NIRP the Perp:
Updating the Odds of FRB Negative Interest-Rate Policy

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In this note, Federal Financial Analytics updates our September, 2015 assessment of the potential for and impact of negative interest-rate policy (NIRP) in the U.S. We believe this was the first such analysis of the financial-stability implications of NIRP – whether implemented by active FRB decision or forced by market factors – and our forecasts have clearly been borne out by recent market developments and FRB statements. We here assess (1) whether the FRB could implement NIRP if the FOMC decides it is warranted and (2) whether the FRB then will be willing or able to do so given current political challenges. We here also relate the FRB's increasingly acute political risk to continuing payment of interest on excess reserves (IOER), concluding that IOER – increasingly seen as a big-bank subsidy – could prove the FRB's least-worst solution if the central bank is forced to implement NIRP or take other unprecedented action.

Here, we go beyond the financial-stability challenges initially assessed from any meaningful drop below the zero lower bound (ZLB) through nominal rates set by a central bank or a market push into real rates so far below the ZLB as to force sustained market reaction. With $5.7 trillion in obligations now calculated to be below the ZLB,[1] there is ample evidence that:

- markets anticipate significant and adverse impact on bank profitability, forcing near-term stress in terms of contingent-convertible debentures and market capitalization that could be systemically problematic if sustained over time;
- large U.S. banks must price sustained negative rates and a flat yield curve into their stress tests, forcing limited recognition of NIRP effects even without actual NIRP;
- cash hoarding is likely in most countries that rely on cash instruments. Political reaction in the U.S. is likely to be fierce to any suggestion that cash instruments could be altered to limit holding;[2]
- NIRP prospects have made Treasury prices and liquidity increasingly volatile. NIRP results in the EU, Japan, and other nations are instructive, but do not serve as precedents for what might happen if a benchmark asset like Treasuries also went negative;
- insurance-company profitability, product offerings, and stability is stressed; and
- some investment vehicles have closed their doors because they cannot sustain investor demand at reasonable fees. The combination of the factors noted above could exacerbate asset-management liquidity stress even if MMFs remain open.

1) The FRB Can Implement NIRP If It Wants to

Reflecting growing discussion about NIRP, the FOMC surprisingly released a 2010 memorandum[3] on both the market implications and legal status of setting IOER below the ZLB in concert with the minutes of its December 2015 meeting. The memo assumes that rates would be made ultra-low or go below the ZLB by concomitant IOER action and thus should be viewed only as an assessment of negative IOER, not necessarily one also of NIRP if rates go below the ZLB through actions in other monetary-policy corridors. Further, much in the market analysis is moot because much in the market has markedly changed since 2010 -- for example, the forecasted minimal adverse impact on bank earnings is likely well below that given the more-than-doubling of excess reserves now held at the FRB and the role of the GSEs as alternative lenders to banks is undermined now by stringent GSE-portfolio limitations. Thus, we do not believe any meaningful market-impact conclusion can be drawn from the 2010 memo, a finding with which the FRB concurs as it conducts its own NIRP analysis.

The legal analysis in the 2010 memo is not only inconclusive with regard to negative IOER, but silent on the extent to which NIRP could be achieved through other corridors. Assuming Congress does not attempt to recapture IOER on grounds that it is a big-bank "subsidy,"[4] we believe the FRB will wish to maintain at least a minimally positive IOER because of the financial-market implications of a sudden

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[1] Robin Wigglesworth, Leo Lewis, and Dan McCrum, *Central banks: Negative thinking*, Financial Times, February 17, 2016, at http://www.ft.com/intl/cms/s/2/7333e92a-d4a2-11e5-829b-8564e7528e54.html.

[2] Editorial Board, *The Political War on Cash*, Wall Street Journal, February 17, 2016, at http://www.wsj.com/articles/the-political-war-on-cash-1455754850.

[3] Chris Burke, Spence Hilton, Ruth Judson, Kurt Lewis, and David Skeie, *Reducing the IOER Rate: An Analysis of Options*, August 5, 2010, Federal Reserve Board, http://www.federalreserve.gov/monetarypolicy/files/20100805.Monetary.Policy.Stimulus.2.IOER.memo.public.pdf

[4] Ben S. Bernanke and Donald Kohn, *The Fed's interest payments to banks*, February 16, 2016, The Brookings Institution, available at http://www.brookings.edu/blogs/ben-bernanke/posts/2016/02/16-fed-interest-payments-banks.

change that causes banks swiftly to reduce their excess-reserve balances and the financial-stability shock of so large and fast a hit to bank earnings. With excess reserves now totaling $2.3 trillion,[5] funding and asset disruptions resulting from sudden excess-reserve liquidations could be at least as problematic as direct sales from the FRB's own portfolio. The decision by the FRB to create the reverse repo program (RRP) and thus a new monetary-policy channel outside the banking system which did not exist in 2010 also complicates negative IOER because of the funding-flow distortions that could result if banks are forced to pay the FRB but MMFs maintain a positive return from their transactions with the FRB or, perhaps, are forced to bear a still steeper cost.

While there are no conventional ways to achieve NIRP without negative IOER, other options without any potential legal roadblocks include:

- imposition of negative rates only on certain reserves to keep overall IOER above the ZLB, as the Bank of Japan sought to do;
- use of interest rates other than IOER to drive the market (e.g., decouple IOER from the fed funds rate or alter the overnight inter-bank rate as the Swiss National Bank did);
- still more FRB asset purchases (as has been done by the ECB). The FRB's governing law and long tradition make it difficult for the central bank to purchase non-governmental, riskier assets, but it could conceivably do so through new facilities designed to alter targeted credit markets or to execute NIRP without adversely affecting Treasury's benchmark status. However, still more purchases compound the growing distortions to global markets resulting from FRB and other central-bank quantitative-easing efforts, recently calculated to account for $23 trillion of assets extracted from private hands;[6] or
- using the RRP or new facilities to drive down rates outside the banking system.

All of these alternative channels have significant operational and political complications (see below), but negative IOER has one that warrants special attention: significant and sustained negative IOER would likely force banks to charge depositors for providing the equivalent of vault-cash services if macroeconomic conditions and applicable regulation (e.g., the supplementary leverage ratio[7]) provide no place for banks to deploy recaptured reserves into profitable, prudent assets. Charging depositors transforms negative IOER from a financial-policy challenge into a grassroots political one, especially given the current U.S. focus on income inequality.

2) Political Risk is a Major NIRP Binding Constraint

As the discussion above indicates, there do not appear to be significant legal obstacles to NIRP, with even the most probable ones – those generated by negative IOER – of uncertain impact. Thus, the Federal Reserve could implement NIRP if advocates for it within and outside the System successfully press their point. Were the FOMC to revive expansionary policy, NIRP could also occur even if the fed

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[5] Federal Reserve Board*, Federal Reserve Statistical Release: H.3. Aggregate Reserves of Depository Institutions and the Monetary Base*, February 11, 2016, available at http://www.federalreserve.gov/releases/h3/20160211/H3.pdf.
[6] Simon Kennedy, *There Are Still a Few Tricks Seen Up Central Bankers' Sleeves*, Bloomberg, at http://www.bloomberg.com/news/articles/2016-02-12/there-are-still-a-few-tricks-seen-up-central-bankers-sleeves.
[7] OCC, FRB, and FDIC, *Regulatory Capital Rules: Regulatory Capital, Enhanced Supplementary Leverage Ratio Standards for Certain Bank Holding Companies and Their Subsidiary Insured Depository Institutions*, 79 FR 24528 (May 1, 2014), available at http://www.gpo.gov/fdsys/pkg/FR-2014-05-01/pdf/2014-09367.pdf.

funds rate returns to zero but market factors trigger negative rates along lines included in the Board's stress-test scenarios in another flight to safe-haven situation. However, if conditions in the FOMC's view force action beyond a limited fed funds retreat, overt NIRP may well be forced on the FOMC's agenda.

The considerations described above will then determine final action, but the FRB is likely quickly to begin to temper its forward guidance and other communications to build on Chair Yellen's recent statements before Congress that NIRP is one option under consideration in any such scenario. In this guidance, the FRB will go beyond the heavy hint dropped in the stress test to limit not only the market volatility evident in Japan, but also the stunned consumer response that quickly led to strong political push-back in that nation which would surely be still more challenging to the U.S. central bank.

Why is the FRB under so much political pressure even without NIRP? A quick summary of considerations here include:

- strong opponents to the FRB are to be found on both sides of the aisle at each end of the U.S. political spectrum (e.g., Sen. Bernie Sanders, Rep. Jeb Hensarling). The campaign is currently fragmenting on issues like income inequality, the power of Wall Street, and slow growth – all of which put the FRB in an unfavorable light regardless of how each of the issues is specifically addressed. Central banks in most other nations have strong support from the majority party and little risk from the minority one, but the nature of U.S. government does not provide the central bank with comparable insulation;
- the U.S. has a long, strong history of distrusting a powerful central bank, again a sharp contrast to most other nations;
- the FRB has been strongly criticized across the spectrum and by many opinion-leaders for continued economic sluggishness and continuing unemployment despite widespread (but far from universal) praise for its action stemming a far worse financial crisis. The Board and Reserve Banks are also seen as over-friendly to the largest U.S. banks, if not actively "captured" by them for supervisory purposes;
- the House has passed legislation to force the FRB to set monetary policy by a hard, quantitative standard designed to emphasize price stability over maximum employment and to demand other constraints strongly opposed by the FRB;
- the Senate Banking Committee has laid the groundwork for structural change to the Reserve Bank System that could move forward more quickly in tandem with the House legislation to pose a significant institutional challenge. Senate Democrats will block most aspects of this legislation if possible and the President is sure to veto it, but the FRB will have used extensive and expensive political capital to block enactment only to face renewed threats depending on the outcome of the 2016 election; and
- funds at the FRB, especially IOER, may be used this year by a Congress that builds on the dividend changes used to fund highway infrastructure to capture other FRB resources for fiscal policy purposes.

The FRB is trying to be more responsive to Congress, but it has otherwise focused its efforts on the economy in hopes that the normalization of December 2015 appeases right-wing critics even as unemployment improvements mollify the left. Market chaos since the beginning of 2016 has of course jeopardized this strategy from both a monetary-policy and political perspective, with all of the events described above making it clear that the FRB has very little room in which to attempt to continue the unprecedented tools (enormous QE, the RRP and IOER) that have increasingly been seen as "normal" in contrast to still more radical actions the FRB might choose or be forced to implement

3) NIRP the Perp

Which brings us back to negative interest-rate policy. None of the tools described above with which the FRB could counter its macroeconomic and political challenges is straightforward or easy. However, NIRP either through negative IOER or another channel has the possible advantage of being seen as a tax on banks – appealing across the political spectrum if politicians are persuaded that community banks are largely exempt from it. The key to political risk is the extent to which the FRB constructs a NIRP structure it believes accomplishes its stimulative purposes without near-term impact on the cost of funds for retail and small-business depositors or rapid contagion risk into MMFs that poses both political and systemic-liquidity risk. The sharp and negative reaction to NIRP in Japan is a strongly-cautionary test case for the FRB, but not one that we believe will dispositively dissuade it from NIRP if nothing else seems to.