



US Outlook: On the Brink of Recession?

A Closer Look

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The US economy faces severe challenges as it struggles to cope with a relentless housing slump and a profound tightening of credit conditions. Ominously, these shocks have parallels to events that precipitated the last two economic downturns. The fall in house prices and the collapse in residential investment are reminiscent of the bursting of the equity-market bubble and the plunge in capital spending that triggered the economic slump of 2001–2002, while the current credit crunch echoes conditions that spawned the economy’s woes in 1990–1992. Whether the consequences for the economy will be similar this time hinges crucially on how the housing and credit shocks play out, and how they impact business and especially household spending. Two related questions seem especially relevant to the outlook:

- How far will house prices fall, and how will households adjust their spending patterns in response?
- What effect will tighter credit conditions have on aggregate demand, and when will credit conditions begin to stabilize and improve?

Housing Spillovers: Not Bad at First

It’s been about two years since residential investment began to slide and house prices started to decelerate, but for most of that time spillovers to the rest of the economy seemed relatively modest. Real GDP expanded at nearly a 2½% annual rate in the six quarters ended in Q3 2007, slower than the pace before the housing correction began but not much below estimates of the economy’s potential, and impressive given the direct drag from tumbling residential investment. Consumer spending—the largest component of aggregate demand, and the one potentially most vulnerable to knock-on effects from the housing slump—had slowed, but modestly, with real personal consumption slipping only to an average annual rate of 2.8% over the six quarters ended in Q3 2007 from the 3.4% clip of the previous three years. Consumers had been helped by continued improvements in their balance sheets. Despite the deceleration in house prices, the net worth of the household sector continued to increase through Q3 2007, though the pace of improvement had slowed. Similarly, the labor market had cooled, but not collapsed. The rate of net job creation decelerated to about a 1% annual rate through the first three quarters of 2007, from a 2% clip in 2005 and 2006, and the unemployment rate—which was steadily falling from mid-2003 through 2006—began to edge up, but slightly, consistent

with an economy that has decelerated from an above-trend to a slightly below-trend pace.

Other sectors of the economy have been providing a much-needed counterbalance to housing-related weakness. Capital spending has remained resilient, with real business investment posting its fifth straight year of growth in the 5% to 7% range in 2007—not as strong as during the late 1990s, but a solid recovery from the tech-bubble collapse of 2001–2002. Investment in non-residential structures (office buildings, factories, etc.), which had been struggling when housing was booming, has rebounded smartly, increasing in real terms at double digit rates in both 2006 and 2007, providing a much needed (if partial) offset to the collapse in residential investment. Capital spending has held up well in part because the business sector is still in relatively solid financial shape and the capital stock did not get overbuilt earlier in the cycle (the way it did in the late 1990s). But the most powerful offset to the housing correction has come from the external sector. After years of persistently weighing on growth, net exports have turned around, adding nearly a percentage point to GDP growth in 2007, countering the direct drag from residential investment. The cumulative decline in the US dollar since its peak in early 2002, coupled with firm domestic demand in many economies outside the US, has boosted exports while slowing import demand. In essence, some of the housing-related deceleration in US domestic demand has been transmitted abroad (via weaker US import demand), cushioning the drag on US output, while resilient foreign demand has helped bolster US exports, providing a much-needed spur to US production that has offset some of the housing weakness.

Chart 1: Real Business Investment Holding Up

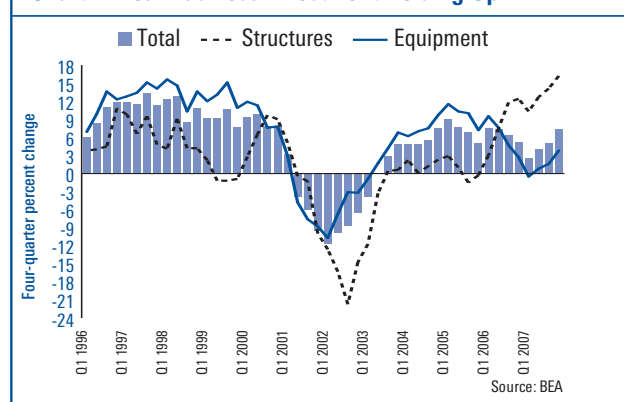
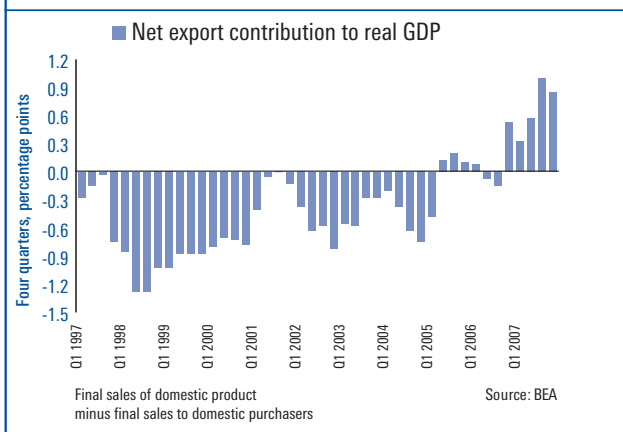


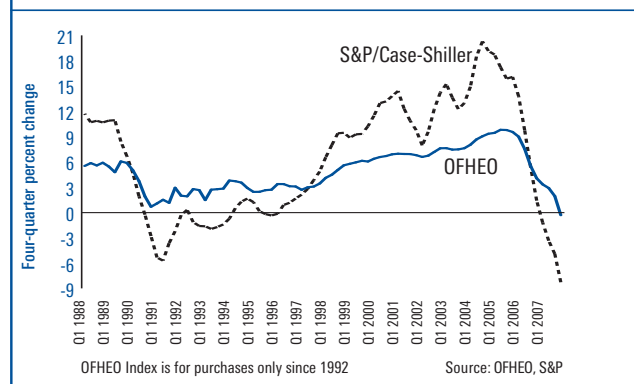
Chart 2: Net Exports Providing a Boost



Worrisome Signs

More recently, though, the picture has worsened. First, credit conditions have tightened markedly. What began as a crisis in sub-prime mortgages has spread into a broad-based deterioration in the cost and availability of credit to a wide array of households and businesses as banks have tightened lending standards and risk spreads on many credit products have widened. At the same time, the pace of house price decline has quickened, perhaps exacerbated by the tightening of credit conditions. Indeed, the OFHEO index of nationwide home prices based on actual purchases fell over 5% at an annual rate in Q4, after a 1½% drop in Q3—the first back-to-back quarterly declines since 1992. And this index is now below its year-ago level—the first time nationwide home prices as measured by the OFHEO index (which dates back to 1975) have ever declined over a four quarter period. The S&P/Case-Shiller home price index—which includes more high-end units and is concentrated in more major urban areas—shows an even steeper deceleration. After rising at an average annual rate of 15% from the end of 2002 through the end of 2005, this index is down 8% over the four quarters of 2007, and more than 10% since its peak in Q2 2006. The quickening pace of house price decline, coupled with some recent weakness in equity prices, likely resulted in a decline in household net worth in Q4 2007 for the first time since the equity bubble burst in 2000–2002.

Chart 3: House Prices: Boom and Bust



Labor market conditions have slipped as well. The rate of net job creation has slowed to a crawl in recent months, and the unemployment rate has moved up about one-half percentage point from its cyclical trough—a move that in the past has always augured the start of recession. The pace of layoffs has picked up only moderately, though well below what has been seen in past economic downturns, but firms do seem to have become more reluctant to hire. Weighed down by a slowing job market, falling net worth, and tighter credit conditions, consumer sentiment has tumbled to levels not seen since the last recession. Consumer spending has slowed too, though not as badly as suggested by the fall in sentiment. The ISM indexes paint a mixed picture, with the manufacturing index holding up well above readings seen in prior recessions, but the non-manufacturing index registering the largest monthly decline in its (short) history. But order and shipment data point to continued moderate growth in business investment, and the latest export figures suggest the external sector remains a source of strength. On balance, recent indicators do not definitively suggest the economy has lapsed into recession, but they do raise serious warning signs, and suggest that economic growth is anemic at best.

Chart 4: Labor Market Slipping

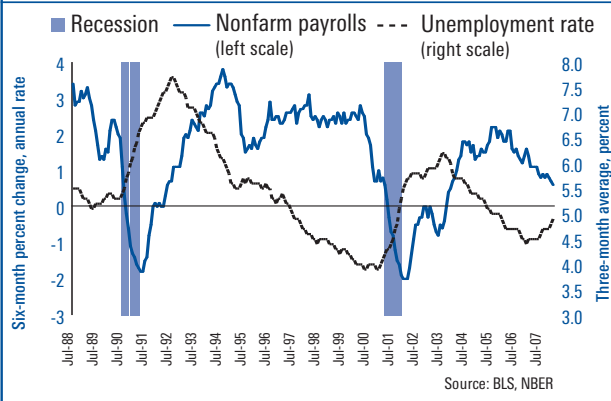


Chart 5: Jobless Claims

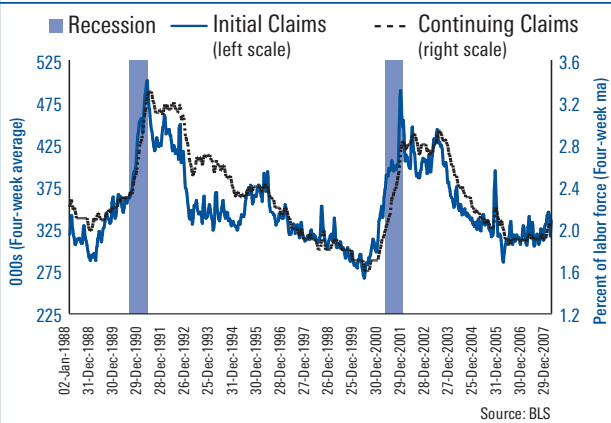


Chart 6: ISM Indexes

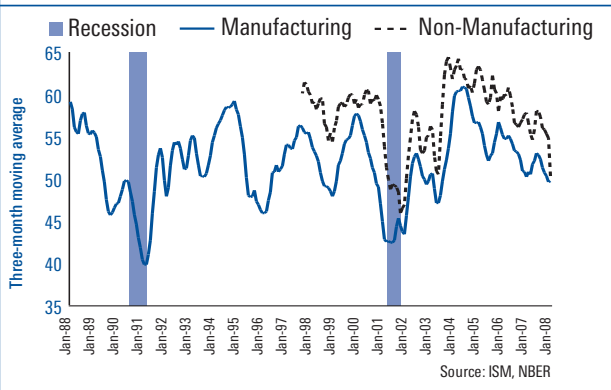
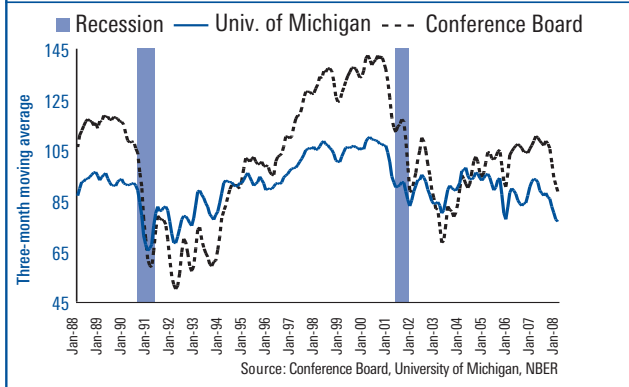


Chart 7: Consumer Sentiment Slumping



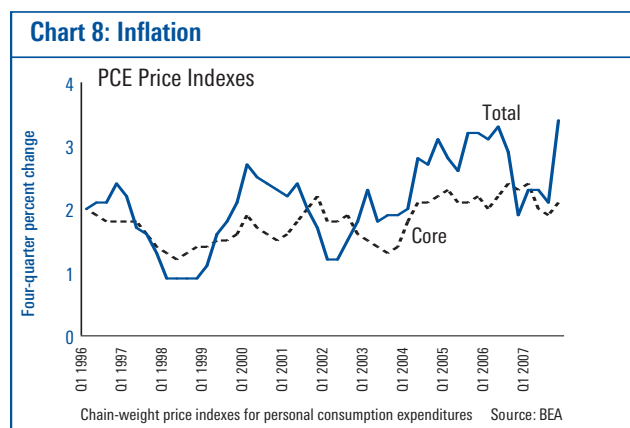
And things could easily deteriorate further. Although the pace of housing starts has been cut in half since the peak of the boom, falling below levels seemingly consistent with underlying demographics, residential investment may not yet have bottomed. Further declines, or at least an extended period of sub-par housing investment, will likely be needed to clear the inventory of unsold homes, especially given the tightening of mortgage financing conditions. So some residual drag from declining residential investment may persist until later this year.

Home prices will likely weaken more too, weighed down by a large inventory of unsold homes, tighter mortgage-financing conditions, and what appear to be still-stretched home valuations in some regions. There's even a risk that expectations of house price decline turn into a self-fulfilling prophecy by raising the perceived user cost of housing and causing house prices to undershoot fundamentals (a reversal of what likely contributed to house prices overshooting fundamentals as people built in unrealistic expectations of house price appreciation during the latter stages of the boom). Even if this sort of vicious expectations cycle is avoided, house prices likely need to fall further, and are at best apt to remain sluggish for a while so that rents and incomes can catch up to the outsized increases in prices during the boom.

Although the weakening of house prices doesn't seem to have dampened consumer spending much so far (at least until very recently), that's not too surprising; households tend to adjust their spending and saving patterns slowly in response to changes in their perceived wealth. Similarly, the tightening of financial conditions may only just be starting to exert a drag on economic activity. Some of that drag is likely yet to come. There are also risks to areas of the economy that have been resilient so

far. Business investment is unlikely to remain impervious to a deceleration in consumer spending, especially with financing conditions less favorable and with nonresidential investment almost sure to slow from the robust pace of the past two years, not least because office vacancy rates are rising. And there's a risk that domestic demand in other countries may not remain immune to the US slow-down or to the tightening of global credit conditions, and this could potentially take some steam out of US exports. Finally, as if the economy didn't have enough to contend with, energy prices have moved higher again, posing a further risk to aggregate demand. Although the US has weathered several jumps in energy prices in recent years without untoward disruption, this one comes at an especially inopportune time, when the economy is struggling to cope with so much else.

The spike in energy and commodity prices also contributes to upside risks to inflation. Headline inflation rates have increased again of late, propelled in large part by higher energy costs. Core inflation has edged up a bit too, and remains near (if not slightly above) the Federal Reserve's desired range. Inflation expectations have shown signs of inching up a bit as well, while the lagged impacts of the dollar's decline are still pushing up non-oil import prices, and resource utilization rates remain relatively tight. Against this backdrop, there's a risk underlying inflation could remain sticky, toward the upper end if not slightly above the Fed's desired range for a while.



All told, there are plenty of reasons to worry about the economy's near-term prospects. The chances of a

sharper, more prolonged period of sub-par growth, or even recession, have risen, and inflation risks persist. Perhaps the greatest concern is that the effects of declining house prices and tighter credit conditions linger, weighing on aggregate demand for several years as households gradually adjust their savings rates up in response to perceptions of reduced wealth and a less favorable credit environment.

Glimmers of Hope?

Arrayed against these storm clouds are a few rays of hope. Residential investment has fallen so steeply, and declined so much as a share of the economy, that its direct drag on economic growth is almost sure to diminish as the year progresses. More importantly, we continue to believe that the spillovers from declining home prices to consumer spending may not be so bad. One reason is that home prices don't have to fall that much further to bring them into better alignment with fundamentals. That's because some of the rise in house prices during the boom was a justified response to a decline in long-term real interest rates and possibly in the risk premium that people require to buy a home (which may have fallen for the same reason that risk premiums on financial assets fell—because people came to perceive the business cycle, economic growth, and inflation to be less volatile). Lower real interest rates and a lower housing risk premium reduced the cost of home ownership per dollar of house price and enabled home prices to rise faster than rents, prices and incomes for awhile without stretching valuations or straining affordability. A number of recent studies have tried to estimate home ownership costs, and though estimates vary, they all agree that the cost of home ownership per dollar of house price declined earlier this decade, justifying some of the rise in home prices.¹ They also concur that things got carried away in the latter stages of the boom, but that home prices probably need to fall only about 10% to 15% at most on the OFHEO nationwide index (perhaps 20% or so on the Case-Shiller index) to bring the cost of home ownership into better alignment with fundamentals. Keep in mind, though, that this assumes we avoid a vicious cycle where expectations of declining home prices raise the perceived cost of home ownership and cause home prices to undershoot.

¹For recent studies of housing valuations, see, for example, "Assessing High House Prices: Bubbles, Fundamentals, and Misperception," Himmelberg, Charles, Christopher Mayer, and Todd Sinai, 2005, *NBER Working Paper 11643* (September). "U.S. House Prices: Not as Overvalued as Many Think," Feinman, Joshua, 2006, *Journal of Investing*, Vol. 15 Number 2 (Summer). "Recent House Price Developments: The Role of Fundamentals," OECD *Economic Outlook*, 2004, No. 75 (June). "A Trend and Variance Decomposition of the Rent-Price Ratio in Housing Markets," Campbell, Sean D., Morris A. Davis, Joshua Gallin, and Robert F. Martin, 2006, *Federal Reserve Board Working Paper* (April).

A decline of that magnitude is much less than the collapse of equity prices earlier this decade (broad equity market indexes fell 40% to 50%). And the responsiveness of consumer spending to a given dollar change in home prices may be similar to a given dollar change in equity prices. To be sure, equity holdings tend to be concentrated more among the affluent, whose marginal propensity to consume (out of income and wealth) is typically lower. But it's not clear that rising house prices really add to the wealth of the economy as a whole, rather than merely re-distributing wealth across groups. Homeowners may feel wealthier if house prices rise, but would-be home buyers will feel less wealthy, as will renters, because they will expect their rents will eventually increase. And homeowners have to live somewhere; if they were to consume their added housing wealth (by borrowing or downsizing) they would leave their children worse off because their future housing costs have gone up.

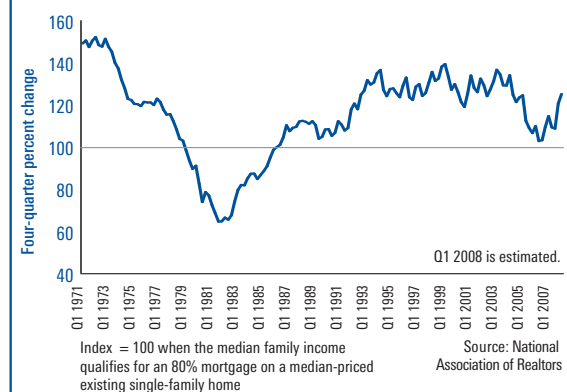
As for mortgage equity withdrawals (MEWs), there's little doubt that they were huge for years, fueled by soaring house prices and financial innovations that have lowered the cost of extracting equity from a home, and that they've fallen off substantially as home prices have slipped. But that doesn't mean MEWs have been the cause of rapid consumer spending, and will likely be the cause of its slowdown now. ATM withdrawals are highly correlated with consumer spending too, but few believe they cause spending. If anything, the causality may run the other way; households decide to spend (perhaps in part because they feel wealthier from the appreciation of their homes), and then choose to extract equity from their homes (or make ATM withdrawals) as a way of facilitating that spending. That means MEWs should not be considered as an added boost to spending on top of the normal wealth effects from higher house prices (anymore than ATM withdrawals should be considered an added boost to spending on top of income growth). An exception might be for the small segment of households who were credit constrained, unable to tap the liquidity needed to spend in the absence of MEWs.

Empirical evidence is mixed. On balance, there is no compelling evidence to overturn long-standing estimates that the long-run marginal propensity to consume out of housing wealth in the US is similar to that for equity wealth—about three to four cents on the dollar.² This

suggests that a 10% to 15% drop in US house prices over, say, a two-year period, would trim consumer spending by only about one-half percent per year, perhaps a bit more at the peak of the effect—though there is considerable uncertainty around this estimate, in part because there has not been sufficient variation in housing wealth to estimate the consumption elasticity with great precision.³

Encouragingly, there are signs that housing affordability is recovering, and that housing valuations are starting to get back into better alignment with underlying fundamentals—reflecting weaker home prices, lower interest rates, and still-decent income growth. If investors could start to see some light at the end of the declining-home-price tunnel, credit conditions might begin to stabilize and possibly improve.


Chart 9: Housing Affordability Recovering



The economy is also likely to get a much-needed boost from substantial policy stimulus. The Federal Reserve has cut the funds rate aggressively, 225 basis points in little more than four months, and is likely to do more soon. Indeed, the funds rate could be down to a very stimulative 2% or so by mid-year. This aggressive easing has already contributed to reducing risk-free interest rates throughout the maturity spectrum, offsetting much of the widening of credit spreads and thus preventing the all-in cost of financing from increasing for most borrowers. Lower interest rates should also help boost aggregate demand through the normal channels of supporting equity prices, reducing the hurdle rate for capital investment, encouraging substitution of future for current consumption, and helping hold down the foreign exchange value of the dollar. A sizable fiscal stimulus package has also been

²"Housing and the Monetary Transmission Mechanism," Mishkin, Frederic S. (2007), Federal Reserve Board Working Paper (August).

³Mishkin, *ibid.*



enacted, which should provide a temporary boost to consumer and business spending later this year.

Another positive is that the business sector is in a much stronger financial condition than during the 2001–2002 economic slump. Cash flows and balance sheets are healthy and firms did not overbuild the capital stock or hire too aggressively during this cycle, the way they did during the 1990s. So they are likely to be under much less pressure to slash capital spending and hiring the way they were during the early years of this decade. Indeed, that may be partly why business investment has held up well so far, and why layoffs have not increased too sharply.

Net exports are also in a better position to help than they were during the downturn of the early years of the decade. That slump was caused by a global shock—a collapse in the worldwide IT industry, a precipitous correction in global equity markets, and a contraction in capital spending by firms around the world. Also, many economies outside the US were in weaker positions to cope; developing Asia was still struggling to recover from the crisis of 1997–1998, Japan remained mired in its decade-long torpor, and Europe was battling structural weakness. And the US dollar had been appreciating since the mid-1990s, making it tougher for US exporters to sell into what were already weak global markets, while encouraging US imports. The upshot was that net exports remained a drag on US growth even in the recession and slow-growth period of 2001–2002. Today, the shock is primarily in US housing, which is a more domestic industry, with less direct global repercussions. To be sure, the tightening of credit conditions is global. But other economies are on sounder footing than they were earlier this decade. In fact, the world is coming off some of the strongest sustained growth on record, with more impetus coming from domestic demand in Europe, Japan, and developing Asia. Finally, the US dollar has been sliding for six years, reversing most of its rise from 1995–2001, which is strengthening the competitive position of US exporters while discouraging US imports. So we expect net exports to remain strong, continuing to offset some of the housing-related weakness in domestic demand.

In sum, although the economy faces substantial downside risks in the near term, conditions may start to improve later this year and into 2009. The excesses in housing that are at the root of the economy's woes are being corrected, which should eventually help improve credit conditions, while policy will eventually help, and the business and

export remain supportive. Also, the economy has shown remarkable resiliency in the face of severe shocks in recent years, a testament perhaps to its improved underlying stability. And although inflation risks persist, inflation expectations remain generally well-anchored, in the range seen for years, suggesting no meaningful deterioration in the Fed's longer-term credibility. With aggregate demand likely to remain weak for a while, rates of resource utilization are apt to ease further, helping reduce any nascent inflationary strains. Finally, once the downside risks to economic activity fade, the Federal Reserve is likely to reverse some of their aggressive easing, restoring policy to a more neutral setting, consistent with their long-term inflation objectives.

Uncertainty

Although uncertainty always clouds the outlook, the fog may be even greater than usual now. Most crucially, it's hard to know just how much farther house prices will fall, and it's difficult to gauge precisely how households will respond, especially since the dynamics of the housing market—the likely extent of boom and bust in residential investment and prices in this cycle—will probably fall outside the bounds of the historical record. It's also hard to know when the dust will settle in credit markets and what financial conditions will look like when they do; it could still take months for investors to come to grips with how to value many mortgage- and credit-related securities, for rating agencies to complete their reappraisals, for financial intermediaries to disclose completely their exposures to these products, and for people to become more comfortable taking risk again. So the cost and availability of many credits may remain somewhat compromised, in ways that are not easy to quantify. It's not just the rise in the cost of credit, but also how much non-price rationing of credit (tighter lending standards, reduced access to financing, etc.) will persist. Estimating the economic impact of these non-price terms is difficult; they're hard to embed in standard macroeconomic models, which typically use just a few market interest rates to capture overall financial conditions and are not well equipped to deal with shifts in non-price terms of credit.

Perhaps the biggest risk is that the twin shocks of the housing slump and the credit crunch cast a pall over economic activity for several years—that it takes time for these shocks to work their way through the economy, and all the while they weigh on growth.

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