscated in case of default. The current mortgage interest rate immediately reflects the impact of inflation and tends to be equal to the real rate of interest of about 3 percent plus the inflation premium.

This concept of how inflation raises immediate costs and defers returns is illustrated in Table 2. Current earnings tend to be 4 percent of land values whether inflation is zero or 9 percent. Deferred earnings in the form of capital gains are zero with no inflation and 9 percent with inflation of 9 percent. The mortgage interest rate is 3 percent with no inflation and 12 percent with 9 percent inflation. On the average, this leaves a 1 percentage point excess of returns over mortgage cost with and without inflation. But cash flow is not so well behaved. In the absense of inflation, current earnings are 4 percent and the mortgage interest rate 3 percent which leaves a cash-flow surplus on a perpetual mortgage of 1 percent of land values. With inflation at 9 percent, current earnings are again 4 percent but the mortgage interest rate is 12 percent, leaving a cash-flow deficit of 8 percent with a perpetual mortgage. Current earnings (rent) from 1 acre pay the interest on 1 acre with no inflation, but current earnings from 3 acres of land are required to pay the mortgage interest on 1 acre with 9 percent inflation.

In short, inflation creates severe liquidity problems for investors incurring debt to purchase land. Inflation at 9 percent forces the owner to "save" approximately three-fourths of his earnings in the form of capital gains. But he must pay for these deferred earnings now at the rate of 12 percent mortgage interest - - 9 percentage points for savings and 3 percentage points for real interest cost. Forced high rates of investment in early years may cause high rates of investment and hence be consistent with economic progress, but they constitute a major barrier to entry for

Table 2. Illustration of cash-flow to owner-operator in the initial year with full debt financing of farmland.

	Inflation rate	
	Zero	9 Percent
	(Percent of land values)	
Returns		
Current earnings	4	4
Deferred earnings (Capital gains)	0	9
Total returns	4	13
Cost		
Mortgage interest rate	3	12
Cash flow surplus (deficit)	1	(8)

beginning farmers with limited equity. The liquidity problem gives a competitive advantage in land purchase to established owner-operators and to persons who have income as well as equity and debt capital from non-farm sources. Higher product prices will not cure this cash-flow problem for new entrants. Benefits of higher product prices bid into higher land prices cause even more severe cash-flow problems for future land owners.

Real Wealth Effects

In past decades, farmers benefited massively from inflation because they were net debtors who incurred long-term interest obligations at rates well below the inflation rate. The requirement for such real wealth gains from inflation is that inflation in land values be unanticipated, that mortgages be contracted at long-term fixed interest rates and that farmers be net debtors. Lenders lost heavily from past credit policies and will not soon repeat their past mistakes. Table 3 shows interest rates charged by Federal Land Banks and Production Credit Associations. The table also shows yield on long-term government bonds and the inflation rate. The long-term bond yield is approximately 2-3 percentage points (the real rate of interest) plus the expected inflation rate. Hence, the long-term bond yield is an indication of expected inflation. In five out of the past seven years the bond yield has in retrospect turned out to be negative. In each of the past seven years the bond yield was insufficient to cover inflation plus the real rate of interest.

Because creditors require compensation to forego current consumption, the long-term rate of interest must be positive for investment and economic growth to occur. In the future, cattlemen can expect interest rates to average 2-3 percentage points above the inflation rate. The only way to reduce interest rates over time is to reduce inflation rates. With more and more lenders indexing interest rates to the cost of borrowing, it is clear that interest rates in the future will more closely parallel inflation rates than they did in the past. This means real wealth gains to farmers as net debtors will not be a feasible financial strategy. The implication is that returns from owning farmland are unlikely to be as great as in the past.

Now that the real wealth gain to farmers that accrued because creditors fail to anticipate high inflation is a thing of the past, farmers will experience mostly the undesireable features of inflation including instability, the cost-price squeeze and liquidity problems. The appropriate stance to promote economic well being of cattlemen as well as of other farm groups seems to be to promote economic growth with price stability.

STRATEGY FOR ECONOMIC GROWTH WITHOUT INFLATION

Economists have had some success in formulating policies to promote economic growth and other policies to promote price stability but not policies to promote both objectives at once. After reviewing the genesis of

Table 3. Interest and inflation rates from 1965 to 1979 for the U.S.

Year	Federal Land Banks (New loans)	Production Credit Associations	Long term (10 yr.) govt. bond yield	Change in Consumer Price Index	Real interest (3) - (4)
	(1)	(2)	(3)	(4)	(5)
1965	5.60	6.58	4.2	1.9	2.3
1966	5.82	6.87	5.2	3.4	1.8
1967	6.02	7.29	5.0	3.0	2.0
1968	6.84	7.34	6.7	4.7	1.0
1969	7.82	7.79	7.0	6.1	.9
1970	8.68	8.98	7.3	5.5	1.8
1971	7.86	7.28	5.6	3.4	2.2
1972	7.42	7.02	5.7	3.4	2.3
1973	7.48	8.09	6.9	8.8	-1.9
1974	8.14	9.43	7.8	12.2	-4.4
1975	8.69	8.91	7.5	7.0	.5
1976	8.66	8.24	6.8	4.8	2.0
1977	8.39	7.88	6.7	6.8	-.1
1978	8.35	8.83	8.3	9.0	-.7
1979	9.20	10.71	9.7	13.3	-3.6

Source: U.S. Department of Agriculture (1980) and Council of Economic Advisors (1981).

such past efforts, I will suggest the outline of a policy for economic growth with price stability.

Keynesian Economics

Keynesian economics recognizes that in times of pessimistic economic expectations such as the Great Depression, people save their money for a "rainy day". This removes money from circulation - - those who supply goods and services are unrewarded for production expenses. This breaks the chain of circulation of money from consumers to producers and the money flow and the economy break down. An increase in the money supply can restore the circular flow of money between producers and consumers. Deficit financing by the government has been effective in spending our way out of economic doldrums, with the most dramatic example being World War II.

Neo-Keynesian Economics

Neo-Keynesian economics differs from Keynesian economics in that the former stresses deficit spending and expansion in money supply in excess of the rate of growth of output not only for the Great Depression but for all times. Neo-Keynesians argue that advanced capitalistic countries are chronically prone to recession and need continual monetary-fiscal stimulus to maintain economic vitality. The government since the 1930's has engaged in deficit spending year after year. The problem with this approach, as indicated earlier in the drug habit analogy, is that deficit spending has less and less impact on the economy as the public learns to anticipate and discount the intended effects. Emphasis on expansion of consumption demand as opposed to supply soon takes its toll in incentives, savings, and investment. Without investment in human and material capital to increase production capacity, stimulation of demand eventually does not generate supply to satisfy demand. The result is chronic inflation.

Monetarism

The general price level is essentially equal to the money supply divided by real output of goods and services. It follows that if the Federal Reserve Board holds down the money supply, the general price level will be restrained. This is the approach of Margaret Thatcher of the United Kindom and of Paul Volcker and the Federal Reserve Board since 1980. Money does matter and tight money supply can end inflation. The difficulty is that restraints on the money supply also cut real output of goods and services because prices and wages are inflexible downward in the economy.

That is, less money supply often shows up as less output rather than less inflation. Monetarism (control of the money supply to restrain inflation) extracts an extremely high social, economic and political cost which politicians are unwilling to pay. Although there is no painless cure for inflation, and restraint on the money supply is a necessary if not

sufficient condition to hold down the price level, the search goes on for a less painful cure for our ailing economy.

Supply-Side Economics

Supply-side economists stress that for too long the economy has been manipulated by government induced expansion of consumption demand at the expense of product supply. For too long incentives for savings, investment, and efficient use of resources have been neglected and that revitalization of the economy requires restoration of incentives. This was basically the platform of the Reagan Administration. The Administration wins high marks from economists for rediscovering supply-side economics. But, unfortunately, the Administration confounded supply-side economics with a Neo-Keynesian vestige called the Laffer curve which again seemed to offer a free lunch. The Laffer principle asserts that a cut in tax rates will increase government revenue and erase the budget deficit. Laffer curve expectations will be unfulfilled. The huge and unprecedented federal deficits that will result will create at least one of the following two problems: (1) If the Federal Reserve Board sticks to tight money policies, the deficits must be financed by borrowing from the public, thereby forcing up interest rates, displacing private investment and stagnating the economy; (2) If the Federal Reserve Board loosens the money supply, the result will be a growing economy but high rates of inflation. Of course, there is also the possibility of combining these impacts: a stagnant economy coupled with inflation which is referred to as stagflation.

Structuralism

I suggest that none of the above formulations is adequate alone, although restrictions on money supply and incentives for savings and efficient use of resources are necessary conditions for growth with price stability. The nation must come to grips with the structural elements in the economy that give rise to unbalanced budgets and to prices and wages that are inflexible downward.

The current policy of large deficits to stimulate the economy coupled with monetary restraint to slow the economy and restrain inflation causes the nation's economic engine to run with all the efficiency of an automobile with accelerator and brake pushed simultaneously. A more nearly balanced federal budget would relieve much pressure on the Federal Reserve Board to hold down money supply, drive up interest rates and discourage private investment. A more nearly balanced budget would allow the economy to grow with lower inflation rates. Major cuts in spending to balance the budget could be accomplished without economic hardships by cutting back on billions of dollars of spending for social programs which transfer funds from taxpayers to neither the poor or near poor. In addition the nation will have to come to grips with other impediments to wage and price flexibility such as labor unions. I have elsewhere spelled out a number of

options for changes in the structure of the economy to restore vigor and resiliency (Tweeten, March 1981).

The transition from high rates of inflation to low rates of inflation can be extended and traumatic. One of the least costly transition programs is wage and salary controls for a two year period. Wages and salaries, which account for 75 percent of national income, are the chief perpetuator of core inflation. The two-year freeze would allow profits (5 percent of income) to increase, would encourage expansion of jobs and would reduce inflationary psychology. The freeze must not include profits, rents and interest rates because such controls depress the economy and only postpone needed price adjustments.

A number of additional structural programs could assist recovery of the economy. One is to reduce barriers to international trade. A classic example is the need to open beef markets in Japan, a country with a net trade surplus of billions of dollars with the United States. In general, a policy of freer trade would give the world currently in an economic slump a much needed boost.

Federal tax policies might be revised to eliminate the corporate income tax and tax only earnings to individuals. This would remove double taxation and permit tailoring of tax rates to the ability of individuals to pay. Coupled with this could be an end to minimum wage laws which keep disadvantaged workers from being employed. The minimum wage would be replaced with a wage supplement to assist employers to hire disadvantaged workers. The government would provide assistance so that the employer could pay the worker only what he or she contributes to the value of output of the firm while the worker would receive a socially acceptable wage. Employment would be expanded and the natural or equilibrium unemployment rate reduced. The result would be less incentive to overheat the economy with inflationary monetary-fiscal policy in search of unattainable, low unemployment rates.

Consideration should be given to reducing tax write-offs under a number of policies that encourage substitution of capital for labor. Some of these policies have encouraged over investment in cattle feeding, over expansion of beef production and caused low beef prices. It would appear to be in the interest of the beef industry as a whole to end such policies.

SUMMARY AND CONCLUSIONS

The future of the cattle industry is bright but clouded by government policies. The cattle industry has a major stake in a growing national

economy with low rates of inflation. Unfortunately, current economic policies hold little or no hope for this outcome. Strong measures are needed to reverse the drift of economic policy. No cure to the existing economic malaise is painless but the pay-off to the cattle industry and to the nation is massive from a redirection of policy. Although such redirection is consistent with the long-run economic and social health of the nation, the redirection is not politically expedient in the short run. An economically literate voting population is the only hope to confront our economic problems in a constructive manner with long-term outcomes that kick the deficit spending "drug habit" and restore economic vigor to the economy.

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