# John C Williams: The research-policy nexus - ZLB, JMCB and FOMC

Remarks by Mr John C Williams, President and Chief Executive Officer of the Federal Reserve Bank of New York, at the Conference celebrating the 50th Anniversary of the "Journal of Money, Credit and Banking", Federal Reserve Bank of New York, New York City, 31 May 2019.

\* \* \*

As prepared for delivery

John Maynard Keynes quipped, "Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist." I wonder whether Keynes would see this as a feature rather than a bug in light of his enduring influence on the profession more than 70 years after his death.

The theme of my talk today is that during my quarter century as a researcher and policymaker at the Fed, we have not been overly beholden to defunct economists. Quite the contrary. A quick scan of FOMC memos, briefings, and meeting minutes provides ample evidence that a wide range of economic research—new and old, conventional and outside the box—regularly enters into our debates and influences our decisions. This represents a rich two-way dialogue between researchers and policymakers, with both sides probing for new answers to old questions.

I could list a long catalog of examples of the synergistic relationship between research and policymaking at central banks. Instead, I will focus my comments today on one specific topic: the zero lower bound on interest rates, or ZLB for short. This topic has obvious importance to central bank practice past, present, and future. In addition, the *Journal of Money, Credit and Banking (JMCB)*, the 50th anniversary of which we are recognizing today, played a very important role in shaping how we think about the ZLB. Today I'd like to highlight how this work has influenced my own thinking, as a researcher and policymaker.

Before I proceed any further, I should give the usual disclaimer that everything I say today reflects my own views and not necessarily those of the FOMC or anyone else in the Federal Reserve System.

## The Zero Lower Bound Emerges

Although the ZLB was not a new idea by any means, three circumstances—two empirical, one theoretical—came together to reignite interest in this topic by researchers and policymakers in the 1990s.<sup>1</sup>

The first was the achievement of low inflation in the United States, which, all else equal, implied lower interest rates. The second was Japan's lengthening period of deflation and near-zero interest rates.<sup>2</sup> The third was renewed curiosity about the theory of monetary policy as decision rules for interest rates, following the publication of John Taylor's "Discretion versus Policy Rules in Practice."<sup>3</sup>

Although that paper did not mention the ZLB, it fundamentally transformed how many economists, including one impressionable Stanford grad student, thought about monetary policy. Indeed, the very logic of the Taylor rule—that interest rates systematically move up and down with changes in economic conditions—forced macroeconomists to come to terms with the presence of the ZLB. Put simply, if you run macroeconomic model simulations with a Taylor rule, you will eventually encounter the ZLB and face the decision of what, if anything, to do about it.

This tension is evident in research papers on monetary policy rules from this era, in which

authors either sidestepped the ZLB or ignored it altogether. In fact, I'll plead guilty as charged when it comes to my own research during this period. At the same time, a small cadre of researchers at the Fed and in academia started to take the ZLB head-on and explore its effects in macro models.<sup>4</sup>

Research on the ZLB quickly made its way to policymakers. The ZLB was analyzed in a note to the FOMC in the summer of 1998 and discussed at the subsequent FOMC meeting in July.<sup>5</sup> That discussion led to interest at the Fed in having a research conference to provide a broad set of views and perspectives on the ZLB.

This convergence in interest between researchers and policymakers resulted in a Federal Reserve conference on "Monetary Policy in a Low-Inflation Environment" held in Woodstock, Vermont, in October 1999. The conference proceedings were subsequently published in a special issue of the *Journal of Money, Credit and Banking* in November 2000. The goal of the conference was to bring together academic and Fed researchers and policymakers to study the implications of low inflation and the ZLB from a variety of perspectives.<sup>6</sup>

Looking back, what stands out the most from this conference was the richness and diversity of thought brought to a topic that had lain mostly dormant for many decades. There were papers on the historical experience with very low inflation and interest rates, and on financial market functioning in such an environment. The conference concluded with an international policymaker panel.

Three of the conference papers were directly related to conducting monetary policy in relation to the ZLB. Specifically, Ben McCallum's paper examined the use of the exchange rate as an additional instrument for monetary policy in the context of a model where a "portfolio balance" channel allowed for deviations from uncovered interest parity.<sup>7</sup> In my paper with Dave Reifschneider, we explored the effects of the ZLB on the macro economy and evaluated alternative monetary policy strategies, including versions of average-inflation and price-level targeting.<sup>8</sup> To his credit, Marvin Goodfriend went outside the box and considered three avenues to overcome the ZLB: charging negative interest rates on reserves and cash; conducting large-scale purchases of long-term securities to reduce the external finance premium; and outright monetary transfers to the public.<sup>9</sup>

What is striking rereading these papers today is how all authors took for granted that the ZLB was a real problem that needed addressing, and how they approached it in novel and different ways. This despite the fact that the economy was in the midst of a productivity-driven boom, the longest expansion on record, and the prevailing federal funds rate was 5.25 percent. These papers and the ensuing discussions and debates planted seeds that would germinate in research and policymaking. Central banks across the globe ultimately used variations of nearly all of the tools discussed at the conference. Indeed, the topics of interest rate policies, targeting asset prices, asset purchases, and negative interest rates are among the most prominent discussions in monetary economics today.

Importantly, this research made its way straight to policymakers within a few years—a quick turnaround by central bank standards! In January 2002, Marvin, Dave, and I reprised our roles from the conference in briefings to the FOMC.<sup>10</sup> And in June 2003, Vince Reinhart briefed the FOMC on alternative monetary policy approaches—including asset purchases and forward guidance—to mitigate the effects of the ZLB.<sup>11</sup> This was followed by a flurry of further research by academics and central bank economists that delved deeper into these topics.<sup>12</sup>

# Putting Research into Practice

This research had important practical lessons for policymakers in the United States and abroad following the global financial crisis. One lesson was that short-term rates should be cut

aggressively when deflation or a severe downturn threatens.<sup>13</sup> That is, do not "keep your powder dry." A second lesson is that short-term rates should be kept "lower for longer" as the economy recovers.<sup>14</sup> A third is that large-scale asset purchases (LSAPs) can complement conventional policy actions by making financial conditions more favorable for growth even when short rates are constrained by the ZLB.<sup>15</sup>

Armed with these insights, policymakers were prepared and able to act quickly and decisively when the financial crisis hit. A great deal was learned about the ZLB and unconventional policy tools along the way.<sup>16</sup> Indeed, another conference organized by the Boston Fed was held in October 2010 to assess lessons learned, and the proceedings of that conference were published in a special issue of the *JMCB* in February 2012. For me, the most interesting aspect of that conference was that participants took the ZLB as a defining feature of the landscape: what was once viewed as primarily theoretical had become grounded in practice and experience.

# The ZLB in 2019

This brings me to today. The Federal Reserve has embarked on a review of its monetary policy strategic framework. As was the case 20 years ago, the question is how to best achieve our monetary policy goals in the context of low inflation and the ZLB. Indeed, the policy questions we are grappling with today are exactly the ones laid out in Woodstock. The one fresh wrinkle is that with estimates of the neutral real interest rate much lower than those that prevailed 20 years ago, the ZLB is likely to be an even more powerful force than was imagined in 1999.<sup>17</sup>

In approaching this question today, we should take lessons from the conference held in Woodstock 20 years ago: Bring together leading researchers and policymakers, draw out the best and most creative thinking, and take a long-run view of how we can navigate the environment before us. I am happy to say that this process is already in train, with the Fed's framework review incorporating perspectives from a wide range of stakeholders, culminating in an academic conference next week in Chicago.

## Conclusion

In closing, I want to add a personal thanks to Ken West for all he has done to promote outstanding research that is both innovative and relevant to the real-world problems that central banks face. And my best wishes for the *JMCB*, which I hope may continue its illustrious record for the next 50 years. As a researcher and policymaker, the one thing I am certain about is that fostering an open and active dialogue between researchers and policymakers is the best way for us to succeed in our work.

## Thank you.

- <sup>3</sup> John B. Taylor, <u>Discretion versus Policy Rules in Practice</u>, Carnegie-Rochester Conference Series on Public Policy, Volume 39, pp. 195–214, 1993.
- <sup>4</sup> For an early example, see Jeffery C. Fuhrer and Brian F. Madigan, <u>Monetary Policy When Interest Rates Are</u> <u>Bounded at Zero</u>, The Review of Economics and Statistics, Volume 79, Issue 4, pp. 573-85, November 1997; for further references see Reifschneider and Williams (2000), and Clouse et al., 2003.
- <sup>5</sup> Board of Governors of the Federal Reserve System, <u>FOMC transcript</u>, June 30-July 1, 1998.

<sup>&</sup>lt;sup>1</sup> For references to the early literature, see James Clouse, Dale Henderson, Athanasios Orphanides, David H. Small, and P. A Tinsley, <u>Monetary Policy When the Nominal Short-Term Interest Rate Is Zero</u>, The B.E. Journal of Macroeconomics, De Gruyter, Volume 3, Issue 1, pp. 1-65, September 2003.

<sup>&</sup>lt;sup>2</sup> Paul Krugman, <u>It's Baaack: Japan's Slump and the Return of the Liquidity Trap</u>, Brookings Papers on Economic Activity, The Brookings Institution, Volume 29, Issue 2, pp. 137-206, 1998.

- <sup>6</sup> Jeffrey C. Fuhrer and Mark S. Sniderman, <u>Conference Summary</u>, Journal of Money, Credit and Banking, Volume 32, Number 4, Part 2, pp. 845-69, November 2000.
- <sup>7</sup> Bennett T. McCallum, <u>Theoretical Analysis Regarding a Zero Lower Bound on Nominal Interest Rates</u>, Journal of Money, Credit and Banking, Volume 32, Issue 4, pp. 870-904, November 2000.
- <sup>8</sup> David Reifschneider and John C. Williams, <u>Three Lessons for Monetary Policy in a Low-Inflation Era</u>, Journal of Money, Credit and Banking, Volume 32, Issue 4, pp. 936-66, November 2000.
- <sup>9</sup> Marvin Goodfriend, <u>Overcoming the Zero Bound on Interest Rate Policy</u>, Journal of Money, Credit and Banking, Volume 32, No. 4, Part 2, pp. 1007-35, November 2000.
- 10 Board of Governors of the Federal Reserve System, <u>FOMC transcript</u> and <u>presentation materials</u>, January 29-30, 2002.
- <sup>11</sup> Board of Governors of the Federal Reserve System, <u>FOMC transcript</u> and <u>presentation materials</u>, June 24-25, 2003.
- <sup>12</sup> See, for example, Lars E. O. Svensson, <u>The Zero Bound in an Open Economy: A Foolproof Way of Escaping from a Liquidity Trap</u>, Monetary and Economic Studies, Volume 19, Issue S1, pp. 277-312, February 2001; Günter Coenen, Athanasios Orphanides, and Volker Wieland; , <u>Price Stability and Monetary Policy Effectiveness</u> <u>When Nominal Interest Rates Are Bounded at Zero</u>, Advances in Macroeconomics, Volume 4, Issue 1, 2004; Ben S. Bernanke and Vincent R. Reinhart. 2004. <u>Conducting Monetary Policy at Very Low Short-Term Interest Rates</u>, American Economic Review, Volume 94, No. 2, pp. 85-90, May 2004; Klaus Adam and Roberto M Billi, <u>Optimal Monetary Policy under Commitment with a Zero Bound on Nominal Interest Rates</u>, Journal of Money, Credit and Banking, Volume 38, No. 7, pp. 1877-1905, October 2006.
- $\frac{13}{13}$  Reifschneider and Williams 2000; Board of Governors 2002.
- <sup>14</sup> Gauti B. Eggertsson and Michael Woodford, <u>The Zero Bound on Interest Rates and Optimal Monetary Policy</u>, Brookings Papers on Economic Activity, Volume 34, No. 1, pp. 139-211, 2003; Reifschneider and Williams 2000.
- <sup>15</sup> Ben S. Bernanke, Vincent R. Reinhart, and Brian P. Sack, <u>Monetary Policy Alternatives at the Zero Bound: An Empirical Assessment</u>, Brookings Papers on Economic Activity, The Brookings Institution, Volume 35, No. 2, pp. 1–100, 2004.
- <sup>16</sup> John C. Williams, <u>Lessons from the Financial Crisis for Unconventional Monetary Policy</u>, Presentation at National Bureau of Economic Research Conference, Cambridge, Mass., October 18, 2013; John C. Williams, <u>Monetary Policy at the Zero Lower Bound: Putting Theory into Practice</u>, The Hutchins Center on Fiscal and Monetary Policy, The Brookings Institution, January 16, 2014.
- <u>17</u> Thomas Laubach and John C. Williams, <u>Measuring the Natural Rate of Interest Redux</u>, Business Economics, Volume 51, No. 2, pp. 57-67, April 2016.