Tapping Home Equity

JPMorgan Chase & Co.
INSTITUTE

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Income and Spending Trends Around Cash-Out Refinances and HELOCs

Executive Summary

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Abstract

Approximately two thirds of American families own a home and for most homeowners, their house is also their most important source of wealth. Homeowners are currently sitting on historically high levels of home equity and the potential withdrawal of this home equity has important implications for consumption at the macroeconomic and household levels. In this report, we examine the extent to which liquidating home equity boosts consumption, as well as how income dynamics around equity extraction may play a role in influencing households' decision to draw from this source of wealth. Using loan-level servicing data from Chase mortgage customers combined with corresponding Chase deposit account data from 2012 to 2018, we create a sample of more than 50,000 homeowners who either obtained a cash-out refinance or drew on a home equity line of credit (HELOC). We find that for homeowners who cash-out refinanced, most refinanced into a lower interest rate but a

higher monthly payment because of a larger loan balance. Also, after controlling for secular trends, homeowners who obtained a cash-out refinance had no change in income whereas homeowners who extracted equity via a HELOC experienced declining income. For both groups, consumption spiked considerably as soon as the liquidated equity flowed into the bank account but quickly settled to steady state-levels at a higher level, 5 percent and 7 percent above baseline for HELOCs and cash-out refinances, respectively. After one year, cash-out refinance homeowners spent 33 percent of their total equity extracted while those with a HELOC spent 47 percent overall. For both sample groups, these marginal propensities to consume (MPCs) were highest for younger homeowners and those with higher loan-tovalues (LTVs). Taken together, these findings have important implications for macroeconomic and housing policies.

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Executive Summary

Approximately two thirds of American families own a home, making the housing market an important source of economic activity and an important vehicle through which monetary policy is transmitted to the real economy. For most homeowners, their house is their most important source of wealth-an asset that can build in value as a mortgage is paid down. As such, homeowners may tap into this wealth-their home equity-when

the need arises. Household behavior around the withdrawal of home equity has important implications for consumption at the macroeconomic level and for the efficacy of monetary policy. And, from a household finance perspective, liquidating home equity responsibly can play an important role in smoothing consumption when homeowners are faced with income disruptions or consumption spikes.

In this report, we use loan-level mortgage servicing data combined with administrative deposit account data to ask: to what extent does liquidating home equity boost consumer demand? We also examine the income dynamics around equity extraction in order to understand the role that a household's financial situation may play in influencing their decision to extract equity from their home.

Data Asset

From a universe of more than 16 million Chase mortgage customers between 2012 and 2018, we created a sample of over 50,000 customers who (1) withdrew equity from their home through either a Chase-to-Chase cash-out refinance or a Chase home equity line of credit (HELOC) that they borrowed against, and (2) also had a Chase deposit account.



Requirements for cash-out refinance sample

Includes Chase mortgage customers who:

- Refinanced to another Chase mortgage between 2012 and 2018 and took cash out
- Are Chase deposit core customers: those who had at least five transactions each month in their Chase deposit account
- Have mortgage and deposit data available for eighteen months before and twelve months after the cash-out refinance

Final sample: **16,000** homeowners

Requirements for HELOC sample

Includes Chase mortgage customers who:

- · Had a HELOC and made at least one draw between 2012 and 2018
- Are Chase deposit core customers: those who had at least five transactions each month in their Chase deposit account
- Have mortgage and deposit data available for eighteen months before and twelve months after the first HELOC draw

Final sample: **37,000** homeowners

Finding One

Most homeowners who cash-out refinanced switched into a longer loan with a lower rate but a higher monthly payment due to the new larger loan balance.

Among our cash-out refinance sample, we find that the largest group of homeowners ended up with a higher monthly payment despite having refinanced into a loan with a lower interest rate and longer term. This higher monthly payment was the result of withdrawing cash through a larger loan. Homeowners appeared to be prioritizing a need for a large amount of cash immediately over a lower monthly payment over time.

	Pre-refinance	Post-refinance	Median difference
Principal balance	\$144,769	\$195,000	\$46,429
Interest rate	4.50%	4.00%	-0.38 pp
Term (years)	24.2	30.0	3.7
Monthly payment	\$881	\$1,091	\$125

Note: All values shown are medians. The median is calculated for each column separately so the median difference is not necessarily equal to the difference between the medians.

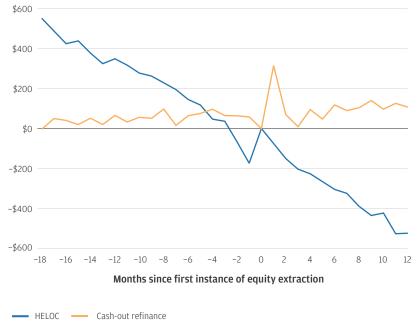
Source: JPMorgan Chase Institute

Finding Two

After controlling for secular trends, homeowners who obtained a cash-out refinance had no change in income whereas homeowners who extracted equity via a HELOC experienced declining income.

Using an event study framework that accounts for time trends, we find that those who drew equity via HELOCs experienced falling income around the time of a draw, whereas the path of income for those who cash-out refinanced was flat. These patterns help us to understand which homeowners use these different products to access home equity and under what circumstances-though it is important to note that these results are specific to a rising interest rate environment, where refinancing is less appealing than it is when interest rates are falling.

Monthly take-home income relative to first instance of equity extraction



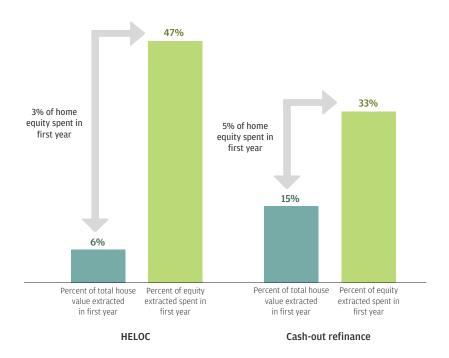
Source: JPMorgan Chase Institute

Finding Three

Spending spiked immediately upon receiving cash and quickly tapered to a level above baseline. Within a year, homeowners who cash-out refinanced spent 33 percent of the total equity liquidated (5 percent of home value) while homeowners with a HELOC spent 47 percent (3 percent of home value).

For both cash-out refinances and HELOCs, we find that consumption increased dramatically in the month that the first instance of home equity extracted hit the homeowner's deposit account. Then, just as quickly, consumption settled to a level that is higher than baseline spending for both cash-out refinances (7 percent higher) and HELOCs (5 percent higher). After one year, the marginal propensity to consume (MPC) out of liquidated home equity was 33 percent for homeowners with a cash-out refinance and 47 percent for homeowners with a HELOC.

Percent of home value liquidated and percent of equity extracted spent in one year



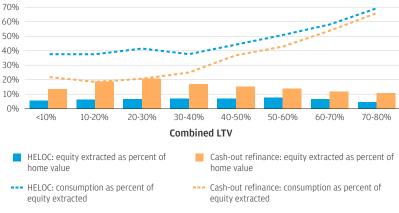
Source: JPMorgan Chase Institute

Finding Four

The largest consumption responses for both cash-out refinances and HELOCs were from younger homeowners and those with higher loan-to-value ratios.

For both cash-out refinances and HELOCs, those with higher combined loan-to-value (CLTV) ratios—that were closer to limits often required by lenders—and younger homeowners spent the largest fraction of the equity that was extracted. These homeowners are most likely to be credit-constrained and have lower income.

Percent of home value liquidated and percent of equity extracted spent in one year by combined LTV



Source: JPMorgan Chase Institute

Implications

Our results suggest that policies facilitating access to home equity withdrawal could have significant macroeconomic effects because the consumption response to this liquidity from home equity is large.

For this reason, removing frictions and barriers to home equity withdrawal would improve the transmission of monetary policy to the real economy through both the housing wealth effect channel (as equity extraction is the mechanism that links home price appreciation to increased consumption) and the refinancing channel (as the spending response to additional cash on hand complements the response to lower monthly payments).

Significant barriers have kept equity withdrawal activity low since the Great Recession, including supply and demand factors (see discussion in Farrell et al. 2020) and well-documented frictions to refinancing. The current low levels of equity extraction activity compared to historically high levels implies that if some of these barriers were removed to allow for greater equity withdrawal, there could be large macroeconomic effects on consumption. Indeed, Black Knight estimates that as of the first quarter of 2020, there is \$6.5 trillion of home equity that is available to be liquidated among homeowners with a mortgage.

The ability to liquidate wealth from one's home may be especially important for homeowners if they have substantial home equity but face

economic uncertainty, as is the case during the **COVID-19-induced recession.** Households are sitting on historically large quantities of home equity and, in contrast to the Great Recession, have not seen their home equity positions erode thus far. Given the importance of cash flow dynamics and liquidity for consumption and staying current on debt payments, continued access to home equity could play an important role in helping homeowners weather economic downturns by providing needed liquidity. In the current interest rate environment, refinancing in particular could provide liquidity through lower monthly payments and/or a large infusion of cash. Of course, the benefits of liquidating home equity must be balanced against maintaining responsible lending practices, all the more difficult in an uncertain economic climate.

Understanding the inherent complexities the private sector faces in maintaining access to home equity withdrawal for homeowners, the public sector may want to consider government backed alternatives that allow homeowners to access the illiquid wealth in their homes if experiencing income disruption in order to avoid more costly impacts to families or the overall mortgage market. A federally guaranteed home equity product or program similar to the Home Affordable Refinance Program (HARP) implemented after the housing market crash in the late 2000s could help more homeowners who would benefit from refinancing actually do so.

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