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HIGHLIGHTS

CRACKS IN THE FOUNDATIONS OF GROWTH

What Will the Housing Debacle Mean for the U.S. Economy?

DIMITRI B. PAPADIMITRIOU, GREG HANNSGEN, and GENNARO ZEZZA

Introduction

With economic growth having cooled to 0.7 percent in the first quarter of 2007, the economy can ill afford a slump in consumption by the American household. But it now appears that the household sector could finally give in to the pressures of rising gasoline prices, a weakening home market, and a large debt burden. In this brief, we look at the American household and its economic fortunes, concentrating on how falling home prices might hamper economic growth, generate social dislocations, and possibly lead to a full-blown financial crisis.

The seasonally adjusted real median price of existing homes—the proxy adopted for our evaluation of the impact of the housing market on consumption—reveals a sharp turnaround (Figure 1).[1] After stabilizing for about 15 years, this measure rose by 19 percent from 1995 to the first quarter of 2000, and by an additional 20 percent to the third quarter of 2005, when it reached its peak. In the first quarter of 2007, this index lost about 9 percent of its value, and the April 2007 figure shows a further decline.

The rising demand for homes had been driven largely by a steep rise in subprime mortgages, which are made to borrowers with a relatively high probability of default. These loans grew fivefold between 2001 and 2005, reaching $625 billion annually (*The Economist* 2006). They now account for

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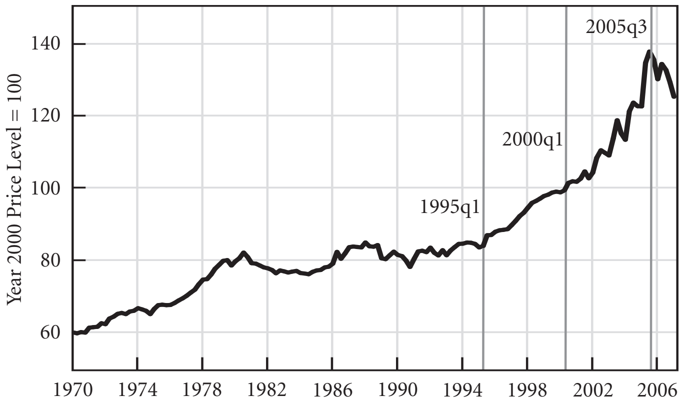
Figure 1 **Index of Median Price of Existing Homes, Deflated**



Sources: National Association of Realtors, Bureau of Economic Analysis, and authors' calculations

14 percent of all mortgages outstanding, and have been used for home-equity withdrawal, not just first-time home purchases (Bernanke 2007c). The rate of serious delinquencies has approximately doubled, to 12 percent, and difficulties have been spreading to Alt-A mortgages, which are less risky than subprime but still below prime (Shenn 2007; Bernanke 2007b).

Some securities backed by subprime mortgages have been downgraded by the major bond rating firms; in what might be a sign of things to come, Bear Stearns, one of the biggest investors in subprime mortgages, has recently lent $3.2 billion to rescue one of its own hedge funds, which narrowly averted a meltdown in late June (Ng 2007; Howley 2007). Moreover, the banks that provide capital to mortgage lenders have begun to demand tighter lending standards, more documentation of income, and more money down (Shenn 2007). This will curtail the demand for homes absolutely, probably leading to further price declines. More problems lie around the corner, as many variable-rate mortgages will be subject to upward interest rate adjustments in the coming years, just as mortgage interest rates have finally begun to rise in earnest. These adjustments alone will cause over one million foreclosures on first mortgages originated in 2004–06, according to an industry study by First American CoreLogic conducted before the recent rate increases (Cagan 2007), and will no doubt depress home prices even more.

Minority borrowers have been a leading market for subprime lenders, and they stand to lose the most from the ongoing wave of foreclosures. Besides a loss of household assets, the decay of entire neighborhoods will have an impact on economic well-being and impose social costs on cities.

Federal Reserve Chairman Ben Bernanke (2007b, 2007c) believes that recent curbs on subprime lending, along with an increase in foreclosures, will reduce the demand for houses, putting downward pressure on prices. However, he emphasizes that the "vast majority of mortgages, including even subprime mortgages, continue to perform well," and that problems with subprime mortgages were unlikely to spill over into the rest of the economy or the financial system as a whole. He has called for action to shore up the capital of the government-sponsored entities that invest in hundreds of billions of dollars in mortgages and also bundle them into securities (Bernanke 2007a). Remarkably, his remarks seemed to hint that the current position of these companies could lead to a major financial crisis.

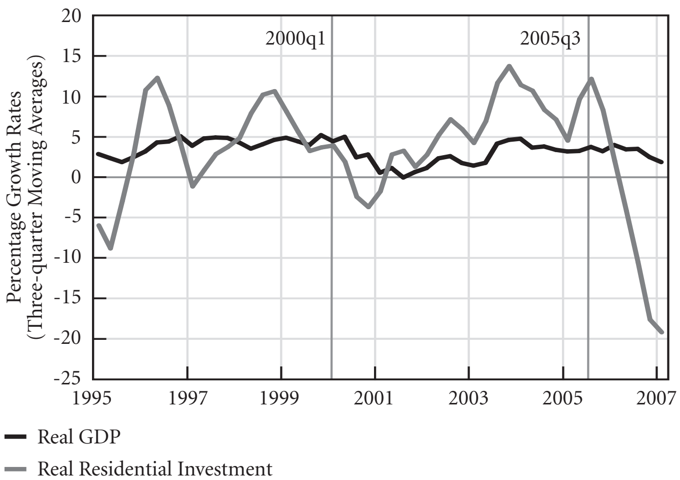
The Impact of Housing Wealth and Home Equity Withdrawal on Economic Activity: What We Know and What We Will Find Out

It will come as no surprise to most readers that economists suspect that the housing boom has been an important force behind the economic recovery that began in 2002, and that an unstable housing market may now be leading the economy into a recession or an extended period of very weak growth (Godley, Papadimitriou, and Zezza 2007). But here we provide some additional perspectives on the "housing wealth effect" and other related impacts on consumption spending.

There are several ways in which housing is an integral part of a growing economy, especially in periods of rapidly rising home values. First, home building, furniture sales, and home improvements account for a significant percentage of GDP. Government statistics show that the residential investment sector is already acting as a drag on economic growth (Figure 2). Second, rising home prices increase household net worth, and consumers probably base their spending decisions partly on their net worth, not their income alone (Friedman 1957; Keynes 1936, pp. 92–93).

It is important to distinguish two roles of home equity—as both a balance sheet item and a source of cash. First, along with financial assets and the discounted value of future income, it is a component of what we call "permanent income," which in turn determines the total amount of overall household consumption. Second, home equity can make consumption possi-

Figure 2 **Growth in GDP and Residential Investment**



Source: Bureau of Economic Analysis

ble through its role as a piggy bank. Since the general increase in the availability of mortgages extends to second mortgages, home equity lines of credit, and the like, the "piggy-bank effect" has become more potent in recent years.

In a useful summary of previous studies, Menegatti and Roubini (2007) find that estimates of the propensity to consume out of an additional dollar of housing wealth range from 4.5 to 16 cents and that each dollar of home equity withdrawal leads to 10 to 50 cents of additional consumption spending. When home improvements and payoffs of nonmortgage debt are added to actual consumption expenditures, the impact of a dollar of home equity withdrawal is multiplied several times over (Greenspan and Kennedy 2007).

Given the potential shortcomings of econometric estimates, we have evaluated the impact of the housing market slowdown on the economy using the Levy Institute macroeconomic model and some simple indicators affecting domestic private expenditure. Our results are calculated in the form of elasticities—the percentage increase in one variable for a 1 percent increase in another variable. We find that the elasticity of real private expenditure to the median home price, at 0.04, is quite low during the quarter when a shock to home prices hits, and rises to 0.12 when the shock is entirely absorbed, with a mean lag of about five months. According to our estimates, the recent decline in home prices is slowly having its effects on real private expenditure, and we expect these effects to persist in the second and third quarters of this year.

More importantly, a drop in home prices is likely to reduce the willingness and ability of consumers to borrow, and according to our estimates this will have additional effects on expenditure. Our estimates imply a short-run elasticity of real expenditure to household borrowing at 0.01, and a long-run elasticity of 0.03.

In the first quarter of 2007, home prices declined 3 percent over the previous quarter, and household borrowing dropped 15.6 percent. Combined, the two effects imply a drop of about 0.4 percent in expenditure by the end of the second quarter of 2007 and about 0.9 percent in the long run. These effects can, of course, be countered by positive shocks arising from real disposable income or the equity market, but May data on real weekly earnings show that wages have not been keeping up with inflation, and this will put added pressure on household expenditure.

Although real consumption growth remained high in the first quarter of 2007, at 4.2 percent, a growth-recession scenario, such as those outlined in recent Levy Institute Strategic Analysis reports (Papadimitriou, Zezza, and Hannsgen 2006; Godley, Papadimitriou, and Zezza 2007), is becoming more and more likely.

Recent Financial Developments: Adding to, or Conjuring Away, Systemic Risk

Two recent developments in the way homes are financed will greatly affect how the current situation plays out. First, financial institutions that originate mortgages often do not hold them on their books or bear the risk of a default. Rather, an increasing number of mortgages are sold by their originators to institutions that bundle them into mortgage-backed securities, which are traded like any other bonds. The biggest players in this business are the so-called government-sponsored entities, or GSEs (such as Freddie Mac and Fannie Mae), which have drawn the fire of Bernanke (2007a) and others. They maintain that GSEs enjoy an implicit government guarantee that allows them to pay low interest rates on the money they borrow, and that this arrangement amounts to a subsidy by taxpayers, who may ultimately foot the bill for a bailout. Another aspect of the "securitization" business is the resale of various "tranches" of mortgage-backed securities and credit derivatives. While it is known that various institutional investors hold much of this risk, there is no complete accounting of exactly who is exposed and to what extent, since hedge funds and the like are not as heavily scrutinized by regulators as traditional financial intermediaries, such as banks.[2]

The second development is the greatly expanded use of subprime and "exotic" mortgages and the general trend toward higher loan-to-home-value ratios. The term "exotic" simply refers to such risky practices as interest rates that jump higher after a period in which the borrower enjoys a below-market "teaser" rate; mortgages that allow the principal to grow for a time, rather than being steadily paid off; zero down payments; and waivers of the usual requirements to provide proof of income when applying for a loan.

Some lenders now claim that they were unaware of the amount of risk being taken on—that they were pressured by the investment banks (Bajaj 2007)—and others have apparently been using creative accounting techniques to hide losses (Browning 2007). Furthermore, those in the industry who are using questionable lending criteria have so far been a few steps ahead of the sheriff—the governmental bodies that have real power to stop the most irresponsible practices. Moreover, some financial practices that have hidden the extent of the problem—such as valuing illiquid derivatives according to an optimistic model rather than market prices—are legal and have been accepted for many years.

We have offered a pessimistic view: lightly regulated lenders have been taking undue risk. Those who see a brighter picture with respect to innovations in mortgage lending point to three key themes in the rapid growth and development of modern financial markets and banking: (1) *democratization* that brings credit to those who lack "collateral and connections" (Rajan and Zingales 2004); (2) increased *choice* of when to spend lifetime income (Hurst and Stafford 2004; Gerardi, Rosen, and Willen 2007); and (3) reduced *costs* of borrowing (Kroszner 2007).

The financial and banking industries have undergone waves of innovation since consumer credit became widely available early in the 20th century. These waves have been spurred partly by the profit motive and the need to outwit the regulators, and partly by the innate human tendencies of greed, herd behavior, and overoptimism. Hyman P. Minsky's financial fragility theory (1975; 1986) showed how the economy is subject to one crisis after another, as "Ponzi" and "speculative" finance repeatedly burgeon until there is an inevitable and disastrous bust. The Minskyan view holds that the increasing availability of credit and the proliferation of new financial products represents the unsustainable upward phase of a potentially unstable cycle.

Supporting this interpretation is the fact that lending standards have been very lax relative to historical norms, and the ratio of home prices to rents, compared to previous levels, is still high. Moreover, the use of credit derivatives to shed risk associated with holding mortgages can be seen as a kind of shell game—well known to Minsky—in which financial firms evade regulatory control by introducing new financial instruments and markets that, at least initially, escape the purview of the regulators.[3] Seen in this way, the housing crisis takes on a different cast. Recently originated subprime mortgages will probably result in a net *decrease* in home ownership because there will be numerous foreclosures, and many subprime home loans are not used to finance first-time home purchases (Center for Responsible Lending 2007). As we have noted, the social costs of foreclosures will be borne by the very people who have apparently been the beneficiaries of democratization.

History is rife with examples, reminding us that we may be witnessing one phase of a cycle that has repeated itself many times in the United States alone since the 1960s (Wolfson 1994). The solution lies partly in a regulatory response, not harsh bankruptcy terms for irresponsible individuals, which would only delay recovery.

What to Do Now

We have argued that the stage has been set for serious and widespread economic difficulties, which may have already begun to unfold. Clearly, macroeconomic policy will be critical: if the Fed and Congress can work to stop any incipient recession, they will prevent job losses, which are among the main contributors to foreclosures. An effective job-creation method could be some form of employer-of-last-resort program that offers government jobs to all workers who ask for them (Minsky 1986; Wray 1998; Papadimitriou 1999). Moreover, the Fed must be ready to step in as a lender of last resort, should major financial institutions falter. In the current situation, pension funds may be as exposed to danger as banks. Furthermore, home ownership may no longer be the most important form of personal saving. Therefore, Social Security will be more important than ever for older Americans of modest income and the system must be protected from ill-advised efforts to make cuts, which would likely increase poverty (Papadimitriou and Wray 1999).

Congress has begun to hold hearings on possible remedies, and the Fed is well aware of the need for action. Bernanke has stated that some new regulatory efforts to stem abuses have been in the pipeline since 2006 (2007b). However, proposed rules focus narrowly on the mortgage problem. Bernanke supports efforts by nonprofit organizations and others to help financially distressed homeowners renegotiate the terms of their loans (2007c). Some members of Congress argue that federal dollars, matched with contributions from financial firms, should be offered to help finance such "workouts." This approach would allow more families to stay in their homes, though the majority could not be helped.

Bernanke remains supportive of a system that relies on transparency rather than regulation. But in the competitive and freewheeling mortgage banking and hedge fund industries, the pressure to improve the bottom line in the current quarter is very strong, even in the face of a credible threat of devastating losses at some point in the future. (Some of the perils of this exposure have been discovered in the Bear Stearns hedge funds.) The proposition that firms and investors rarely take on excessive risk without the assurance of a government guarantee seems empirically dubious.

Whatever the future prospects for a transparent system that punishes risky behavior, Congress, the administration, and regulators must now deal as best they can with the failures of the past. In doing so, we must be slaves neither to an idealized view of the financial system nor to old ways of doing business that seemed, until recently, to be working well.

Notes

1. In general, such indices can be misleading. For the home market, there is no observation of a market-clearing vector of prices reached in an auction market; rather, we observe a relatively small number of transactions that leave many homes unsold. Hence, certain problems arise: for example, those homeowners whose property values have declined the most may be the most likely to resist an immediate sale, leading to an upward bias in the index.
2. See Chilcote (2006) for a detailed discussion of credit derivatives.
3. In one of his first articles (1957), Minsky, possibly under the influence of his undergraduate mentors at the University of Chicago, developed the notion that financial innovations could be used to circumvent regulation. In that article, he was concerned with the ways in which banks skirted reserve requirements using new institutions such as the federal funds market, but the general notion that banks outfox regulators by staying one technological step ahead of them also applies to recent mortgage innovations. There is also a less sinister motive: simply to obtain funds at the lowest possible interest rate.

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