Land Bubble Bursts — Will Agriculture **Economy Follow?**

Recent reports from the Federal Reserve Banks of Chicago and Kansas City indicate that farmland values in sections of the nation's cash grain and livestock belts cracked and began heading down during the third quarter of this year after more than 15 years of spiralling upward:

The break in land values puts a time charge to the entire farm economy and its highly fragile credit structure. Over the past several years in particular, with world trade and productivity undermined and new export markets virtually embargoed by the succession of monetary crisis and repeated doses of the inflation-andausterity "cure," inflated land values have served as the dubious linchpin of the American farm economy. In recent years, the land value bubble has been the overriding source of nominal

producers have "refinanced" old, unpayable debts and secured new credit to continue production.

With the bottom falling out of this arrangement, the serious and persisting cash-flow crisis in the farm sector threatens to devolve into an epidemic of bankruptcies and production collapse, whose consequences would by no means be limited to the confines of the farm belt. The collapse of the 1920s land boom, the only comparable previous such "boom," and subsequent prolonged depression in the American farm sector, it will be remembered, both foreshadowed and greatly intensified the succeeding general depression calamity.

Estimates of the downturn vary by region, from 1 percent in parts of the north central region to a drastic 10 percent in western Kansas and Nebraska, and the development is properly causing a stir among agricultural economists, bankers, policymakers, producers and agribusinessmen.

But despite the fact that Kansas City Reserve economist Marvin Duncan hastened to assure himself and William Robbins of the New York Times on Nov. 20 that the downturn is merely a "pause," the proverbial cat is out of the bag. As Chicago Reserve Bank economist Donald Langford had bluntly stated in his Oct. 28 newsletter, the fourth quarter 1.2 percent decline in land values registered in the Seventh Federal Reserve District "ends the boom of recent years" - the doubling of farmland prices, on average, since 1972. Even the cautious U.S. Department of Agriculture now quietly admits, in its November Agricultural Finance Outlook, that future increases in farmland values will "be very moderate, even declining in some states," and highlights this as among the determining features of the agricultural economy's poor financial prognosis.

A Financial Tinderbox

After several years of steep rises, farm income levels dropped sharply in 1973, characteristically foreshadowing the 1974 abrupt general collapse of the post-1971 inflationary "boom." The welcome interim jump in farm incomes, given impetus by the Nixon-Butz "full production" farm policy in conjunction with the 1972 Soviet grain deal and implied prospects for expanded U.S.-East Bloc agricultural trade, had in the meantime given farm producers the long-awaited chance to expand capital investment in land, machinery, irrigation, and other capital formation to achieve greater economies of scale and overall output efficiencies. This trend was in large part reflected in the doubling of farm debt from 1970 to 1976 to \$102 billion, a development which under conditions of world economic growth would reflect a process of vigorous expansion of investments crucial to profitable and necessary leaps in farm productivity.

But, as the 1973 farm income collapse indicated, earlier broad expectations of a growing American and world economy were illusory. Instead, with trade outlets and consumption levels constricted worldwide by the international monetary mess, and with inflation and hyperinflationary austerity bloating producer costs, the American farm sector was pushed into crisis. The New York bank-City of London axis behind the International Monetary Fund's imposition of import austerity requirements on indebted developing sector nations has placed a de facto embargo on U.S. farm export expansion. As former Agriculture Department official Richard Bell recently emphasized, it is precisely the food-short and industrial-development hungry nations of the Third World that are the key to U.S. farm export expansion.

Predictably, as export markets stagnated generally socalled "surpluses" accumulated, and farm prices and incomes started sliding as soon as the blossom of the Soviet grain deal was off the rose. Over the past four years farm income has declined sharply. In September, 1977 the USDA revised farm income statistics for 1975 and 1976 downward. At \$20 billion, 1976 net farm income registered 18 percent below the revised 1975 level, and fully 40 percent below the record 1973 level. Moreover, real net farm income - deflated to reflect "purchasing power" in 1967 dollars - for 1976 totaled a mere \$11.4 billion, a 55 percent drop from 1973 levels and among the lowest since the Great Depression. Latest USDA preliminary estimates for 1977 net farm income stand at \$19.8 billion, a further 1 percent drop from 1976. The USDA and other competent observers acknowledge that rising operating expenses, including the fictitious carrying costs associated with the large debt load, will more than offset any stop-gap improvements in cash receipts resulting from support program adjustments contained in the 1977 Farm Bill.

These are the broad parameters of today's farm crisis - unquestionably the worst cash-flow crisis since the 1920s and 1930s. In April, 1977 the USDA finally made the crisis official with an "extraordinary" survey of credit conditions in a selected nine-state area of the nation's plains and western "breadbasket." The USDA found that at that time fully one-third of the area's producers were in severe repayment difficulty with their loans, and that forced cutbacks or liquidations were on the books for more than 10 percent of the area's 685,000 producers. Since last spring's cash-flow difficulties, then relatively localized in the country's wheat and livestock sectors, and aggravated in areas of severe drought, spread into the north central corn belt region, as corn prices followed wheat prices downhill, and to the southwest. By late summer, monthly distress signals issuing from the Kansas City Federal Reserve District were joined by similar warnings from the Minneapolis and Dallas Federal Reserve Districts.

By Nov. 4 the Chicago Federal Reserve Bank had announced that agricultural credit conditions among banks in the Seventh District, covering the corn belt states of Illinois, Iowa, Indiana, as well as Michigan and parts of Wisconsin, had "deteriorated substantially" during the third quarter, and pointedly noted "the absence of any near-term prospects" for improvements in the situation. The American Bankers Association's November Special Report on agricultural credit conditions nationally concurred in the expectation of further drastic deterioration in the corn belt and continued steady worsening in the plains and west.

In short, since 1973 conditions in the nation's farm sector have unravelled steadily to the present point of a classic "illiquidity" crisis which threatens not only the fragile farm credit structure but production itself. Mounting producers repayment difficulties and concurrent intensified demand for additional credit is occurring simultaneously and acting to intensify the shortage of lendable funds throughout the regional commercial banking network - which depend on farm producer deposits for their cash and credit base.

Enter the Land Value "Buffer"

Under these conditions, producers have been increasingly forced to rely on their "equity" to stave off near-term debt collectors and maintain a flow of production credit. With operating cash-flow strangled, and product inventories devalued, real estate was the obvious candidate for hock - especially since the seemingly irreversible land boom had doubled land values over five short years since 1972, thus increasing producer reliance on the farm credit system to meet the mounting credit needs, a marked trend over the past five years, complemented by a trend toward greater reliance on real estate based credit, and that increasingly for "refinancing" as opposed to new capital formation. Along with this there has been a precipitous increase in nonproducer speculation in the farm real estate market.

As the cash-flow crisis deepened, farm policy pundits

and financial analysts clucked and chirped that the farm sector's \$495 billion in real estate assets would, in the form of collateral for refinancing and new loans, provide a durable "buffer" against the impact of adverse price and income movements.

That this has in fact been the operative principle behind the past year's farm credit developments is apparent. The USDA's November 1977 Agricultural Finance Outlook documents both the surge in farm real estate debt outstanding - quite apart from the rate of land transfers — as well as indicating the extent to which it is serving to "refinance" old debts, rather than underwrite capital formation trends which have accelerated markedly over the past two years.

Farm real estate debt, estimated to reach \$64.5 billion by January 1978, is up 14 percent over 1977. This rate of increase is compared to an 11 percent jump in 1977 over 1976, and a 16 percent increase in 1976 over 1975. At the same time, the rate of increase of nonreal estate debt has slowed. At an estimated \$52 billion as of January 1978, total nonreal estate debt increased 14.8 percent over 1977, compared to a 14.4 percent jump over 1976, and a 12 percent increase over 1975 (see chart 1).

Significantly, in analyzing the 1977 real estate debt increase the USDA cites higher land prices, slower

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Total Farm Debt Outstanding (percent change)

Real Estate	Nonreal Estate*	
15.4	15.6	
12.2	9.6	
10.3	11.9	
10.8	14.4	
14.0	14.8	
	14.0	

^{*}Excluding Commodity Credit Corporation

Farm Real Estate Debt Outstanding by Major Creditors (percent change)

	Federal Agants	Life sure fice ites	Control cial	Individual
1973-74	20.5	5.7	13.9	18.4
74-75	22.9	5.6	9.3	9.4
75-76	19.0	6.8	5.5	7.6
76-77	15.7	10.0	7.7	8.2
77-78	17.2	17.6	16.5	10.0

repayment rates brought on by declining incomes, and "a much greater than normal proportion of short-term debt being converted into loans secured by farm real estate," - together with a merely "probable" increase in the rate of transfers.

In fact, actual farm real estate acreage transferred had dropped significantly in the past two years. In the year ending March 1, 1976 23 million acres changed hands — up 15 percent from the 20 million acres transferred in 1971, but down nearly 50 percent from the 42 million acres transferred in the year ending March 1,

Suggestive of the speculative bonanza involved is the sudden and substantial reentry of insurance companies into the farm credit market in the past two years, after more than three years of reduced participation. Over 1976 life insurance company-held real estate debt outstanding leaped 10 percent, and in 1977 a startling 17.6 percent, the largest percentage increase among the major real estate lender groups. By contrast, from 1973 to 1976, the years of greatest activity in terms of actual farmland transfers, the insurance companies' outstanding farm real estate debt increased at a sluggish annual average rate of 5-6 percent.

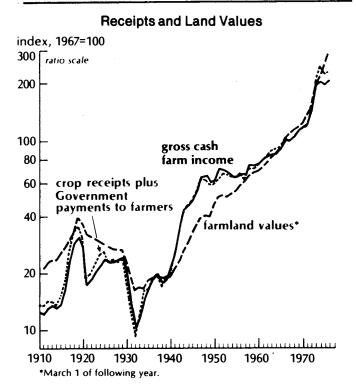
Further, the USDA notes repeatedly that commercial banks are increasingly securing their short term debt with farm real estate loans, adding that 49 percent of the surveyed bankers reported an increase in such farm mortgage-based refinancing, and concluding that such conversions tended to boost the real estate secured loans totals and correspondingly limit the rise in nonreal estate loans. Indeed, farm real estate debt outstanding to commercial banks, while a relatively small portion of total real estate debt, jumped 16.5 percent over 1977, compared to a 6 percent average annual increase over the previous two years. At the same time, nonreal estate

debt outstanding to commercial banks rose 10.8 percent during 1977, compared to a 15.5 percent increase over 1976, and a 10.5 percent increase over 1975. According to the USDA, this overall slowdown in the growth of nonreal estate loans for 1977 occurred despite an unusually rapid rate of increase during the first half of the year, which "leveled off" in the second half of the year (see chart 1).

A Bubble Built On A Bubble

What these trends show is not the resiliency and increasing stability of the farm economy, but its dangerous vulnerability. This shift toward real estate debt financing, with its included feature of an increasing proportion of refinancing, has the effect of building a speculative time bomb into the farm economy. On the one hand, the proliferation of such fictitious accumulations demands a progressively greater portion of farm cash revenues in the form of carrying charges, at a time when the constriction of world markets holds down farm income. On the other hand, the decline in farm income and mounting cash flow problems act increasingly as a "reality principle" undermining the inflated land values that are the ultimate bank-stop to the debt accumulations. A producer who has secured a \$250,000 loan, putting up 500 acres of his farmland at the nominal 1977 value of \$500/acre as collateral, is immediately saddled with high interest and principal payments in the face of a declining rate of return, a formidable problem in itself. But this same producer will find such a relative "squeeze" turned into a veritable death-trap at the point that land values plunge 10 percent.

The post-1972 land boom turned a longer-term inflationary trend into a full-blown speculative bubble in the farmland real estate markets. Since 1953, real farmland values rose steadily while real farm income stagnated and trended lower. But by 1976 real farm income was at 1967 levels, or the tenth lowest in 40 years, while real





Percentage of Cash Receipts

Absorbed by Interest Payments

30 Illinois 20 10 **United States** '59 '63 '67 '69 '71 '73 Source: The Federal Reserve Bank of Chicago

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farmland values were more than 50 percent above 1967 levels!

By all accounts, the "land boom" of 1972-1976 was accompanied by farmland purchases by producers in the relatively larger family farm category for expansion of their operations to realize the economies of scale implicit in the level of technological development — e.g., large, four-wheel drive tractors, and similar machinery. In 1976, 60 percent of all transfers were intended for use as part of another farm and only 29 percent were intended for use as a complete farm — by contrast, in 1956 only 33 percent of such transfers were used as part of another farm, while 60 percent were used as whole farms.

This is corroborated by the fact that from 1971 through 1975 the number of farm units in the \$40,000 to \$100,000 and over sales class, as a percentage of total farm units, doubled, from 8.5 percent to 16 percent. The number of farm units in the \$20,000 to \$100,000 and over category nearly doubled as a percentage of total farm units — from 20.8 percent to 36.1 percent — during the same period.

In light of the fact that the "land boom" was nonetheless an essentially speculative phenomenon, it is noteworthy that it is precisely these larger, more efficient and productive farm units that are now most immediately on the chopping block.

In fact the momentum of the land value bubble was initiated and sustained, even in the face of contrary real economic indicators, on the basis of the monetarist conceit of "ground rent." As Feedstuffs editor Fred Tunks put it recently, "What's happened to the price of farmland probably makes more sense to psychologists than to accountants." For the monetarists, the value of land depends not on its real wealth producing capacity, but on the bet that he can sell it to the next guy for more than he himself paid for it. In a highly inflationary period like the present, with persistent international monetary crisis and uncertainty, the non-producers who now make up 25 to 30 percent of the farm real estate market participants use that leverage to introduce a self-feeding speculative spiral in the market - otherwise known as "hedging against inflation." The producers buying land for productive expansion are relative captives to this more basic process.

He is further penalized by the fact that debt servicing requirements — that is, interest and principle payments — have increased even faster than land values! While

from 1960 to 1970 the annual principal and interest payment for an average acre of Illinois farmland, for example, rose from just over 20 percent of gross receipts expected from raising corn to a "peak" of 34 percent, by 1976 the inflation of land values and collapse of grain prices had pushed the ratio to a new high of 40 percent for that same piece of Illinois acreage — fully double the levels typically experienced during the 1960s. Under conditions of world economic and trade contraction, this trend of increase in fictitious charges acts to offset gains from the investment in expanded economies of scale, very quickly turning a dubious investment into a certain liability, and further cannibalizing the farm sector's productive resources.

In emphasizing the uniquely precarious nature of the current land boom, Gary Benjamin observed in the May-June Federal Reserve Bank of Chicago Review that the sustained uptrend in land values from 1953 to 1970 despite a stagnating income base was manageable largely due to the fact that, in contrast to the World War I land boom and that of recent years, the postwar boom was accompanied by a huge across-the-boards paydown in real estate debt outstanding. With new capital goods diverted to war-related manufacturing, Benjamin points out, farmers converted high wartime net incomes to debt repayment to the extent that by 1946 outstanding farm real estate debt had fallen to a 31-year low. No such paydown took place prior to or in conjunction with the 1972 boom.

Monetarist gibberish to the contrary, land values are ultimately determined by the viability and well-being of the underlying process of real production, capital formation and trade. Thus, the enormous \$495 billion in farm real estate holdings — compared to \$116 billion in total outstanding farm debt - remains a merely nominal asset. As the break in land values indicates, reality has now begun to unceremoniously "correct" such nominal fantasies. The break in land value appreciation will act both to shut off this avenue of producer credit, and devalue the collateral behind existing outstanding debt, sharply tightening the financial noose around the farm sector's neck. The fact that the fantastic bubble has become the basis for a pyramid of both nonproductive "refinancing" as well as necessary new operating credit, under conditions of accelerating world trade and financial collapse, sets the stage for a rerun of the 1920s farm sector collapse and worse.

-Susan Cohen