



HOME EQUITY LOAN BUBBLE?

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Topical Study #67

All important disclosures can be found beginning on page 13.

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I. HELS AS FWMD

Warren Buffet, a.k.a. the "Sage of Omaha," has famously warned that derivatives are financial weapons of mass destruction (FWMD):

Charlie and I believe Berkshire should be a fortress of financial strength—for the sake of our owners, creditors, policyholders and employees. We try to be alert to any sort of megacatastrophe risk, and that posture may make us unduly apprehensive about the burgeoning quantities of long-term derivatives contracts and the massive amount of uncollateralized receivables that are growing alongside. In our view, however, derivatives are financial weapons of mass destruction, carrying dangers that, while now latent, are potentially lethal.¹

On the other hand, Fed Chairman Alan Greenspan has extolled the virtues of derivatives. These innovations have allowed lenders to use the capital markets to reduce their exposure to financial risk (see Appendix). I'm not sure who is right, but I lean towards the Sage rather than the Chairman.

Instead of joining the debate, I would like to start one of my own. Could it be that home equity loans (HELs) are potentially a much more dangerous FWMD, and are more likely to detonate than some of the other ticking time bombs in the financial markets? In my opinion, as they are becoming more popular, they are helping to power the economic expansion. However, if home equity loans continue to grow rapidly, they could reach enough critical mass in a few years to set off a dangerous financial chain reaction. In other words, they are currently like a nuclear power plant. In the future, they could be more like a nuclear bomb.

I still recall that, not too long ago, even during the 1980s, most people who purchased a home did so with a 30-year fixed-rate mortgage. They put up 20% of their own money as a down payment and borrowed the remaining 80%. The down payment was the first payment for the house. The remaining installment payments were to pay the financing cost and the remaining principal. In other words, the intention was to pay down the mortgage loan over a 30-year period. At the end of that period, the home would be fully owned, just in time for retirement.

Admittedly, this is a bit of a caricature. Somewhere I recall seeing survey data that Americans move, on average, every five years. During the 1980s and 1990s, fewer and fewer Americans expected to remain in the same house for 30 years. So increasingly they opted for shorter-duration mortgages, which became increasingly available.

During the past three years, most households that still had a fixed-rate mortgage refinanced several times as mortgage rates plunged. Many also cashed out some of the appreciation in the value of their home by increasing the amount of their mortgage (Figure A). Over the past three years, I remained optimistic on the outlook for consumer spending largely because of the

¹ Mr. Buffet is the Chairman and CEO and Charles T. Munger is the Vice Chairman of Berkshire Hathaway Inc. The quotation is from its 2002 Annual Report, available online at http://www.berkshirehathaway.com/2002ar/2002ar.pdf.



refinancing windfalls and the cash-outs. Yet I also questioned whether the cash-outs were all spent. I believed that much of the cash-outs were actually parked in low-yielding savings deposits as the preference for liquidity soared, especially among upper-income workers in the shaky technology and financial industries.

Figure A: Excerpt From Fed's Article On Consumer Finance Survey*

Although home purchase remains the main purpose of home-secured debt, the incentive to use such borrowing for other purposes has been higher since the Tax Reform Act of 1986, which phased out the deductibility of interest payments on most debt other than that secured by a primary residence. In addition, declining mortgage interest rates since 1998 provided many families the incentive to refinance existing mortgages. By refinancing for more than the existing balance, many families were able to obtain funds for other purposes.

The survey provides some evidence of such borrowing. Families that refinanced a main mortgage were asked whether additional funds were obtained, and if so, how the funds were used; families that carried a second mortgage, home equity loan, or home equity line of credit were asked the purpose of the borrowing. Families that simply chose to take out larger initial mortgages to free up funds to spend for other purchases would not be captured by these questions. However, among families with any type of home-secured debt, the available data suggest that the proportion who used such borrowing for a purpose other than just financing their home declined in the period after 1998. In that year, the proportion of families with such borrowing was 33.6 percent, and in 2001 the figure was 32.1 percent; however, the 2001 level is substantially above the 1995 level of 22.2 percent.

Home equity lines of credit are a widely advertised source of tax-preferred borrowing. Among homeowners, the proportion of families with a home equity line edged up 0.4 percentage point, to 14.9 percent in 2001; the proportion actually drawing on such lines rose 0.7 percentage point, to 10.6 percent.

* The article, "Recent Changes in U.S. Family Finances: Evidence from the 1998 and 2001 Survey of Consumer Finances," from the January 2003 issue of the *Federal Reserve Bulletin*, is available online at http://www.federalreserve.gov/pubs/oss/oss2/2001/bull0103.pdf. Source: Federal Reserve Board.

Now that mortgage rates are rising again, refinancing activity is falling, and so are cash-outs. Nevertheless, Americans are still tapping their home equity. They are doing it with HELs and undoubtedly spending the proceeds. Home equity loans outstanding at all U.S. commercial banks soared to a record \$324 billion in early May, up 36% from a year ago. They are the fastest-growing asset class in commercial bank balance sheets.

A home equity loan is really money borrowed from a line of credit secured by the value of the home. Typically, the borrower pays the prime rate. The rate is usually lower when more is borrowed, according to the terms set by the lender. It can be an alternative to a mortgage or a supplemental source of credit. In other words, the actual aggregate line of credit undoubtedly exceeds the amount of HELs outstanding. I wouldn't be surprised if the sum of all the lines is



twice or even three times as large as total HELs, i.e., \$649 billion to \$973 billion in early May (Figure 2). By comparison, the total of mortgages held by all commercial banks was \$2.4 trillion in early May. Anyway you slice it or dice it, banks already have a very large exposure to HELs borrowing, and the exposure appears to be heading higher fast.

II. Good News. Bad News.

For now, the surge in home equity loans is providing extra spending money for homeowners. Over the past year, these loans are up 36%, or \$86 billion (Figures 3 and 4). By comparison consumer credit is up \$99 billion over the past 12 months through March. Together, consumer credit and home equity loans are up \$178 billion over the past year (Figures 4 and 5).

Together, they totaled \$2,330 billion during March, or 27% of disposable personal income. This is historically high, and somewhat worrisome. On the other hand, the ratio of savings deposits plus retail money market funds to disposable personal income is also historically high at 47.3%. Consumers have the equivalent of almost a half year of income in "mattress money" (Figure 6).

The close correlation between the Refinancing Index compiled weekly by the Mortgage Bankers Association and the three-month annualized change in savings deposits supports my view that a significant portion of cash-outs during mortgage refinancing may have been saved as the liquidity preference has increased in recent years because of job insecurity as well as the turmoil in financial markets and the geopolitical arena (Figure 7). Unlike cash-outs, proceeds from home equity loans are undoubtedly completely spent on goods and services.

I will be monitoring HELs very closely. I suspect that more and more Americans may use them to finance a lifestyle they may be unable to support on their incomes alone. Tapping home equity to buy new furniture or to fill up the gasoline tank could set the stage for major financial trouble down the road. On the other hand, it is possible that some borrowers may be using the money to remodel a kitchen or add a bathroom. Such activities would add back to the value of the home and homeowners' equity.

The Federal Reserve publishes quarterly data on the value of residential real estate and mortgage loans outstanding, including home equity loans. During the fourth quarter of last year, our homes were valued at \$15.2 trillion. We had \$6.8 trillion in mortgages and \$8.4 trillion in owners' equity in household real estate. In other words, the banks own 45% of our homes and we own the remaining 55%, which is the lowest percentage on record and well below the 70% readings of 20 years ago (Figure 8).

It is possible to calculate a sort of P/E ratio for household real estate by dividing the Fed's data on the market value of houses by disposable personal income. This ratio soared to a record high of 1.8 at the end of last year (Figure 9). On a trend basis, real estate values have been rising faster than incomes since the mid-1970s. Should we be worried? Falling interest rates tend to raise the stock market's P/E. The same is true for real estate. Lower mortgage rates



mean that for any given income, people can afford to pay more for a house. Home mortgages as a percent of disposable personal income soared to a record 82% at the end of last year (Figure 10). While there may be no bubble yet in home prices, I do worry that there may be a bubble in the financing of homes and in the increasing use of home equity as a source of credit.

III. Seductive

Earlier this year, Fed Chairman Alan Greenspan assessed the financial position of the household sector and concluded that all is well:

In evaluating household debt burdens, one must remember that debt-to-income ratios have been rising for at least a half century. With household assets rising as well, the ratio of net worth to income is currently somewhat higher than its long-run average. So long as financial intermediation continues to expand, both household debt and assets are likely to rise faster than income. Without an examination of what is happening to both assets and liabilities, it is difficult to ascertain the true burden of debt service. Overall, the household sector seems to be in good shape, and much of the apparent increase in the household sector's debt ratios over the past decade reflects factors that do not suggest increasing household financial stress. And, in fact, during the past two years, debt service ratios have been stable.²

I generally agree, and the data generally support the Fed chairman's optimism (Figure 11). For now, the extra cash is boosting consumer confidence and spending, and the overall economy (Figure 12). The problem is that home equity lines of credit are seductive. In most cases, the more you borrow the lower the interest rate. If you can't make the payment this month, the bank will take what is due from the credit line. If more households tap more of their home equity—effectively turning their home into a credit card—then I can foresee that such a development could seriously exacerbate the next economic downturn.

* * *

² Excerpt from the Fed chairman's speech, "Understanding household debt obligations," at the Credit Union National Association 2004 Governmental Affairs Conference in Washington, D.C., on February 23, 2004. The full transcript is available online at http://www.federalreserve.gov/boarddocs/speeches/2004/20040223/default.htm.



Appendix: Excerpt From Alan Greenspan's Speech On Derivatives*

Financial derivatives, more generally, have grown at a phenomenal pace over the past fifteen years. Conceptual advances in pricing options and other complex financial products, along with improvements in computer and telecommunications technologies, have significantly lowered the costs of, and expanded the opportunities for, hedging risks that were not readily deflected in earlier decades. Moreover, the counterparty credit risk associated with the use of derivative instruments has been mitigated by legally enforceable netting and through the growing use of collateral agreements. These increasingly complex financial instruments have been especial contributors, particularly over the past couple of stressful years, to the development of a far more flexible, efficient, and resilient financial system than existed just a quarter-century ago.

Greater resilience has been evident in many segments of the financial markets. One prominent example is the response of financial markets to a burgeoning and then deflating telecom sector. Worldwide borrowing by telecom firms in all currencies amounted to more than the equivalent of a trillion U.S. dollars during the years 1998 to 2001. The financing of the massive expansion of fiber-optic networks and heavy investments in third-generation mobile-phone licenses by European firms strained debt markets.

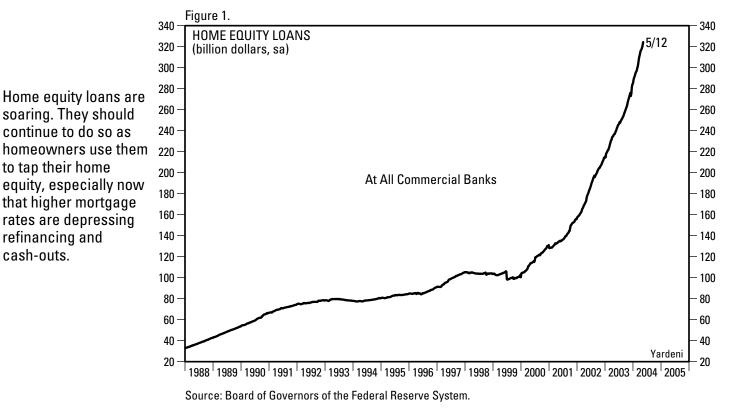
At the time, the financing of these investments was widely seen as prudent because the telecom borrowers had very high valuations in equity markets that could facilitate a stock issuance, if needed, to take down bank loans and other debt. In the event, of course, prices of telecom stocks collapsed, and many firms went bankrupt. In decades past, such a sequence would have been a recipe for creating severe distress in the wider financial system. However, a significant amount of exposure to telecom debt had been laid off through instruments that mitigate credit risk, such as credit default swaps, collateralized debt obligations, and credit-linked notes. Taken together, these instruments appear to have significantly reduced telecom loan concentrations and the associated stress on banks and other financial institutions.

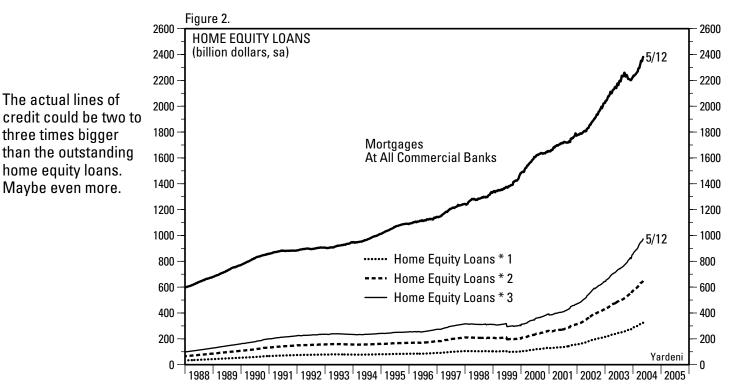
More generally, such instruments appear to have effectively spread losses from defaults by Enron, Global Crossing, Railtrack, WorldCom, and Swissair in recent months from financial institutions with largely short-term leverage to insurance firms, pension funds, or others with diffuse long-term liabilities or no liabilities at all. In particular, the still relatively small but rapidly growing market in credit derivatives has to date functioned well, with payouts proceeding smoothly for the most part. Obviously, this market is still too new to have been tested in a widespread down-cycle for credit. But so far, so good.



^{*} The Fed chairman's speech, "World Finance and Risk Management," was delivered on September 25, 2002. The full transcript is available at <u>http://www.federalreserve.gov/boarddocs/speeches/2002/200209253/default.htm</u>. Source: The Federal Reserve Board.

Home Equity Loans

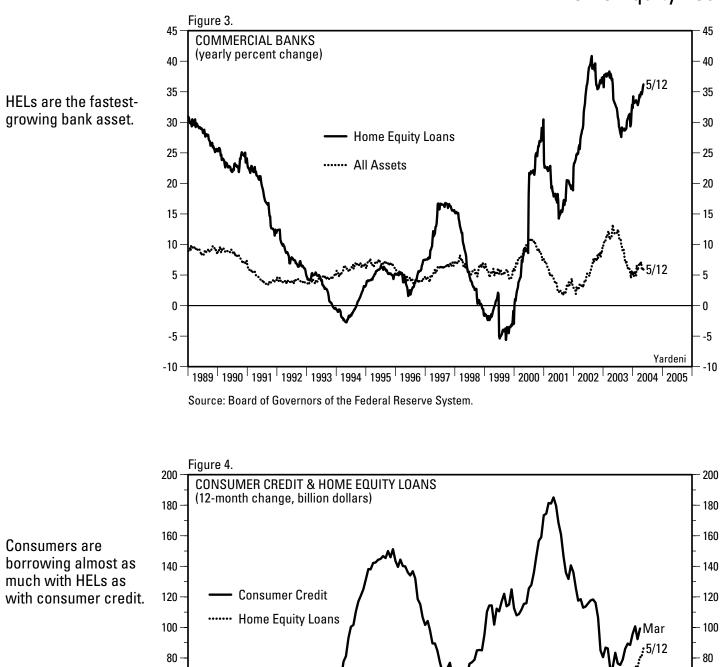




Source: Board of Governors of the Federal Reserve System.



Home Equity Loans



Source: Board of Governors of the Federal Reserve System.

1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005



60

40

20

0

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60

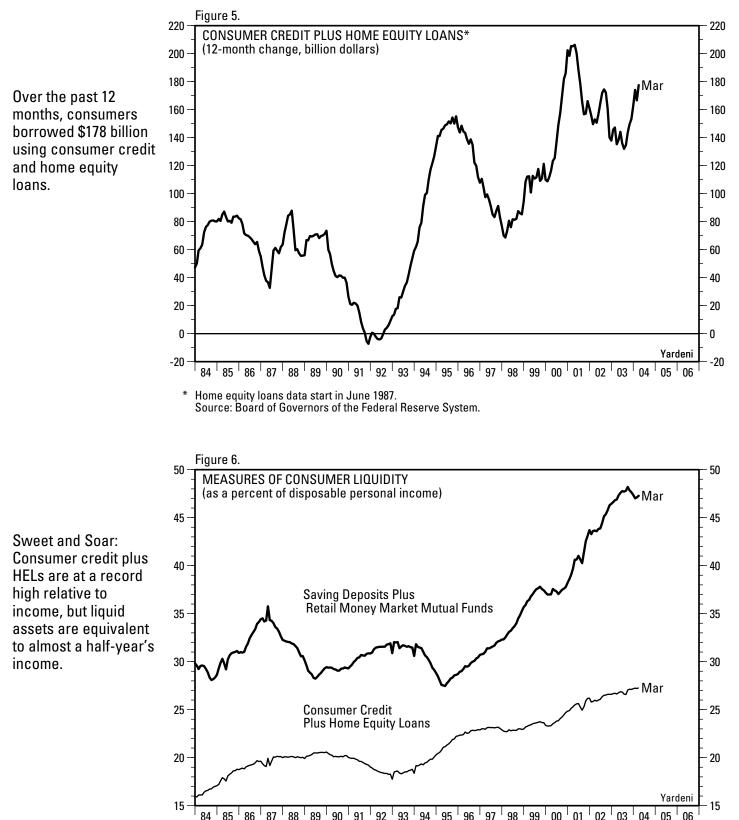
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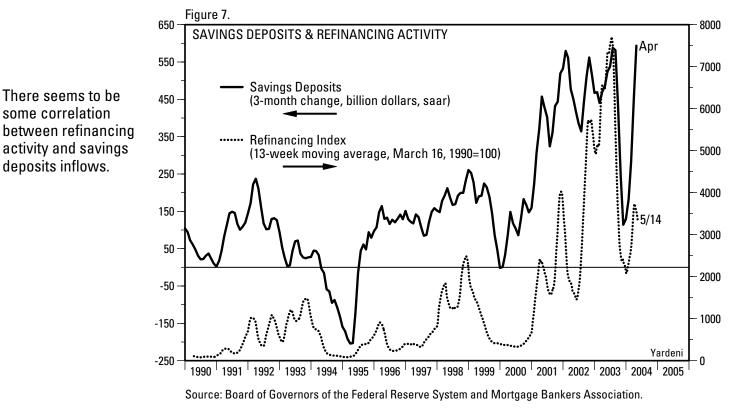
Consumer Credit & Liquidity

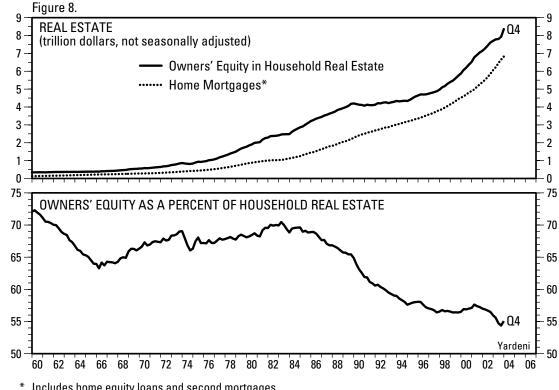


Source: Board of Governors of the Federal Reserve System.

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Home Mortgages



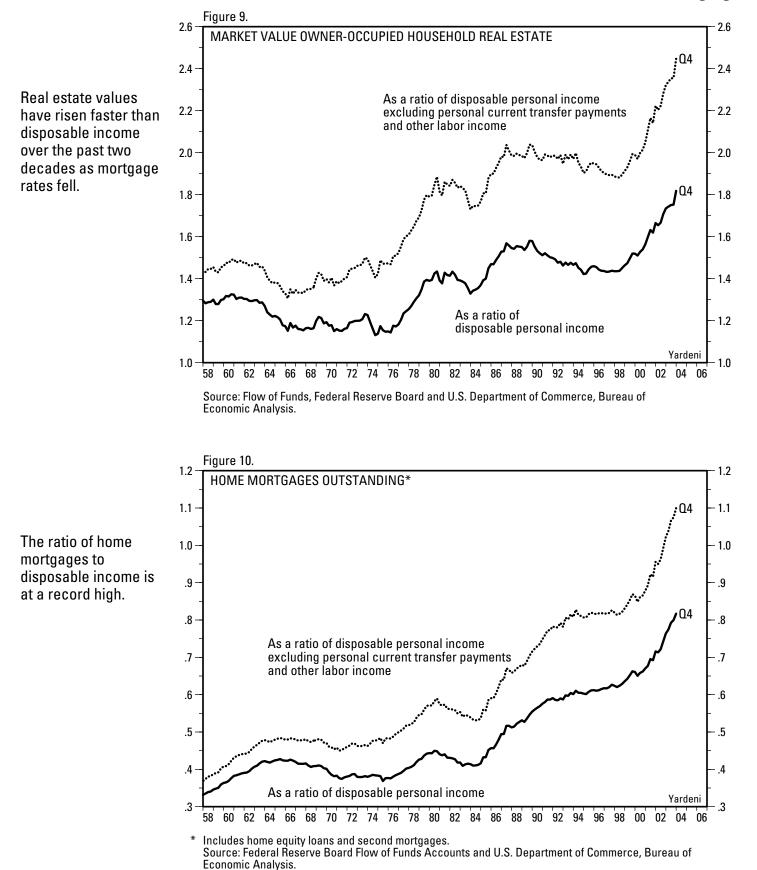


During the fourth quarter of 2003, household real estate was worth \$15.2 trillion, with equity of \$8.4 trillion and mortgage debt of \$6.8 trillion. Owners' equity increased to 55.1% during the fourth quarter from 54.4% during the third quarter.

> Includes home equity loans and second mortgages. Source: Federal Reserve Board Flow of Funds Accounts.

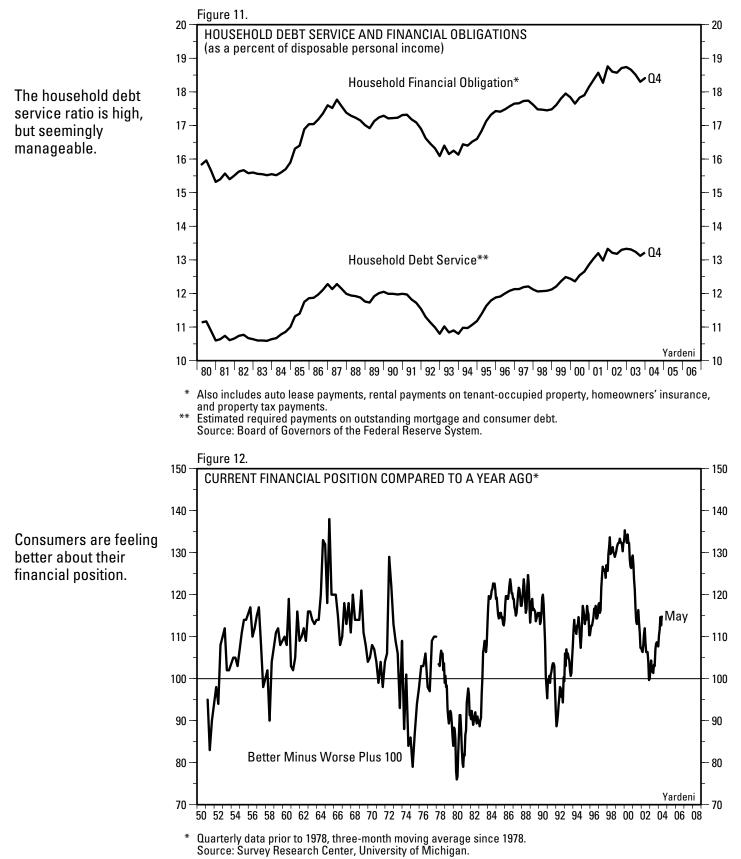


Home Mortgages





Household Debt Service





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03/31/04	Consolidated	Investment Banking Clients
Overweight(Buy)*	36.00%	2.00%
Neutral Weight(Hold)*	43.00%	3.00%
Underweight(Sell)* Excludes Closed End Funds	21.00%	1.00%
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Overweight(Buy)*	34.00%	2.00%
Neutral Weight(Hold)*	42.00%	4.00%
Underweight(Sell)* Excludes Closed End Funds	24.00%	1.00%
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Overweight(Buy)*	34.00%	2.00%
Neutral Weight(Hold)*	41.00%	3.00%
Underweight(Sell)* Excludes Closed End Funds	26.00%	1.00%

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