

# OBSERVATION

## TD Economics



August 6, 2013

# WILL THE FALL IN REFINANCING POSE A THREAT TO THE U.S. RECOVERY?

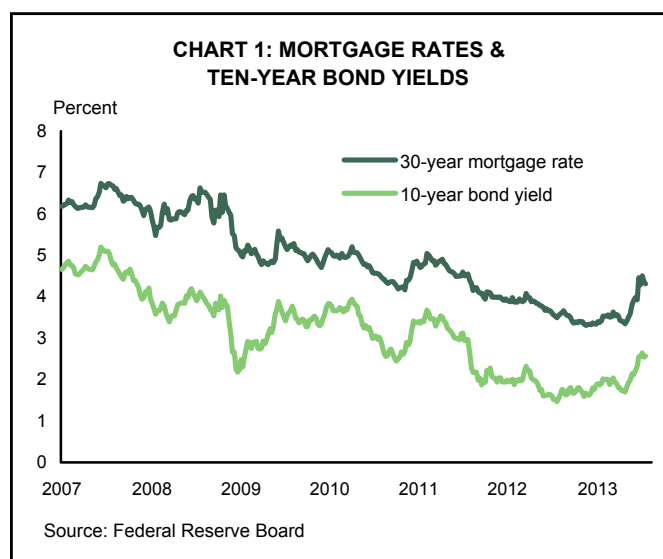
## Highlights

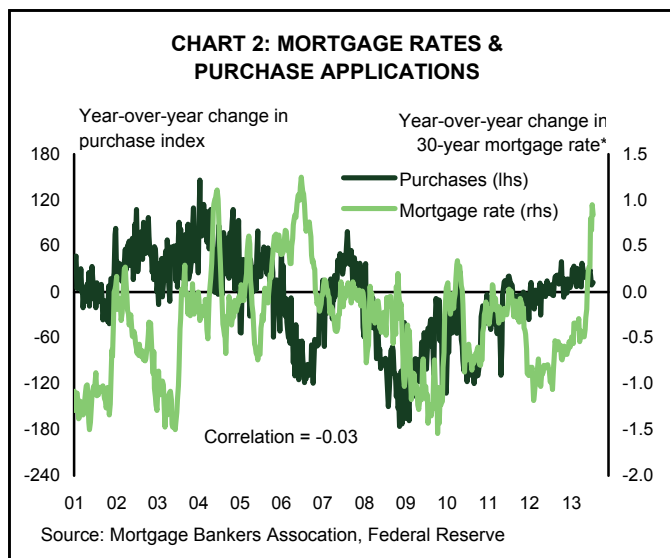
- Mortgage rates have risen by slightly under 100 basis points (1 percentage point) over the last two months. The rise in rates has taken a bite out of mortgage refinance applications, which have fallen 57% since May.
- The magnitude of the recent rise in rates is unlikely to be repeated, but the low watermark for mortgages has passed. From a current rate of 4.3%, the 30-year mortgage rate is likely to rise to 4.8% by the end of 2014 and further to 5.5% by the end of 2015.
- Over the past four years, mortgage refinancing volumes have averaged \$1.2 trillion a year. Based on data from Freddie Mac, refinancing has reduced mortgage payments by 1.2 percentage points per year, saving households an average of \$14 billion in interest costs since 2009
- Refinancing is likely to continue to dwindle as long as mortgage rates are moving up, reducing savings to borrowers. From the point of view of the economic outlook, the hit is unlikely to be noticeable. The savings are small relative to disposable income and will be partially offset by rising investor income.
- Over time, the rise in mortgage rates will result in a greater debt burden for American households. The cumulative impact of rising interest rates is only sustainable if it comes alongside improved household income growth.

Over the last two months, mortgage rates have risen a full percentage point. The rise is not the first of the economic recovery, but it is the largest increase so far. If, as is largely expected, interest rates continue to rise, mortgage rates will increase on an annual basis for the first time since 2006.

In a previous [note](#), we explored the impact of the rise in mortgage rates on the broader housing recovery. The conclusion was that higher mortgage rates are unlikely to derail housing demand. Housing remains affordable relative to history and the rise in rates is conditional upon accelerated economic growth, which will offset the negative impact of higher borrowing costs.

However, one area where higher mortgage rates are having an immediate and noticeable impact is mortgage refinancing. Applications for refinancing fell for a sixth straight week in the week ending July 26 and have fallen 57% from their most recent peak in May. Given the savings to mortgage holders of refinancing into lower rates, concerns have been raised about the impact on consumer spending and the broader economic recovery.





Refinancing is likely to continue to dwindle as long as mortgage rates are moving up and debt-service costs are likely to rise in tandem with interest rates. However, the lost savings to households is unlikely to have a meaningful impact on spending. The long-term sustainability of higher debt burdens will depend on improved income growth.

### With mortgage rates rising, refinancing will continue to fall

There are two occasions in which households will take on a new mortgage. One is to purchase a home and the second is to refinance a previous mortgage. The rise in mortgage rates has made headlines for its potential impact on home purchases. However, the relationship between mortgage rates and purchases is much smaller than it would seem. In fact, since 2000, the correlation between the two has been virtually zero (see chart 2). This does not mean that mortgage rates do not have an impact on home purchases, but it implies that other factors such as income growth are more important.

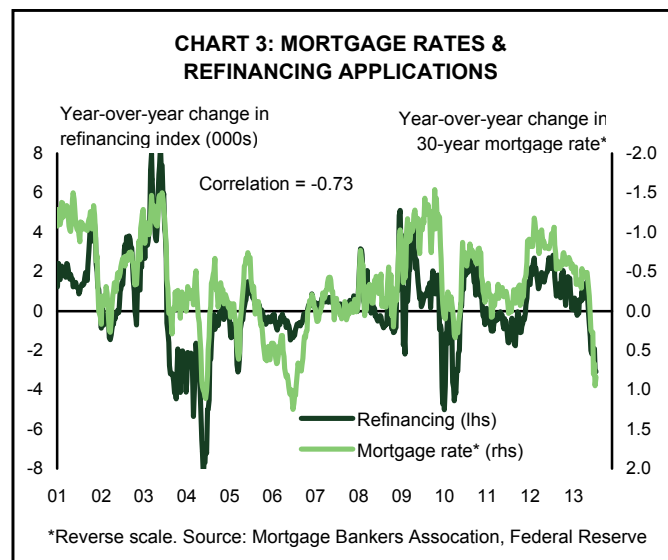
Unlike purchases, the relationship between mortgage rates and refinancing has remained tight over the last 13 years. Households refinance when the rate they acquire by refinancing is lower than their existing rate. Since refinancing is not costless, as interest rates rise, the relative benefit of doing so diminishes. Given the steep run-up in mortgage rates over the past two months, it is hardly surprising that refinancing volumes have plummeted.

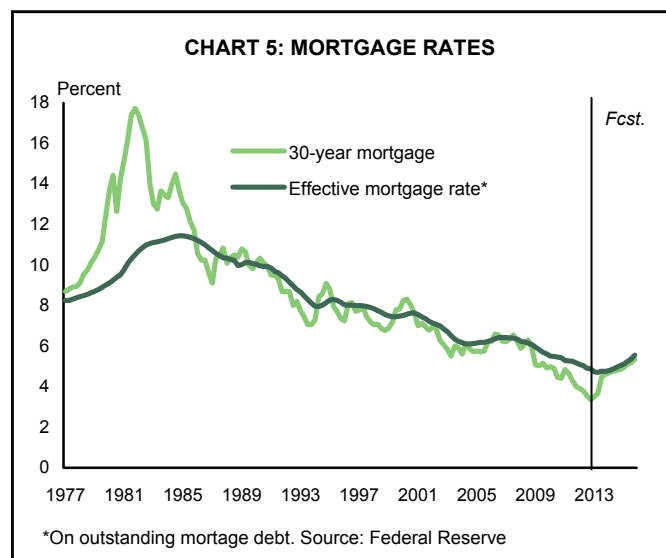
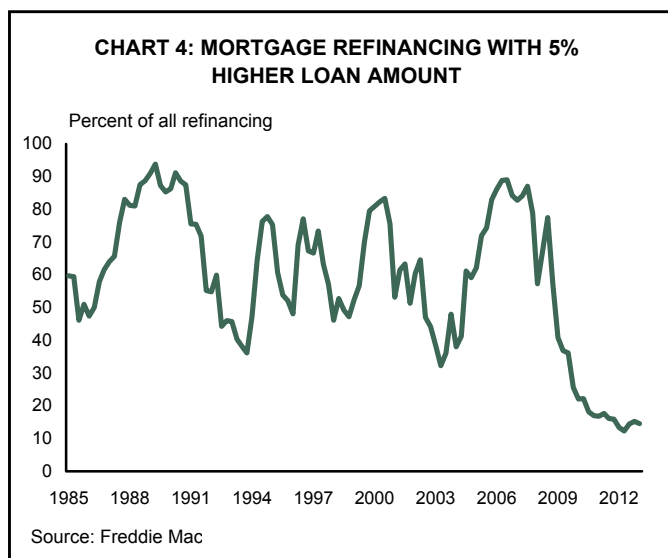
The magnitude of the recent rise in mortgage rates is unlikely to be repeated. Quantitative easing is estimated to have reduced long-term interest rates by around 100 basis

points. The rise in yields to-date has already removed this impact. Nonetheless the low watermark for interest rates has likely passed. As fiscal drag diminishes and economic growth accelerates, the 10-year bond yield is likely to rise by around 50 basis points (0.5 percentage points) over the course of 2014 and another 70 basis points in 2015.

Mortgage rates, which are priced as a spread over 10-year government bonds, are likely to move in tandem with government bonds. From its current rate of 4.3%, the 30-year mortgage rate is likely to rise to 4.8% by the end of 2014 and further to 5.5% by the end of 2015. Recognizing that this is still a very low rate relative to history, the expected rise will lead refinancing volumes to fall by around 20% annually over the next two years.

It is not just the current rise in mortgage rates that will lower refinancing volumes. Even if mortgage rates remain at the current level, past declines in mortgage rates have reduced the pool of potentially “refinancable” mortgages. In the first quarter of 2013, the median refinanced mortgage loan was 5.5 years old and therefore originally issued around the third quarter of 2007. In fact, over the past six quarters, the median refinanced loan had its origins sometime in 2007. This is no coincidence. Mortgage rates hit a high watermark in 2006 and 2007 and have been declining ever since. As mortgages made after 2007 were made at lower rates, there are fewer of these mortgages currently being financed. As 2007 moves further into history, even without further declines in interest rates, the number of households looking to refinance will fall.





### Risk to the economic outlook is negligible

Over the past four years, mortgage refinancing volumes have averaged \$1.2 trillion a year. Based on data from Freddie Mac, refinancing has reduced mortgage payments by 1.2 percentage points per year, saving households an average of \$14 billion in interest costs since 2009. As demand for refinancing dries up, so too will this source of saving to households.

However, such a hit is still not enough to derail the housing or economic recovery. For one, the savings are simply too small to be noticeable on a broad economy-wide basis. While \$14 billion is not pocket change, it amounts to just 0.1% of aggregate disposable personal income.

Second, unlike the refinancing that took place prior to the financial crisis, households are no longer using refinancing to extract equity from their homes. According to data from Freddie Mac, the percentage of mortgages refinanced into a larger loan amount was just 14.5% in the first quarter of 2013, down from 89% in the third quarter of 2006 (see chart 4).

Instead of borrowing more against their homes, households are increasing repayments and therefore building equity. The percentage of households who refinanced with a lower loan amount or who had made some pre-payments above and beyond their amortization schedule was 19.5% in the first quarter of the year, up from less than 4% in 2006.

The lack of mortgage equity extraction through refinancing means less of a downside risk to spending as refinancing declines. Over time, rising home prices may allow households to once again borrow against the increased value of

their homes, but this is not something we expect will happen over the forecast horizon.

Finally, the reduction in savings to borrowers represents higher income for lenders and mortgage investors. Admittedly, this shift does not have a clear impact on aggregate spending. The difference in income between the two groups will depend on their respective marginal tax rates. In turn, the change in spending will depend on differences in their marginal propensity to consume. Borrowers will likely have a larger propensity to consume than lenders, but at a minimum the gain to the latter will partially offset what is already a fairly small amount of savings to the former.

### The era of falling debt burdens is behind us

On a year-to-year basis the savings from refinancing are small, but the cumulative savings from lower interest rates have been an important factor in reducing the financial obligations of American households. Mortgage rates have been declining for the past 30 years. Consequently, the interest rate paid on outstanding mortgage debt has also been declining for the vast majority of this period. In the first quarter of 2013, the effective rate on outstanding mortgage debt fell to an all-time low of 4.7% (see chart 5).

While the prevalence of 30-year mortgages is likely to shield existing debt holders from higher interest rates, over time, the increase will put upward pressure on the debt burden of American households. Based on our forecast for mortgage rates, the effective interest rate on outstanding mortgage debt is likely to begin trending up early next year. Its rise will be slow, but this will mark a sea-change in what has been a relatively continuous ride downward over the

last three decades.

The easiest way to see the impact of rising rates over a longer period of time is to consider what debt services costs would be if they had not declined. If, for example, instead of falling to 4.7%, the effective mortgage rate had remained at its 2006 level of 6.4%, interest payments on mortgage debt would be 36% higher than they are today. As a share of disposable income, mortgage interest costs would be 5.4% instead of 3.9%.

Debt service costs have fallen relative to disposable income over the last several years even as income growth has been relatively weak. Had income growth been stronger, interest rates likely wouldn't have fallen as far. The prospects for rising interest rates are also contingent on the economic outlook. If economic growth disappoints, interest rates will not rise as expected. As long as income growth improves, the ability to service debt will rise along with it.

### Bottom Line

The relationship between mortgage rates and mortgage refinancing is a close one, much closer, in fact, than the relationship between mortgage rates and home purchases. As a result of the recent upswing in the rate environment, refinance applications have fallen significantly. Since higher rates lower the benefit of refinancing relative to the cost, as long as mortgage rates continue to rise, mortgage refinancing volumes are likely to continue to fall.

From the point of view of the economic outlook, the fall in mortgage refinancing is unlikely to be noticeable. The savings on an annual basis are simply too small and will be partially offset by rising income to mortgage investors. However, over time the rise in mortgage rates will result in a greater debt burden for American households. The cumulative increase in interest rates added up over a number of years is sustainable as long as it comes alongside rising household income.

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