

Thoughts on Today's Economy

(Stergios Skaperdas, September 16, 2007)

Summary: The US economy is currently in a state of fundamental imbalance that is unlikely to lead to a happy end. Low savings, large current account deficits, untested financial experimentation, a serious housing bubble, and, up to recent weeks, very high liquidity have been central ingredients of this state. The bursting of the housing bubble and the unwinding of some novel financial engineering are likely catalysts to the breaking of the imbalance. It is hard to contemplate how the US and the rest of the world are going to adjust to a new state without severe economic disruptions that can also have significant geopolitical consequences that are hard to predict.

The Bigger Picture

Some areas of concern:

- *The Negative or Extremely Low Savings Rate.* With the exception of some years of the Depression, *Homo sapiens* has little precedent for that. (Rather, in most cases of such a precedent, the societies in question disappeared; you could not survive without saving adequate quantities of seed.) At some point, the savings rate has to increase. The big question is whether this will take place gradually with minimal effects on the economy or it will be abrupt, prompted for example by sudden changes in foreign demand for US assets, and lead to a deep recession.
- *Large current account deficits.* In the face of low savings, US high consumption has been abetted by foreign inflows of capital. Again, it would be impossible to sustain such levels of current account deficits indefinitely. Whether they will come down gradually or suddenly, under duress, is the twin concern to the one concerning the increase in savings. It should be emphasized that the current account deficit is not a phenomenon that can be considered a creation of “market forces.” It is the People’s Central Bank of China, the Bank of Japan, as well as many other Central Banks that are furiously stuffing dollar bills, treasuries, and agencies in their vaults (or in the “custodian” vaults of the Fed), and that is an additional reason that makes the indefinite continuation of the present regime nearly impossible and the likely resolution of great transnational political significance.
- *The Housing Bubble.* If you doubt it has been a bubble, take multiple measures of fundamentals – percentage of households that can afford the median-price house, carrying cost vs. rental return, price to income ratios, and so on – and see if current prices are anywhere close to the fundamentals. Goldman Sachs expects a 7% reduction in prices for 2007 and another 7% for 2008.¹ That translates to nearly 20% reduction in real terms over two years. Since other housing recessions have lasted at least four years – and none has been as big as this one, at least in the US (we can ask the Japanese for worse) – we can conservatively expect more than 20% reduction in median US prices. For places like Orange

¹ Based on the Case-Shiller S&P index. No public access to the forecast, but quoted in:
<http://calculatedrisk.blogspot.com/2007/08/goldman-sachs-on-housing.html>

County, where prices reached about double their fundamentals, we can expect more significant reductions. To gain some perspective, over the past 9 years housing valuations went from \$8 trillion to \$20 trillion.² A 20% reduction would lead to \$4 trillion loss of asset value, almost a third of GDP.

- *Record Consumer Debt to Income ratios.* This is another way that high consumption has been enabled. One could respond this is no problem since the value of assets – mainly real estate – is also at record levels. The problem is that these assets are being devalued as we speak, and they are likely to continue to be devalued. The problem is not just the loss of asset value but also the costs and stumbles of the financial unwinding that can be expected to accompany the reduction in asset values.
- *Stress-testing all the New financial “products” and practices.* Over the past decade, we have seen the emergence of numerous financial products and practices, many new but some were old that made a comeback. For mortgages, we had the spread of ARMs, interest-only, all the subprime variations and option/negative-amortization ones (that were accompanied by minimal oversight and regulation). Along with the growth of hedge funds we've had the growth of “structured” finance: “CDOs” (Collateralized Debt Obligations), CLOs” (Collateralized Loan Obligations), “SIVs” (Special Investment Vehicles), “conduits” and so on, as well as more intensified “carry trade” both along the yield curve and across countries. What these were supposed to do is to reduce risk, even eliminate it somehow. But in the past, all bouts of new financial engineering – usually unregulated and non-transparent – was taken to its limits and even if it did not bring economic calamity, which it often did, it more surely brought closer regulation. Likewise, the financial innovations of the past decade have pushed hard on their limits. And, apparently, instead of risk reduction we have been faced with severe underpricing of risk. We will be experiencing its consequences soon enough.

Each of the issues above is of concern by itself. They are all obviously interrelated, however, and taken together they represent a much bigger challenge than when considered individually. Low savings can be maintained because of foreign (by sovereign not the “market”) financing and the Mortgage Equity Withdrawal (“MEW”), which has become possible by the massive increase in real-estate values, which in turn has been at least partly fuelled by new financial engineering and the, by now, almost universally agreed upon under-pricing of risk. Serious breaches in one part of this system can be expected to seriously influence all this areas of concern.

It appears the first breach has occurred in the residential real estate market. That breach has infected the financial sector, with high risk of credit contraction (regardless of what the Fed does) and significant spillovers into the real economy. Both the reduction in housing prices and the possible credit contraction can be expected to reduce MEW which,

² See Economist Intelligence Unit report, *Heading for the rocks: Will financial turmoil sink the world economy?*, September 2007, p.2. Can be found in:
<http://a330.g.akamai.net/7/330/25828/20070904125121/graphics.eiu.com/upload/Heading%20for%20the%20rocks.pdf>

in turn, will reduce consumption. That by itself could be enough to bring about a serious recession. The problem is that the Fed cannot do much by reducing interest rates – which from a long-term perspective are already pretty low -- without risking inflation and flight from the dollar.

Before going into some details regarding the path from initial breach to flood, I will briefly discuss US housing.

Current State and Prospects for Residential Real Estate

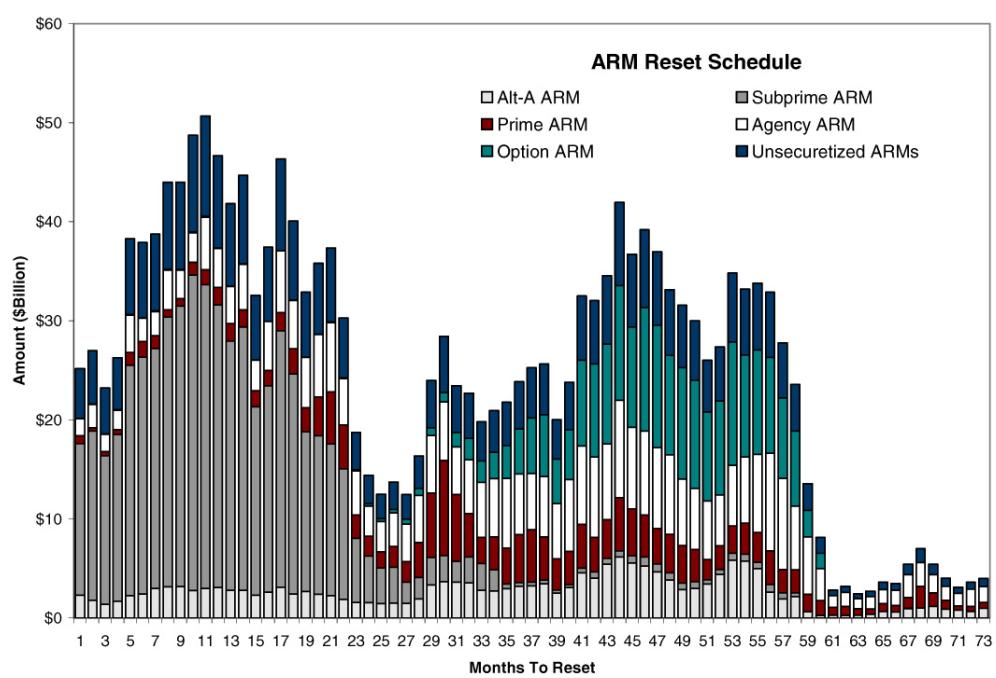
Housing transaction volume (both existing and new housing) has been steadily decreasing over the past eighteenth months and is approaching decade lows in many places, even though median prices have not yet gone down very much. Actually, this low-volume-low-price-change scenario is the typical pattern of the initial downward part of the housing cycle. If anything, prices – especially in the past few months – are going down faster than one would expect at this stage, with aggressive price-slashing by construction companies and the higher rate of foreclosures for this early in the cycle being likely contributing factors.³

Some of the reasons why prices have a way to go down, at least for as long as in other cycles -- three to four years – if not longer, given that the price increase was much bigger than in early episodes. (These are also reasons that residential real estate can be expected to decrease and not recover as quickly as in other cycles.):

- The greater number of interest-rate resets is ahead of us, with its peak next February and March (2008) (see figure):

³Another factor is that median prices in most cases (with the exception of the S&P Case-Shiller index) do not adjust for the quality and price per square foot, so that stagnant median prices are the result of transactions at the higher end of the market. With the lower end of the market “falling off the cliff” and fewer transactions in that segment taking place, median price can remain constant despite falling prices when controlling for quality and quantity.

Exhibit 42: Adjustable Rate Mortgage Reset Schedule



Note: Data as of January 2007.

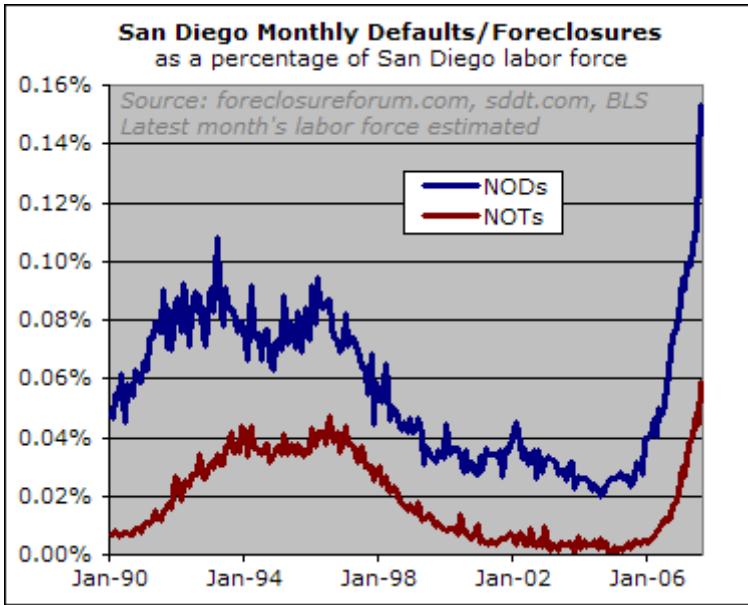
- *Source: Credit Suisse Fixed Income U.S. Mortgage Strategy.*

(Via <http://calculatedrisk.blogspot.com/>)

Most of these are subprime mortgage resets, most going from low teaser rates (and low payments) to higher, above market rates and, typically, much higher payments. These higher payments that can be expected to become unaffordable for those who could barely afford the initial teaser payments. Before a notice of default can be sent, three months pass without mortgage payments. The foreclosure process starts six months or more after the first payment is missed. Therefore, the foreclosure tsunami that comes from interest-rate reset cannot be expected to hit until late 2008. Of course, other sources of foreclosures could change the foreclosure profile. In particular, if there is a recession the real economy could be a large independent source of foreclosures due to unemployment and related reasons.

In some places that are leading in the downward trend of housing prices, it's downright scary how foreclosures have advances. See the following picture from San Diego, where NODs (Notice of Default) and NOTs (Notice of Trustee Sale) have a very steep, convex shape, and have exceeded very quickly their previous highs in the 1990s. It would be difficult to project the point at which the rate of growth of these notices will subside; the curves will turn concave before they hit their maximum. How high can they go?

Can banks and mortgage companies do anything to mitigate these effects? I think most of these institutions will be struggling themselves, and mitigation



(From piggington.com)

Possibilities are limited anyway (as I hope to discuss later). Wouldn't the government be under tremendous pressure to do something big? Well, yes, it would be but would the government have the means to do much? And, by how much could it prevent reduction in real estate prices.

One could think that San Diego is very unique place. Yes, it could be. So it is Orange County, San Francisco, LA, San Jose, Miami, Tampa, New York, Las Vegas, Portland, Seattle, Chicago, Phoenix, Atlanta, Baltimore, or Philadelphia. Dallas is not as unique, but surprisingly Detroit and Cleveland as getting hit badly as we speak (or, write) as well. The first figure of mortgage resets tells the story that a lot more San Diegos are to follow.

As foreclosures put further pressure on prices, more homeowners will find themselves having negative equity in their homes and the higher will be their incentive to just walk away from their mortgages and homes, thus putting even more downward pressure on prices. One silver lining to this otherwise bleak process is that it will not take the 15 years it took for its real estate prices to finally stabilize.

Goldman Sachs' forecast of nearly 20% (real) cumulative reduction in prices over 2007 and 2008 sounds eminently reasonable and, if anything, conservative. Then, a 30% real reduction over four years also sounds reasonable and conservative. Well, given EIU/Economist's estimate of \$20 trillion housing wealth, that implies a \$6 trillion reduction in that wealth. Do you think that would not have a negligible effect on the economy? But let's be a bit more systematic about the different ways in which the breach in the dam of real estate will affect the other dams and the whole economy.

How the piercing of the real estate bubble matters

Here are the different channels and mechanisms that create a bleak overall assessment.

- Residential investment, though a somewhat small component of GDP (4-5% on average), fluctuates more widely than other components of income. Leamer (2007)⁴ argues that weak residential investment is the strongest leading contributor to (and indicator of) US recessions during the postwar period. Even if one were to disagree with Leamer (I don't), still one could hardly deny the fact that residential investment has fallen by more than 1.5% of GDP, from more than 6% -- a record by the way – to about 4.5%. Previous bottoms of Residential Investment went below 3.5%. Thus, the loss of GDP from Residential Investment alone will be for sure 2% and, again given the high bubble level, could be edging closer to 3%. That's a lot to make up in the rest of the economy, but of course that would be the beginning, not the end, of loss of income.
- Other components of consumption and investment (durable goods, non-residential investment, services, non-durables), however, are positively correlated with Residential investment, typically with a lag. For example, non-residential investment follows residential investment by about 5 quarters (according to Calculated Risk). We can expect a reduction in these other components of GDP, especially given the overall reduction in consumption that can be expected (see next item)
- Significant reduction in consumption as a result of higher savings, lower Mortgage Equity Withdrawal, and generally reduction in housing prices and possibly those of other assets (like stocks). A reduction in wealth of \$6 trillion is almost half of GDP. Even if the “wealth effect” (the MPC) out of housing were 5%, that would represent over a 2% of GDP (\$300 billion) decrease in exogenous expenditures. However, I would argue that the effect would be bigger, much bigger, given that houses have been used as ATM machines or “third salaries” by many over the past five years. The tightening of credit standards for mortgages will put additional pressure on consumption. Initially, the effect on consumption might be delayed with substitution of MEW with credit card debt – there is already some evidence of that occurring – but that will be a band aid that cannot last for long, and it will make it even more painful for the individuals involved.
- Financial unwinding. The party (of financial “innovation” and the underpricing of risk that it has allowed) is over. The question how painful the process of adjustment will be, how long it will take, and as a result how deep its effect on the real economy will be. With respect to housing, the tightening of standards over the past month or so will certainly put additional pressures on the housing markets, and there is no way that we will come back to the recent go-go years any time soon. The problems of moral hazard that have become so evident in housing

⁴ Leamer, Edward, “Housing and the Business Cycle,” August 7, 2007; paper presented the Jackson Hole Symposium sponsored by the Kansas City Federal Reserve Bank.

finance recently have also been present in commercial real estate, private equity financing, hedge-fund lending and so on. The ones who make the loans – for a hefty fee – immediately unload them to somebody else, who unload them to somebody else for another hefty, who repackages everything so that risk somehow disappears in the vast globalized “market” for paper. Until very recently, there were hardly any incentives for the initial lender to do any “due diligence” since “the market” would gobble up everything. Well, there will be a lot less of that now but in the meantime we can have a catastrophic unwinding of the international financial system that may involve things that we do not even now about (like the dealings of hedge funds). But to have serious consequences on the real economy, no catastrophe need occur. Simple, old-fashioned credit tightening in the middle of falling housing and (later) commercial prices, if not of other assets, will be enough to have serious consequences on the real economy. Reduction of interest rates could hardly compensate when credit standards are tightening and no financing becomes available at any rate.

- One consequence of the financial unwinding on the real economy will be the shrinking of the financial sector itself. 22% of the S&P 500's valuation belongs to the financial sector. Reduced fees, profits, reduced bonuses in Wall Street and the City, layoffs, and the breaking of leases will have an effect on the economy that is not comparable to other times, given the centrality and economic significance of the financial sector compared to any time during the post-war period.

Residential investment is leading the coming economic disruption and it will be following by reduction in other sectors like non-residential investment, consumer durables, and the financial sector. The reduction in asset wealth will necessitate a reduction in consumption and, likely, an increase in savings. I have difficulty imagining how a recession, and a deep one at that, could be avoided. Massive fiscal intervention is a possibility but the margins left out of the Bush tax cuts are small and they could create severe problems for the dollar and the international trading and financial system.

There is also very limited, if any, room for maneuvering for the Fed. Lowering rates and intervening in other ways so as to increase liquidity run the risk of a run on the dollar, and the even more serious risk of destroying the Bretton Woods II system. Then all bets would be off, although there is a chance that the US could get away with a stagflation that is no worse than that of the 70s, even though that would also be the end of the dollar as the main reserve currency.

The larger context

What happens if the current international trading and financial system of post-Soviet times breaks down? Would the US become isolationist or would it actively challenge, and blame for the demise of the system, China, Russia, and other real or imagined enemies? Would there be more war and isolated trading blocks or a new international multipolar community that will continue globalization with a different face?

These are difficult questions to ponder but they should have been asked (by the powers that be) some time ago and actively engaged. I think the post-Soviet system will break down. The question is how fast and how orderly will be its demise. If it is orderly, then I think there is a better chance of global balkanization not occurring.