THE IMPENDING REAL ESTATE CRASH: FACT OR FICTION?

by James R. Webb and Richard J. Curcio

1979 was the fiftieth anniversary of the stock market crash. In keeping with the occasion, numerous doomsayers have predicted a crash (or at least a substantial decline) in the prices of existing housing. Numerous reasons are offered for this impending crash but the predominant ones include:

- Because housing prices are out of historical relation to the price of gold, the stock market and the consumer price index (inflation), a downward adjustment must occur to restore balance.[1]
- With household indebtedness at an all-time high in absolute and relative terms, the economy is slowing down. Some people will lose their jobs and others will work fewer hours, reducing income and increasing defaults on debt payments, thereby causing foreclosures in the short run. Since people could not afford to continue to bid up prices or perhaps even make their mortgage payments, prices will fall.
- The cost of borrowing for mortgages, at an historical high in most states (mortgage rates are twelve percent or higher for twenty percent down, single-family owner-occupied houses in many places), stops potential purchasers, if they could obtain mortgage funds, from buying. This puts pressure on sellers to lower prices in order to sell their property.[2] Because many of these people are speculators, the effect of a downward rolling snowball would occur accelerating the price decline.[3]
- The decrease in the volume of house sales while prices have continued to rise implies a decrease in demand at the increasing price. Therefore, house prices should peak soon as sales slump and then decline until the market reaches normal sales volume again.

These scenarios may sound very logical at first reading. With closer scrutiny however, the underlying analyses reflect serious shortcomings.

The Relationship of Housing to Other Goods

The first explanation derives its strength from a hypothetical relationship between the price of real estate (single-family houses only) and the price of gold, the price of common stocks and the consumer price index (CPI). However, sponsors of this rationale never specify this theoretical price relationship nor is it apparent that it should or does exist.[4] The CPI, the nation's official measure of inflation, has come under severe criticism lately as an overstatement of true inflation largely because of the distorted manner in which house and mortgage interest costs are incorporated. The CPI reflects the average periodic changes in retail prices for a fixed basket of goods and services with housing and mortgage interest costs making up one fifth of the index's computed value. However, people are not continuously purchasing a new home and, for most existing homeowners, their mortgage interest rates are fixed at far lower than current market levels. Further, the determinants of stock prices, and the influence of inflation on stock prices in particular, remains a highly debated issue among financial theorists.[5] Certainly the performance of stock market indices over the past fifteen years in which, for example, the Dow Jones Industrial Average (DJIA) is currently trading at levels lower than those achieved in 1966, is enough to make even the most devout common

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James R. Webb, PhD, is head of the real estate department at Kent State University. His published articles include topics such as real estate investment evaluation, housing analysis, quantitative appraisal techniques and risk measurement in real estate.

Richard J. Curcio, PhD, is chairman of the finance and public administration department at Kent State University. His articles on capital budgeting, cost of capital, financial analysis of banks, real estate portfolio selection and quantitative approaches to real estate valuation have appeared in leading publications.

stock investor question the age old belief that stocks are a "good hedge" against inflation. Finally, the pricing of gold in recent years has defied the arguments and rationale of the nation's leading economists and has signified the defeat of the major efforts of governments to demonetize it. More emphatically, the very dramatic rise in gold prices in recent months has taken place with little apparent relationship to the prices of common stock or real estate.

Hence, it appears fair to conclude that the pricing relationship between real estate, common stock and gold, if there is such a relationship, is unknown. Thus, attempts to forecast housing prices based on such vague associations must be regarded as scientifically unfounded.

Burden of Household Indebtedness

To be sure, excessive household indebtedness would tend to put downward pressure on housing prices. Hence the real issue is not whether high debt levels are detrimental to real estate pricing, but whether the current level of indebtedness is really excessive. The doomsayers cite consumer debt ratios (mortgage debt/personal income and installment debt/personal income measures) which are at an all-time high in both absolute and per capita terms. While such arguments are initially convincing, these computations do not reflect the extended repayment periods which currently are so common in the purchase of homes and large ticket items such as automobiles and major appliances. The standard consumer debt ratios do not reflect modern financing instruments such as graduated home mortgages which reduce the monthly payment in the early years of home purchase. It would be more relevant to measure the consumer's ability to repay his debt and not merely his total indebtedness. In this regard debt repayment/disposable household income ratio is a superior measure of the consumer's repayment ability. It would be even more appropriate to measure this debt repayment ratio for those households with debt rather than for all households. For example, whereas in 1970 the top twenty percent of the income earners had 24.9 percent of the total installment debt, in 1977 the same group was responsible for thirty-seven percent of the debt in this category.[6] Further, in 1977 over forty-three percent of households had no installment debt while all other income groups had only nominal increases or decreases in the percent of total installment debt when compared to 1970 levels.

Hence, it appears that a significant proportion of households have no debt burden and that a major portion of the increased financial indebtedness in recent years is being borne by the top twenty percent of income earners or those better able to meet their obligations. It also has been demonstrated that debt repayment as a percent of disposable income was 20.7 percent in the first quarter of 1979, only slightly higher than the 19.3 percent level registered between 1965 and 1973.[7] More emphatically, when debt levels are analyzed on the basis of repayments as a percentage of disposable income of only those households that actually hold debt, the results are quite favorable. This ratio has been less than thirty-nine percent only three times since 1961; however, in 1978, this ratio had just broken through thirty-nine percent from the underside.

Another deficiency of the standard measure of consumer indebtedness is the manner in which home refinancing is reflected in the computation of indebtedness ratio. For instance when a consumer refinances his home either through a renewal of a first mortgage or by securing a second mortgage, the numerator of the ratio (total mortgage debt/personal income) is increased while the denominator does not change. However the funds received from the refinancing, while not reportable income, are disposable and can be used to meet debt obligations.

Finally, if consumer indebtedness were indeed excessive, it would seem reasonable to expect some significant increase in mortgage delinquencies to follow. Despite the recession (believed to have begun in April 1979) the mortgage delinquencies reported for November 1979 by the United States League of Savings Associations held at 0.71 percent, the same as a year earlier and the lowest since the association began monitoring delinquencies in 1953.

Speculation Hypothesis

The "speculation" rationale for a crash in housing prices is based on the conclusion that not only are current consumer debt levels excessive, but that much of this borrowed money is going into speculation in single-family residences. The rationale further depends on the expectation that potential home buyers will significantly resist purchases due to the current record high mortgage interest levels. These conditions, it is reasoned, would cause sellers to lower prices in order for their sales to clear the market. Since many of these sellers are heavily indebted speculators adversely affected by price reduction, they may subsequently be stampeded into further selling thus accelerating the price decline.

The conclusion that consumer debt levels are excessive has already been questioned, but what about the necessary assumption regarding the extensive speculation in housing? The major proponents of this hypothesis, Cardiff and English, both appear to be victims of the old (very old) psychological neurosis known as "the central place fallacy."[9] Stated simply it means that every young person views himself or herself as the center of the world.

Cardiff and English seem to assume that the rest of the United States revolves around what happens in California. The gyrations of the California real estate market lately are familiar to almost everyone, but

hardly representative of the whole United States. They state, for example, "We have talked to many speculators of relatively modest means who own twenty-five or more houses. Due to normal expenses, some of these folks report that they are forced to sell a house or two a year just to make ends meet.... No one knows how much of the nation's housing stock is in the hands of speculators. Estimates range as high as forty percent in some areas."[10]

Is this representative of the real estate market in the United States? How many people do you know who own twenty-five or more houses? Who owns the houses in your neighborhood? Speculators or the people who live in them? A major error has been committed, that is, the results of a small biased sample have been generalized to the whole universe without aid of rigorous methodological technique.

The extent of consumer resistance to the current high interest rates should also be examined carefully. To be sure, home sales may well be slowed by these historically high mortgage rates. However, high financing costs alone do not seem sufficient to drastically impact housing demand. The availability of mortgage money has in the past appeared to be a more critical factor affecting home sales. In the 1974-75 recession, the relatively steep and abrupt decline of home sales was due more to the shortage of mortgage funds than to the high interest rates (historically high for that period) prevailing at the time. As the Federal Reserve Board imposed credit tightening actions, thus raising interest rates, the savings and loan associations and the commercial banks were unable to compete with other sectors for savers' funds. Disintermediation occurred, drastically reducing the availability of mortgage funds. Despite the adverse circumstances that prevailed in the 1974-75 period, housing prices did not decline nationally on an annual basis. To date, owing to the introduction of the competitive six-month money market certificates and other instruments permitted to banks and savings and loan associations, the impact of recent Federal Reserve Board credit tightening moves has had a less severe impact on mortgage availability. Also, mortgage bankers (who, unlike savings and loan associations, do not rely on savings deposits for mortgage money, but rather raise funds in the more competitive secondary mortgage market) are filling an increasing portion of the unfilled conventional mortgage demand of the savings and loans. Hence, as long as mortgage funds are available, the consumer may still justify purchase of a home at high mortgage interest rates in light of expectations of housing price increases.

Sales Volume Versus Prices

The last rationale comes from the sales volume analysts.[11,12] This is a form of chart reading or technical analysis somewhat subject to interpretation from the outset. In arguments for this approach, we are again forced to make comparisons with the 1929 stock market debacle.[13] The only difference is that a chart of volume is given with that for prices. A reading of volume analysis sounds like the analysis of a stock market chart reader, i.e., breadth divergence, volume and price acceleration slowed, etc.

As any real estate professional knows, housing prices by themselves are fairly meaningless in most instances. The price tells little, if anything, about the underlying asset. The mean price of housing used in the above analysis can be seriously criticized for omitting quality variables, a problem that does not generally occur and is not adjusted for often in financial asset analysis. Numerous and substantial changes in housing since 1966 have occurred.[14] Simply adjusting for number of square feet reduces the average sales price in 1977 to $50,000 instead of $54,000 — a seven percent reduction. This is not an insignificant difference. Also in 1977, 46.9 percent of the homes built had two bathrooms versus 30.7 percent in 1966 and only 25.4 percent of new homes had central air conditioning in 1966 versus 54.0 percent in 1977. In addition, more appliances, fireplaces and garages are supplied with homes than ever before. It has been estimated that over twenty percent of the rise in the price of housing since 1966 is due to improvements in quality.[15]

The "price" of housing, furthermore, is not the sales price as it is with financial assets. The price of housing is a combination of the selling price and the financial terms of purchase or the mortgage. The mortgage includes the interest rate and the term. A rise in the interest rate can be offset by lengthening the term. Many variable rate mortgages, especially in California, simply lengthen the term when the interest rate increases, thereby maintaining the same debt service. The mortgage is the means whereby the sales price is paid and interest is paid on the loan. (The down payment is excluded of course.) If interest rates on mortgages are increasing, then housing prices would tend to decrease, all other things equal. But all other things are not equal! Therefore the relevant variable for analysis is not selling price but a combination of selling price and terms of financing.

The volume/price relationship in real estate is also unusual. It does not adhere to those of financial assets. When the price of housing (selling price plus terms of financing) gets high relative to the recent past, sales volume slows due to price resistance as with all economic goods. This happens easily when interest rates are increasing since the selling price of housing does not go down as it's supposed to do. This is probably due in large part to inflation which makes the replacement cost higher if another house were to be built. The prospective sellers may just rent and keep the property or often simply take property off the market to wait for better times. So interest rate increases simply get added to prevailing prices. Housing prices rarely adjust downward. They usually

level off and then rise faster than inflation later as interest rates decrease. Demand becomes pent up during the high interest rate period and the supply of new housing is reduced. When interest rates decrease, the demand exceeds the supply and housing prices accelerate quickly.

Real Assets Versus Financial Assets

Many of the errors of current attempts to analyze the real estate markets can be traced to the analyst's lack of familiarity with real assets in general and real estate in particular. Real assets are the property itself as compared to financial assets which are proxies for property. A real asset can be and often is used to enhance the owner's existence. People live in and enjoy their homes daily. This is not true of common stocks or gold in general. When the asset is disposed of, the owner directly receives 100 percent of the benefits. Real asset owners see their property, can use their property and do not have to wait for dividends, etc. at the whim of management.

There are other major differences between financial assets and real assets. The most significant is the financing. Real estate until recently could be leveraged to ninety percent with a thirty-year debt service that never changed. At this writing, thirteen percent mortgages can be obtained for thirty-year terms while the rate for broker's funds is over eighteen percent. Also, for the common stock investor, only fifty percent leveraging is available to shelter income! Where in the financial sector can benefits comparable to those in real estate be obtained? In addition to all of this, real estate is never subject to a margin call. The initial investment and debt service are fixed for thirty years once the transaction is completed. Only minor expenses such as taxes and maintenance may increase but they will generally be offset by higher rents. Some analysts would argue that loss of rents acts as a margin call since more capital will have to be paid into the investment. However, real estate owners can cut their rent losses by renting at under market rates. Financial market investors have no control other than to sell their assets.

Necessary Conditions

If a crash in real estate were to occur, some major changes would have to transpire in American society.

A technological breakthrough that significantly reduced the cost of construction would cause a temporary reduction in the price of existing housing. If the technological improvement enabled houses to be built fifteen percent cheaper, then housing prices would drop approximately twelve percent. Since land is on the average twenty percent of the price of housing, the fifteen percent reduction would apply only to the improvements part. After this one time reduction, housing would then again resume its upward cost movement, unless the technological breakthroughs continued. However, technological improvements such as modular homes, prefabricated and pre-engineered homes have been around for many years but show little sign of making major inroads into the housing markets.

Major expansions in supply without corresponding expansion in demand would eventually cause a drop in housing prices. If the housing market were to overbuild by twenty percent, for instance, eventually prices would begin to shift significantly downward due to lack of buyers. Once sales could not be made by builders at a reasonable profit, they would cease to build thereby allowing the demand to catch up. Since in a whole year of good building activity builders add only about three percent to existing supply, the chances of a major price shift due to oversupply is extremely unlikely.

People could move in with each other thereby reducing the number of units demanded. Grandma and grandpa could move in with son or daughter or young married couples could move back with mom and dad. A major depression such as the one that occurred during the 1930s could cause such a situation but the federal government would never permit such a state of affairs to persist for long. With all the available social welfare payments and the governmental and quasigovernmental mortgage agencies, any large scale threats of foreclosure in the housing markets would be shortlived. In addition, the tax code continues to favor home ownership due to the deductibility from income of interest and real estate taxes.

Looking Ahead

Explanations have been offered on how the low number of building starts due to high level of interest rates would create over a million unit shortage of housing units by 1981. The result will be more demand pushing the existing housing stock which in turn will eventually produce rapid price increases. Some analysts have gone even further, claiming that perhaps major changes in lifestyle are upcoming due to lack of housing units.[14] A study by the Robert A. McNeil Corporation, a fast-growing California real estate management and development company, further states that 2.8 million dwelling units are needed each year up to 1990 just to break even. If this prediction is true, the shortage could be as high as four million units by 1985. The losers in the bidding competition that could develop will have to live in multiple unit dwellings.

Regardless of high interest rates and "end of the world" philosophers, the near future will hold more of the recent past. The real estate market will not crash. There will not be a general decline in the average price of housing on a year to year basis. This is not to say that minor short term or regional decreases may not occur. Monthly seasonal decreases occur each year. Special events such as a large rise in

interest rates over a short period may also cause temporary short term decreases. But on balance and quite to the contrary, using annual national comparisons, it is more likely that housing will continue to increase in price. Price increases will be more moderate but look for these increases to accelerate in 1981, particularly if interest rates are decreasing.

NOTES

1. Charles D. Kirkpatrick, II, "Bearish On Real Estate: House Prices, an Analyst Insists, Are Peaking," *Barron's* (July 23, 1979), 11-14.
2. "Business Outlook," *Business Week*, (November 5, 1979), 49.
3. Gray Emerson Cardiff and John Wesley English, *The Coming Real Estate Crash* (Los Angeles, Arlington House, 1979).
4. Kirkpatrick, op cit.
5. Franco Modigliani and Richard A. Cohn, "Inflation, Rational Valuation and the Market," *Financial Analysts Journal* (March/April 1979), 24-44.
6. Charles A. Luckett, "Household Borrowing Behavior: Some Survey Evidence," paper presented at the annual meeting of the Financial Management Association, Boston, October 1979.
7. Carl J. Palash, "Household Debt Burden: How Heavy Is It?" *Federal Reserve Bank of New York Quarterly Review*, Vol. 4, No. 2 (Summer 1979), 9-12.
8. Ibid.
9. Gray Emerson Cardiff and John Wesley English, "Subtle Signs of a Housing Slump," *The Plain Dealer* (October 2, 1979).
10. Cardiff and English, op cit.
11. "Economic Diary: Is It Time For The Real Estate Bubble to Burst?" *Business Week* (June 11, 1979), 20.
12. Kirkpatrick, op cit.
13. Ibid.
14. Catherine C. Randazzo, "'Quality' Features Drive up Housing Prices, Surveys Indicate," *The Appraisal Journal* (October 1979), 592-600.
15. Ibid.
16. Steve Frazier, "Shortage, High Prices Loom in Housing Field After Slump of 1979-1980," *The Wall Street Journal*, Vol. LX, No. 12 (October 30, 1979), 1, 32.
17. Dan Dorfman, "Housing Unit Shortage May Alter Lifestyle," *Akron Beacon Journal* (September 23, 1979), H7.

BIBLIOGRAPHY

1. "Economic Diary: Housing's Final Flare Before The Fall," *Business Week* (July 9, 1979), 11-12.
2. Howard J. Ruff, "The Crash That's Coming and How To Survive," *Reason*, Vol. 11, No. 2. (June 1979), 34-35.