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Non-bank Financial Institutions at the Ground Zero of Next Crisis

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Non-bank Financial Institutions at the Ground Zero of Next Crisis

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Executive Summary

- Non-bank financial institutions (“shadow banks”) filled the funding gap following banks’ retreat in the wake of the post-crisis regulatory tightening and amid pressure to bolster returns in response to central banks’ low rates policy
- “Shadow banks” such as investment managers, insurance companies and pension funds reacted to policy-induced volatility suppression by moving up the risk ladder: longer term bonds, high yield debt, equities, and direct lending
- Prolonged volatility dampening induced investors to forgo volatility hedging and fueled the growth of passive funds, and rising concentration of “flighty asset” in passive funds increased probability for a “shadow bank run”
- Non-banks are becoming increasingly reliant on monetary authorities to continue volatility suppression, and many “reach for yield” and risk-parity strategies hinge on prolonged policy accommodation to ward against redemption
- Looming increase in Fed balance sheet reinvestment cap and ECB QE taper will threaten years of non-bank risk accumulation made viable by low volatility, and a decline in asset prices will likely trigger a systemic VaR shock

Non-banks’ growing footprint and risk exposure

Policy landscape following the financial crisis presented a “path of least resistance” for non-bank financial institutions to expand into areas previously dominated by banks. [Unrestrained by financial regulations such as Basel III](#) and hunger for yield under unconventional monetary stimulus by global monetary authorities, which dampened risk-free returns and encouraged investors to take bigger risks via the “[recruitment channel](#)” (central bank guidance to induce investors to take on more interest rate risk and push down term premiums), non-banks were seen extending duration (buying longer maturity bonds), taking bigger credit risk (buying investment grade and high yield debt), bolstering equities exposure, expanding in the direct lending market, and increasingly take on intermediary roles:

- As “reach for yield” intensified under effects of QE, many investors extracted liquidity premium (“selling liquidity”) by buying less-liquid assets, and [well-funded non-bank investment firms have directly finance home purchases to turn them in to rentals](#), with rental payment from pools of houses used as collateral to secure short-term funding
- As bond yields decline, insurance companies faced a “[perverse](#)” [feedback loop where lower yields would beget further buying](#) to close the “duration gap” because duration of liabilities would rise faster than that of assets; the reverse is also true, where rising bond yields would see decline in duration of liabilities outpace portfolio’s bonds
- Silicon Valley is “bursting with fledging venture-capital funds” thanks to “[endless flood of cash](#)” from college endowments, nonprofit foundations and pension funds as non-bank financials joined the hunt for tech unicorns
- In a move that harken back to pre-crisis days, some non-bank asset management firms who invest on behalf of pensions funds and other institutional investors are offering high premium “[covenant-lite](#)” loans to “selective” direct lending customers
- Market participants began to notice [serious slippage in lending standards in the \\$940 billion leveraged loans market](#) as low interest rates combined with strong demand for credit vehicles encouraged riskiest companies to lever up. As a whole, riskier “covenant-lite” loans now account for about 70% of new leveraged loans (often sold by private equity firms to finance leveraged buyouts); institutional buyers of these loans may not realize what they are giving up, as the loans are often pooled together within opaque collateralized loan obligations (CLOs)
- As banks pared risk in response to [regulatory curbs](#) (both tighter capital requirements and heavy penalties from non-conformity), agency MBS origination by non-bank financial institutions had [accounted for 53% of all such originations in early 2015](#) (almost double from the same period in 2013)

November 26 2017

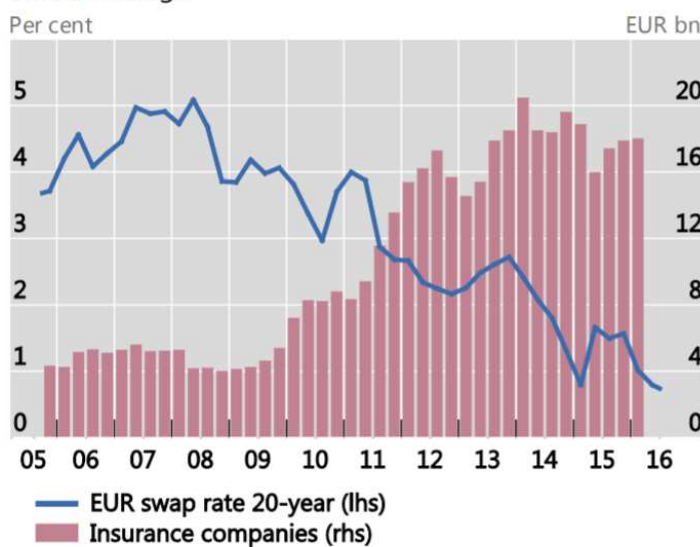
As a whole, the non-bank financial sector has pushed its risk envelope in response to monetary authorities' effort to dampen long-maturity bond yields and suppress volatility. The aforementioned "yield seeking" strategies share a common vulnerability – a rise in volatility would foremost threaten illiquid (because liquidity is never there when one needs it the most) and low credit quality instruments, and given bullish risk-parity (bearish volatility) being the consensus outlook in the industry, even a small volatility spike would likely shift perception on portfolio value at risk (hence risk of a VaR shock).

The rise in volatility would also threaten long-duration sovereign bonds. As seen in the BIS analysis that "[low bond yields beget more buying](#)" (see chart below), an unexpected rise in long maturity bond yields would also likely to amplify non-bank institutions' duration shedding and potentially trigger a VaR shock in the sovereign bond market.

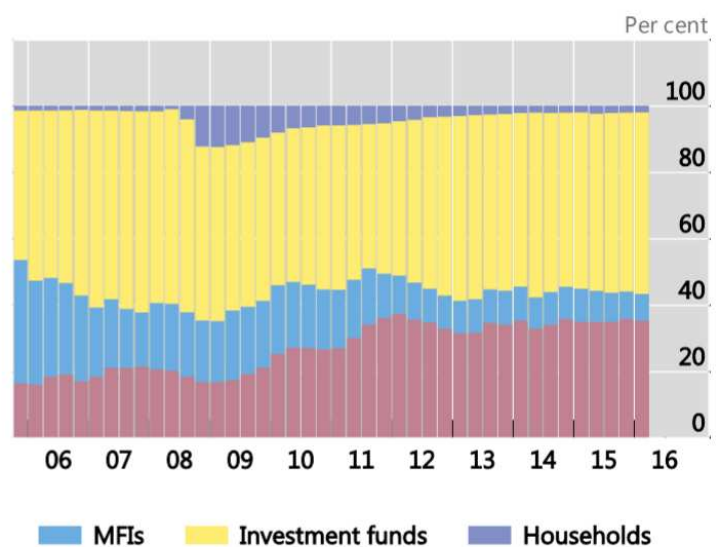
Twenty-year swap rate and holdings of ultra-long bonds by German sectors

Graph 1

Twenty-year swap rate and German insurers' ultra-long bond holdings¹



Relative holdings by German sectors¹



¹ Sovereign bonds of AT, BE, DE, FI, FR, LU and NL with remaining maturities longer than 20 years.

Sources: Bloomberg; Research Data and Service Center of the Deutsche Bundesbank, Microdatabase Securities Holdings Statistics.

Low volatility gave rise to passive funds and risks of "shadow bank run"

Encouraged by nearly a decade of low volatility policies (QE programs have buoyed valuation across multiple asset classes to dampen volatility), investors are [increasingly willing to forgo volatility hedging](#) by [pulling asset out of active investment managers and increasing allocation in passive index instruments](#).

It is thus not surprising that [Vanguard](#) and [BlackRock](#) now manage in excess of \$10 trillion in assets thanks to relentless inflow into passive index funds and ETFs. However, the convenience offered by exchange traded funds and the "[race-to-zero](#)" (in fees) masked a hidden risk – the easy inflows can quickly turn into "at will" selling and a cascade of redemption waves if volatility return.

Unlike professional investors who tend to be "strong hands" and willing to ride out adverse market conditions, retail funds are generally more "flighty" in nature, especially at a time when a 2% weakness in the broader index would make headline news on major publications. A severe risk-parity unwind in both equities and bonds would likely decimate corresponding ETFs and shaken investor confidence. This would sow the seeds of a potential stampede out of the door, and prolonged redemption waves would risk morphing into a "shadow bank run" if retail investors become downbeat on the conditions of their asset managers.

November 26 2017

Should the passive funds run into difficulties, active managers with similar exposures (such as the not-so-uncommon tendency for some active managers to “hug the index”) would likely experience similar mark-to-market pains. Given many institutions share similar risk management methodologies as well as risk management professionals who share a common intellectual lineage – working at similar sell-side firms prior to coming to the buy side, took similar courses in graduate school, using the same risk management software supported by the same vendors, markets’ reaction function on a severe volatility spike would likely be surprisingly synchronized to amplify price impact.

Nevertheless, many investors remain optimistic that volatilities are no different than financial market boogymen that cynical old traders made up to frighten first year analysts. Many continue to count on global monetary authorities to keep volatility suppressed with excess liquidity generation.

Looming quantitative tightening as a catalyst for volatility

With the Federal Reserve on-track to [increase balance sheet reinvestment cap](#) to \$20 billion per month (Treasury cap to \$6 billion from \$12 billion, MBS from \$4 to \$8 billion), ECB to soon begin QE taper, as well as signs of [less term premium suppression by the BOJ](#), global excess liquidity generation will likely ease in the months ahead and reduce the effectiveness of policy-induced volatility suppression and threaten assets that have been levitated by policy support: long-maturity government bonds, risk assets such as equities and credit instruments, as well as less liquid investments favored by private equity investments.

This is similar to the transmission of risk contagion during the last financial crisis, which was spread via toxic assets on bank balance sheets – an area where regulators continue to maintain strong focus. However, many investors and officials did not realize that similar risks had since migrated to the non-bank sector in the ensuing years (and the unfortunate truth that regulatory measures would only channel risks to other parts of the system), and financial excess had ballooned thanks to nearly a decade of policy-induced volatility aided by [risk-taking on a global scale](#). The risk transmission mechanisms are in place, and the only missing catalyst is volatility:

- “Flighty money” are amassed at a number of large non-bank institutions with closely correlated risk exposures
- Consensus bullishness toward risk-parity reflects collective vulnerability to a decline in asset prices
- Non-bank financial intermediaries tend to [contract their balance sheets more than banks](#) in adverse conditions
- Non-banks’ risk management process remain untested after years of “worry-free” march to steadily add risk
- Prices of illiquid assets remain buoyant despite liquidity conditions would deteriorate under volatility shock