Preparing Central Banks Before the Next Systemic Crisis

Georges Ugeux[1]
Columbia Law School

This article addresses the question whether central banks will be resilient and effective in a future financial crisis, focusing on the last decade when the largest central banks increased their influence. The article sets out how fiscal and monetary policies became intertwined as a direct result of government over-indebtedness and lack of fiscal discipline. The long aftermath of the financial crisis exposed the limits of central bank interventions. The growing reliance on central banks throughout the last decade coincided with an intensified interdependence between governments, banks and central banks. The effects of central banks' loss of independence from governments has been compounded by their closeness to the banking sector that they regulate and supervise. By being "too complex to manage", central banks operate under an impaired ability to act promptly during a crisis. They should therefore consider a new governance model that defines their functional autonomy.

Keywords: central banks, monetary policy, global financial crisis management, systemic financial crisis," Bermuda Triangle," "Third Arrow," Quantitative Easing.

> Central banks are no longer central banks. I think it gets dangerous when they lose sight of the basic function of the central bank […] The central bank is not an all-powerful tool. Central banks, including the Fed, could eventually inflict more harm by what they're doing with their portfolio to save the world economy.[2]
>
> —Paul Volcker, former Chairman, U.S. Federal Reserve

With these words, Paul Volcker delivered a strong warning signal in April 2013 about the aggressive expansion of central banks – both quantitatively in terms of their balance sheets and qualitatively in terms of central banks' responsibilities. Volcker

[1] Communication with author: 1 (212) 332-6055

[2] Maureen Farrell, 'Volcker: central banks have become too aggressive', *CNN Money* (April 8, 2013).
http://money.cnn.com/2013/04/08/news/economy/volcker-central-banks/

said that rather than trying to stay out of the market as much as possible and tinker from the sidelines, central banks have been aggressively trying to influence economic growth and even employment.

Ire against central banking policies and sometimes the institutions themselves is boiling at high temperature. Is it justified? This article will focus on the increased interconnectivity between governments, central banks and financial institutions that impairs the ability of central banks to act independently or autonomously. In addition, this article argues that central bankers too often disregard the existence of unintended negative consequences of their policies. Examples of this are the impacts of low interest rates and the increase of the largest central banks' balance sheets. As a consequence, trust in central banks has seriously eroded during the last few years in the eyes of the general public, lawmakers, governments, financial institutions and corporations. Given the weight of central banks for determining the value of money in our post-Bretton Woods economies, John Authers notes, "*Lose trust in these institutions, and you no longer have a currency.*"[3] In a more immediate sense, the financial crisis reconfirmed the crucial role central of banks in our financial markets. It is this role that is compromised by the lack of credibility and effectiveness of central banks.

This article will assess the scope of activities of central banks, to introduce the issues; will address the relationship of central banks with governments and banks; will raise questions about the complexity of central banks' tasks and economic objectives; and focus on governments' dependency on central banks. The article concludes by questioning the future of the central banking model in light of their core objectives.

Have Central Banks Become Financial Conglomerates?

A number of occasions and crises over the past ten years transformed the role of central banks. At the origin of this trans-

[3] John Authers, 'Central banks are not the enemy', *Financial Times* (July 28, 2016). https://www.ft.com/content/fa7746f6-5379-11e6-9664-e0bdc13c3bef

formation, one finds the financial crises of the last decade. In times of crisis, the priority is action and effective resolution. The problem is that these extended responsibilities carried over well beyond times of crisis. This led to a transformation that raises questions about their *raison d'être*. Through their interventions during economic downturns, central banks have become an important element of the resilience and prosperity of their domestic economies. They became the most prevailing and influential players in the game of the global economy.

Today, after rescuing the financial system with massive liquidity injections, central banks are asset managers of substantial bond portfolios, issue bank notes, lend to each other and to banks, exercise an open market policy and set up interest rates. They finance themselves through short term deposits from banks, extend various forms of illiquid loans to private and public banks with deteriorating qualities of collaterals. On top of that, they promote growth and employment, stimulate the economy, and regulate banks while, in the meantime looking after financial stability. It is a balancing act to have all these measures and objectives on the plate of a single institution.

As central banks received more and more responsibilities, they failed to acknowledge that they operate within a nest of conflicting interests. The post-financial crisis policies of central banks challenge their democratic legitimacy, independence, accountability and governance. This power emanates from the conflicting objectives that they abide with. In this day and age, central banks have effectively become financial conglomerates. Consequently, they have become too big to fail. With $4.5 trillion of assets, the US Federal Reserve is the largest financial intermediary in the world. On top of that, the scope of central banking activities has become too complex to manage.

The key monetary policy objectives of the US Federal Reserve exemplify the difficulty of a central bank in charge of a broad range of responsibilities. In 1977, Congress amended the Federal Reserve Act to say:

> the Board of Governors of the Federal Reserve System and the Federal Reserve Open Market Committee shall maintain long run growth of the monetary and credit aggregates commensurate with the economy's long run potential to increase production, so as to promote effectively the goals of maximum employment, stable prices and moderate long-term interest rates.[4]

Under this dual mandate, the Fed is supposed to pursue price stabilization as well as employment maximization. Are these objectives compatible? Paul Volcker asserts: "*Fashionable or not, I find the dual mandate both operationally confusing and ultimately illusory*."[5] Perhaps even more so because some consider the Fed to have a '*triple mandate*' due to its statutory responsibility to "moderate long-term interest rates" [6], besides the goals of maximum employment and stable prices.[7]

Central banks accepted - or were forced to take on - new responsibilities. In the meantime, we, the public, increasingly considered them as the real drivers of the economy and thus expected them to solve more than they realistically could. The Group of Thirty (G30), a powerful think-thank of former central bankers, admits that "*central bank policies alone should not be expected to deliver sustainable economic growth, as their policies require complementary measures from governments*.[8] However, central banks have too often been "the only game in town"[9] as their government counterparts

[4] The Federal Reserve of Chicago, The Federal Reserve's Dual Mandate https://www.chicagofed.org/publications/speeches/our-dual-mandate

[5] Paul Volcker, 'Central banking at a cross road', *Speech at the Economic Club of New York* (May 29, 2013). https://c.ymcdn.com/sites/www.econclubny.org/resource/resmgr/Events/2013VolckerTranscript.pdf

[6] 12 U.S.C. § 225a.

[7] John C. Williams (President and CEO, Federal Reserve Bank of San Francisco), Presentation to the Marian Miner Cook Athenaeum (February 13, 2012). http://www.frbsf.org/our-district/press/presidents-speeches/williams-speeches/2012/february/williams-federal-reserve-mandate-best-practice-monetary-policy/

[8] G30, Fundamentals Of Central Banking: Lessons From The Crisis, G30 Report (2015), p. xiii. http://group30.org/images/uploads/publications/G30_FundamentalsCentralBanking.pdf

[9] Mohamed El-Erian, *The Only Game in Town: Central Banks, Instability, and Avoiding the Next Collapse* Yale university Press, 2016.

were incapable or politically unwilling to act. In his latest book, Mohammed El Erian explains how governments rely too much on central banks for economic stimulus.[10] While they pursue some conflicting interests, central banks carry tremendous risks and responsibilities. On many occasions their governors or presidents are portrayed as the most powerful men or women of their countries or, indeed, of the world. In the meantime, a wider range of authorities implies a growing probability of conflicting interests. The following paragraphs set out the complexity of central bank activity.

The Blurred Border Between Fiscal and Monetary Policies

Because of their increased significance for the global economy, it is increasingly relevant to question the core business of a central bank. Let us start from the basics: monetary policy. A central bank, according to the *Financial Times* Lexicon[11], is:

> the monetary authority and major regulatory bank in a country. Its functions include issuing and managing the country's currency, controlling monetary policy and supervising money market operations, managing exchange and gold reserves, acting as lender of last resort to commercial banks, and providing banking services to the government".

This traditional definition does not cover the amplitude and the diversity of interventions carried on by today's central banks, as previously set out. We have come to admit that monetary policy can include responsibilities such as fostering employment, restoring investors' trust or financing the economy as creditors through quantitative easing. Whether those actions are the result of an explicit mandate or an informal delegation, central banks around the world acquired political, social and economic responsibilities outside of their core mandate. Yet, there are missions that only a central bank can accomplish and that cannot be sacrificed to political skirmishes.

What they have effectively done, willingly or not, is to as-

[10] Mohamed El-Erian, *The Only Game in Town: Central Banks, Instability, and Avoiding the Next Collapse* (2016).

[11] Financial Times Lexicon, http://lexicon.ft.com/Term?term=central-bank

sume control over elements of fiscal policy at the expense of the responsibility of governments. This gave governments the latitude not to take the painful measures that are needed: decrease their indebtedness and change their social-economic model (e.g., employment laws or subsidy schemes). Often enough, central banks took over responsibilities that governments and parliaments were unable to assume in an effective and timely fashion because of political or structural opposition.

> High levels of public debt are likely to be the most enduring legacy of the 2007-2009 financial crises for the United States and other industrial economies. For many if not most advanced countries, concerns about those debt burdens will shape policy choices for years. Fiscal adjustment is painful in the short run, which makes it politically difficult to deliver. Debt restructuring, for its part, leaves a damaging stigma and is also often associated with deep recessions.[12]

Many governments of the largest economies have a version of the "Third Arrow" that Japan's Prime Minister Shinzo Abe is using.[13] Besides the First Arrow (fiscal stimulus) and Second Arrow (unorthodox monetary policies), Abe promised 'structural reforms to improve Japan's economic growth and productivity' under the Third Arrow. However, while the other arrows have been aggressively used, the delivery of the intended reforms is not clear yet. Japan is certainly not the only country to struggle with the reforms needed to redefine the Western economic model that has now exhausted its financial solutions and faces the fact that it lives beyond its means. The next paragraph elaborates on this.

Recent Crises Expose the Limits of Central Bank Interventions

All over the world, examples of central banking interven-

[12] Barry Eichengreen et al., 'Rethinking Central Banking Committee on International Economic Policy and Reform', *Brookings Institute* (September 2011). http://bruegel.org/wp-content/uploads/imported/publications/Rethinking_Central_Banking_web.pdf

[13] Robert Harding & Leo Lewis, 'The third arrow of Abenomics: a scorecard', *Financial Times* (September 15, 2015). http://www.ft.com/intl/cms/s/0/ee40a73c-521d-11e5-8642-453585f2cfcd.html#axzz4BP038AwU

tions raise fundamental questions of the range of responsibilities of central banks. Most of them have started to operate well beyond the boundaries of orthodox central bank policies: where does that leave the economy?

In July 2015, the Chinese stock market collapsed because the Chinese authorities had turned a blind eye on the leverage of investors that they had even encouraged. This increased market prices by 150% in one year, followed by several severe corrections as well as an explosion of shadow banking. The People's Bank of China ("PBoC") had to use monetary policy instruments to avoid an even bigger explosion.

As *The Economist* put it, "three fears remain: that China's economy is in deep trouble; that emerging markets are vulnerable to a full-blown crisis; and that the long rally in rich-world markets is over."[14]

The Peoples' Bank of China (PBOC) interjects that:

> China's economic growth is still facing downward pressure, and the task of stabilizing growth, adjusting institutions, advancing reform, benefiting people's lives and preventing risks is still extremely arduous.[15]

Europe has been unable to impose fiscal discipline on its Eurozone member states even though that was an essential element of the Stability and Growth Pact that accompanied the Maastricht Treaty of 1992. Several national central banks have faced sovereign crises, often as a result of a banking crisis. However, the asymmetry where monetary policy is the prerogative of the ECB while fiscal policy is the prerogative of Member States remains an unsolvable issue.

---

[14] 'The Great Fall of China. Fear about China's economy can be overdone. But investors are right to be nervous', *The Economist* (August 29, 2015). http://www.economist.com/news/leaders/21662544-fear-about-chinas-economy-can-be-overdone-investors-are-right-be-nervous-great-fall

[15] Ben Bland & Josh Noble, 'China cuts rates and pumps in liquidity', *Financial Times* (August 25, 2015).http://www.ft.com/intl/cms/s/0/8501c04e-4af7-11e5-b558-8a9722977189.html#axzz49KFIs6xl

> Separating the liquidity explanation and contagion risk from aggregate risk and sovereign default is very important from a policy-making perspective, because an intervention by the central bank can be successful if financial markets face technical liquidity problems or subject to contagion. If, on the contrary, the rise in spreads is due to aggregate factors and sovereign default, then a central bank has only little room for manoeuvre.[16]

In Japan, none of the recent governments delivered fiscal discipline. The influence of prime minister Shinzo Abe created an even bigger challenge to the sound governance of Japan's public debt, loaded on the Bank of Japan following Abenomics.

> As a result of the negative interest rate, Japanese government bond yields decreased but the stock market declined, and despite a fleeting initial depreciation, the Japanese yen has sharply appreciated. Even though these market reactions were mainly caused by the rise in uncertainty regarding the outlook of the global economy, at the same time, it illustrates the simple fact that without desirable conditions in the global economy and markets, it's difficult for [Governor] Kuroda to make the bank's monetary easing policy bring about the intended positive effects on the markets.[17]

The US Federal Reserve, which missed the signs of exploding real estate prices following low interest rates, might fall into a similar trap by not reducing its balance sheet and hesitating to increase interest rates to protect employment. Lending to borrowers who could not repay created a bubble that culminated in the rescuing by the Federal Reserve of banks in liquidity traps following the Lehman crisis. *"It's not just that they missed it, they positively*

[16] Roberto A. De Santis, 'The Euro Area Sovereign Debt Crisis Safe Haven, Credit Rating Agencies and the Spread Fever from Greece, Ireland and Portugal', Working Paper Series, *European Central Bank* (February 2012). *https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1419.pdf*

[17] Setsuo Otsuka**,** 'The Bank of Japan and Abenomics: The struggle has just begun', *Brookings Institute* (March 2016). http://www.brookings.edu/blogs/up-front/posts/2016/03/10-bank-of-japan-abenomics-otsuka

denied that it would happen." Wharton professor Franklin Allen alleges that many central banks' underestimated the importance of banks and other financial institutions to the overall economy: *"They simply didn't believe the banks were important."*[18] Central bank policies have led to a completely contradictory interest rate structure. As shown by the graph below, while the blended interest rates of sovereign bonds from France, the United Kingdom and the United States went from 6% to almost 0%, the indebtedness to GDP of the G7 plus China exploded from 170% to 260% of GDP.

Looking at this graph, how can the US, Japan and EU justify the decrease of interest rates in front of mounting indebtedness? Unless sovereign risks are eliminated forever, the absence of a risk premium hugely favors borrowers. However, over the past few years, governments have been denying the risks of over-indebtedness. As they were taking on more public debt, central banks bought sovereign bonds in amounts aggregating several trillion dollars. The Bank for International Settlements ("BIS"), the banker of central bankers, mentions the different interests and objectives that obstruct the effectiveness of central banks as government funders.

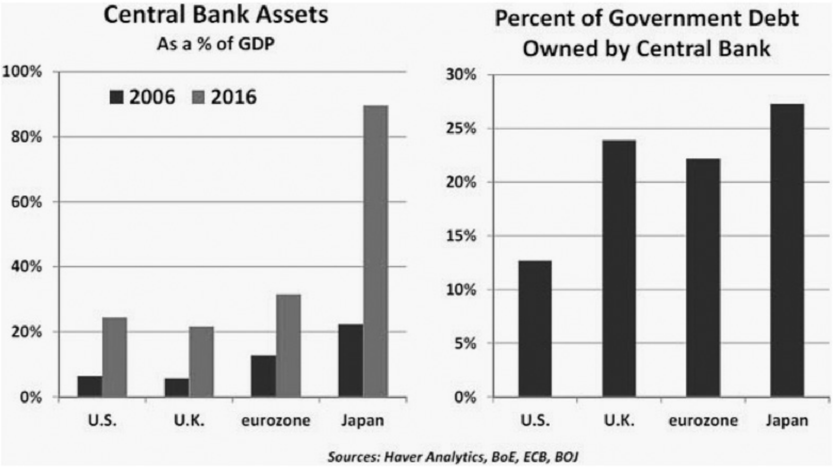

Figure 1

[18] Franklin Allen quoted in: 'Why Economists failed to forecast the financial crisis', *Knowledge @ Wharton* (2009). http://knowledge.wharton.upenn.edu/article/why-economists-failed-to-predict-the-financial-crisis/

> Central banks are assigned the goal of macroeconomic stabilization (i.e., price stability) while debt managers are typically mandated to keep the government's funding costs to a minimum. Thus, while the government would like to issue most of its debt in long-term paper to reduce the need to roll it over, central banks may have a strong preference for short-term bills for their day-to-day liquidity operations. This could lead to undesirable consequences for the monetary transmission mechanism through the term structure.[19]

It is not a central bank's function to act as the primary financier of a government. While they are lenders of last resort, they are not supposed to be in the business of credit or even marketable securities.

Quantitative Easing is an Unnecessary Trap if it is Overextended

The dependency on central banks by governments is exemplified by quantitative easing ("QE"). Through different forms of QE, the massive absorption of government debt in the balance sheet of central banks beyond their normal role of open market policy threatens the financial stability of our societies.

The following table (see page 13) provides a view of the series of measures that were taken by the ECB and the Federal reserve between 2007 and 2015.

Since then, the ECB, the Bank of England and the Bank of Japan have undertaken additional QE programs that are currently adding $80 billion assets per month, mostly in sovereign debt, to their balance sheets. The table from Deutsche Bank hereunder illustrates this recent evolution with an estimate of $100 billion a month.

Quantitative easing is not a new term; neither is the application thereof. Central banks have used various types of instruments

---

[19] Andrew Filardo, Madhusudan Mohanty & Ramon Moreno, 'Central bank and government debt management: issues for monetary policy', *BIS Papers* (2012). http://www.bis.org/publ/bppdf/bispap67d_rh.pdf

to ensure that some areas of credit squeeze or illiquidity in the financial system are taken care of. What have been game changers are the size and duration of the operations. Most recent quantitative easing programs have been in tranches of one or more trillion dollars. At the central bankers' meeting in Jackson Hole of August 2016, some argued the Fed should further expand its balance sheet.[20] From that perspective, central bank balance sheets are considered a tool that assists the private sector and governments with maturity transformation. That raises a fundamental question: if there is no risk in the balance sheet of central banks, by implication, does it mean that the risks of central bank balance sheets are implicitly guaranteed by those governments. Should they be included in the analysis of a country's indebtedness?

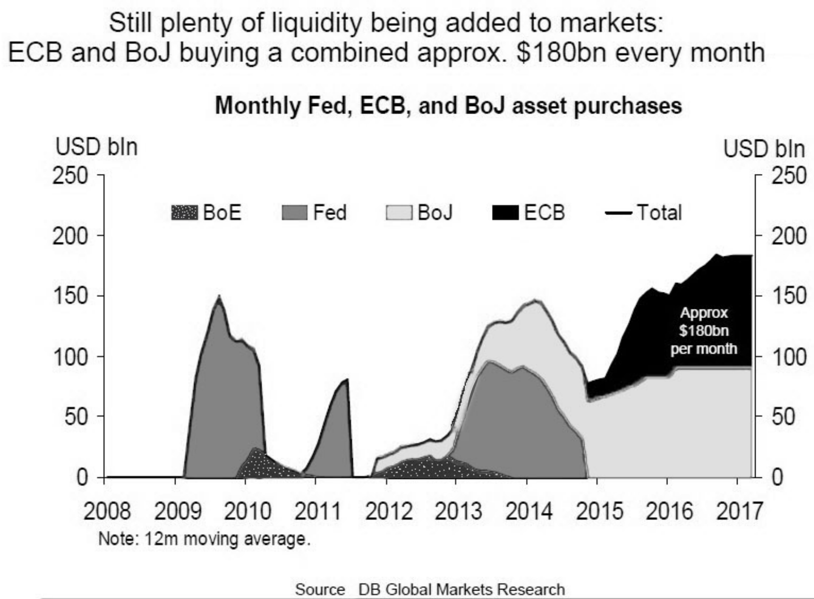

Figure 2

The quantitative easing programs of the Federal Reserve, Bank of England, European Central Bank, and

[20] Robin Greenwood, 'The Federal Reserve's Balance Sheet as a Financial-Stability Tool', *FRB Kansas City Economic Policy Symposium* (August 2016) https://www.kansascityfed.org/~/media/files/publicat/sympos/2016/econsymposium-greenwood-hanson-stein-handout.pdf?la=en

Bank of Japan during the recent financial crisis and recovery initially attempted to alleviate financial market distress, but this purpose soon broadened to include achieving inflation targets, stimulating the real economy, and containing the European sovereign debt crisis. The European Central Bank and Bank of Japan focused their programs on direct lending to banks—reflecting the bank-centric structure of their financial systems—while the Federal Reserve and the Bank of England expanded their respective monetary bases by purchasing bonds.[21]

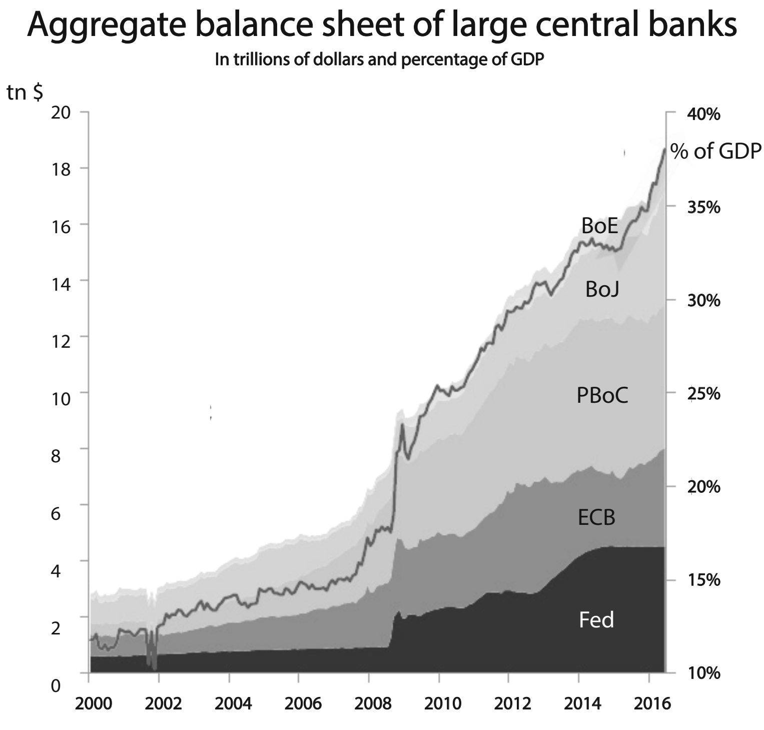

Figure 3

[21] Brett W. Fawley & Christopher J. Neely, 'Four Stories of Quantitative Easing', *Federal Reserve Bank of St. Louis Review,* 95(1), (January/February 2013), pp. 51-88. https://research.stlouisfed.org/publications/review/13/01/Fawley.pdf

The massive quantitative easing programs launched by many central banks can only be justified as short-term measures at times of crisis. The difficulties of the US Federal Reserve when exiting its QE programs are there to remind us of the risks attached to such policies. Increasing or maintaining the programs for several years is threatening financial stability. Following the example of the Federal Reserve, the accumulation of three tranches of QE make the exit from the massive balance sheet bubble almost impossible to execute over a short period of time. The Fed seems stuck at $4.5 trillion. While in theory, sovereign bonds are marketable securities, this is only true if the holdings do not exceed the market ability to absorb them without creating a turmoil in the market. We saw it very painfully in the case of Greece, when the Bank of Greece had no buyer for its Hellenic Republic bonds.

Let's face the reality. Despite announcing the end of the third QE program, the Federal Reserve is stuck with approximately $2.5 trillion of government debt and $1.7 trillion of mortgage assets it will take a decade to liquidate.

Can Central Banks' Balance Sheets Explode?

The president of the ECB, Mario Draghi continues to consider the ECB balance sheet an instrument of monetary policy. In July 2012 he announced that within the ECB mandate, "*the ECB is ready to do whatever it takes to preserve the euro. And believe me, it will be enough*".[22] The question is how extendible that mandate is.

On the other side of the world, Shinzo Abe, the Prime Minister of Japan, managed to oust the Governor of the Bank of Japan and bring in a successor who accumulated $2.3 trillions of Japanese Government Bonds. Abenomics have put the indebtedness of Japan at 200% of its Gross Domestic Product, the world record of developed economies. The numbers allow us to ask fundamental questions on central banking. Central banks, like other banks, rely on deposits and loans. This reliance increased significantly since the financial crisis.

[22] Mario Draghi, *Speech at the Global Investment Conference in London* (July 26, 2012). https://www.ecb.europa.eu/press/key/date/2012/html/sp120726.en.html

Yes, the Federal Reserve and the Bank of England have increased their balance sheets by 400%. Yes, in aggregate they took an additional $10 trillion of assets since the banking crisis. Yes, central bank balance sheets, like any balance sheet, matter. And this is not a criticism of their ability to surge and rescue the banks in financial crisis. The real issue is: how should central banks operate in the future, given that the financial crisis is almost ten years behind us? Of the $10 trillion increase of assets, $5 trillion were added long after the crisis. The justifications in terms of economic benefit proved insufficient. They threw the baby away with the bathwater. Little attention is paid to the limited equity, concentration of loans and weak collateral of central banks. Nobody would lend money to commercial banks that would have such weak balance sheets. Those banks would not pass the capital adequacy, liquidity and leverage tests that Basel III imposes on the banking system. Central banks are also too big to fail. They are only as good as the countries and the governments who own them.

Central banks are overleveraged and overexposed to single risks. They carry a multi trillion dollar illiquidity risk. Increasing those risks and this leverage is creating a systemic risk. From lenders of last resort as a key element of monetary policy, central banks have become lenders. The ECB's corporate bonds purchases amply demonstrate this. It is taking huge credit risks with increasingly insufficient collateral. The BIS sent a warning signal:

> It is the right time to be thoughtfully considering the various roles of central bank balance sheets. Exit strategies from these enlarged balance sheets will be an issue that will pre-occupy us for some years to come. Doing it right is important.[23]

In a banking crisis, where will they find the necessary funding to finance those balance sheets? In addition to stress testing banks, do central banks sufficiently assess their own ability to face a new global crisis? Central banks avoid answering this key question by making *ex-cathedra* statements that they have the means to face

[23] Jaime Caruana, 'Why central bank balance sheets matter', *BIS Papers 66* (December 2011). http://www.bis.org/publ/bppdf/bispap66b.pdf

any crisis. One thing is certain: with their current balance sheets, they have seriously impaired their ability to confront a banking or sovereign crisis.

Figure 4

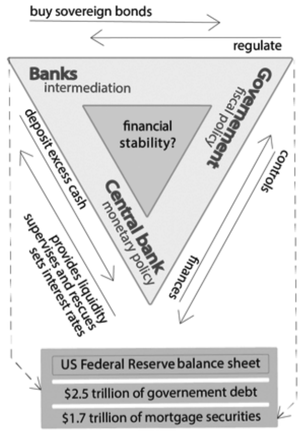

Figure 5

Is the Safety Net Broken?

The Group of Twenty (G20) created a Financial Stability Board as one of its first initiatives after the financial crisis of 2007-2009. This is the definition of macro prudential policies according to the ECB:

- prevent the excessive build-up of risk, resulting from external factors and market failures, to smoothen the financial cycle (time dimension)
- make the financial sector more resilient and limit contagion effects (cross-section dimension);
- encourage a system-wide perspective in financial regulation to create the right set of incentives for market participants (structural dimension).[24]

The long aftermath of the financial crisis reminds us, however, that financial stability is never certain and that central banks, more often than is desirable, end up having to extinguish a fire. In the absence of coordinated action by other authorities, central banks

[24] This is the official ECB definition. https://www.ecb.europa.eu/ecb/tasks/stability/html/index.en.html

have taken the lead in safeguarding financial stability through regulation, banking supervision, interest rate management and stimulus packages. Accordingly, public opinion tends to consider them the custodians of financial stability. The post-crisis mindset considers financial stability a prerequisite for our economies. *It is essential that we do not forget that growth depends on stability. Indeed, social cohesion and political stability go hand in hand with financial stability.*[25]

In sum, financial stability concerns the resilience to systemic risks as well as a vital condition for strong financial markets and economic prosperity. The pursuit of financial stability has therefore become a cornerstone of the large central banks, which have powerful financial stability departments. They are right to focus on that critical issue, but it could send the misleading message that financial stability is the *exclusive* responsibility of central banks. As the G20 recognizes, financial stability is a long quest that goes beyond the immediate impact of central banks' decisions.

Beyond Central Banking: the Bermuda Triangle and Financial Stability

For financial stability to exist, three important players need to play the same music. One, governments need to have a true fiscal discipline and reduce their dangerous indebtedness. Two, central banks need to have a monetary policy that is robust and resistant to temporary political maneuvers and excitement. And three, banks need to build sustainable capital adequacy, liquidity and leverage.[26]

The over-activity of central banks reduces the effectiveness of this triangle. *Governments*, generally over-indebted, issue bonds, which are treated as 'riskless assets'. These sovereign bonds are held in the portfolios of financial institutions (mostly banks and in-

---

[25] Andrew Large, 'Financial Stability Governance Today: A Job Half Done. Ongoing Questions for Policymakers', *G30 Occasional Paper 92* (2015). http://group30.org/images/uploads/publications/op92b.pdf

[26] These three ratios have been established by the Bank for International Settlements, known as the Basel III ratios, intended to apply globally to all banks. http://www.bis.org/bcbs/basel3.htm

surance companies) and central banks. *Financial institutions* hold and trade loads of sovereign debt, and deposit and borrow from central banks. *Central banks* became major holders of financial assets, mostly bank loans and sovereign debt, in addition to their responsibility to independently supervise financial institutions. For example the US Fed, as visualized above, shows the fragility of the system following the dependency of banks and the government on the Fed and its balance sheet.

Today in the US, commercial banks hold $2.44 trillion in US government debt.[27] *As such, the banking sector and the Fed hold about 30% of the total US governement debt ($19.5 trillion).*[28]

Whether the storm comes from either of them, it is a combined $8 trillion risk that will create the tourbillon that will explode in the face of central banks, loaded with illiquid assets.

Central banks have severely reduced their ability to face the next financial crisis by overextending short-term crisis-related measures years beyond their usefulness. This new kind of interdependence between financial institutions, central banks and governments is now a permanent situation: a Bermuda Triangle of finance.

The world's six largest central banks, the sextet[29], increased their assets by an extra $10 trillion. For example, the total assets of the US Federal Reserve increased significantly from $869 billion in 2007, to well over $4,464 billion.[30] The absence of fiscal discipline of governments, a series of quantitative easing and a series of incentives for banks to hold sovereign debt rather than corporate bonds or loans, significantly eroded the externality that central

[27] US Federal Reserve data, 'H.8 Assets and Liabilities of Commercial Banks in the United States'. https://www.federalreserve.gov/releases/h8/Current/ (retrieved at September 29, 2016)

[28] This is excluding state and local debt, and other government liabilities following programs like Medicare and Social Security. See monthly US public debt statement: http://www.treasurydirect.gov/govt/reports/pd/mspd/mspd.htm

[29] The sextet is composed of the Federal Reserve of the United States, the European Central Bank, The Bank of England, The Bank of Japan, the Peoples Bank of China and the Reserve Bank of India.

[30] US Federal Reserve, Quarterly Report on Federal Reserve Balance Sheet Developments (August 2016): https://www.federalreserve.gov/monetarypolicy/files/quarterly_balance_sheet_developments_report_201608.pdf

banks provided to the financial system.

It is difficult to see how the next financial crisis might not have an immediate and simultaneous effect on each of the three components, provoking a tourbillon that none of the main components will be able to escape. In today's financial world, there is no mechanism to avoid a seism. There is no balancing act any longer. When one of them will collapse, the whole system will. The safety net is broken by a Bermuda Triangle of banks, central banks and governments.

It would not be fair to blame only the central banks for this situation. All three categories of players are responsible for this disequilibrium. *Governments* have lost financial discipline and found a substitute-government in central banks, given their own inability to solve systemic financial issues. *Central banks* have therefore developed unorthodox policies that make them vulnerable to undue credit risks. *Banks* are loaded with sovereign debt that bears the risk of a deadly snowball effect, while the central banks' ability to come to their rescue is impaired by their increased balance sheets.

Too Complex to Manage: the Unintended Consequences

In 2013, the IMF noted that central banks' untraditional post-crisis policies had slightly improved bank soundness and not harmed liquidity. They, however, warned:

> Policymakers should be alert to the possibility, however, that financial stability risks may be shifting to other parts of the financial system, such as shadow banks, pension funds, and insurance companies. The central bank policy actions also carry the risk that their effects will spill over to other economies.[31]

Policy measures such as low interest rates, QE and regulatory reforms delivered relief after the financial crisis. However, as the IMF Report implies, those drastic measures also amounted to unintended side-effects, domestically or internationally.[32] Whereas

[31] IMF, Global Financial Stability Report (2013), chapter 3. https://www.imf.org/External/Pubs/FT/GFSR/2013/01/pdf/c3.pdf

[32] Andrew Large, 'Financial Stability Governance Today: A Job Half Done. Ongoing

economic recovery and financial stability depend upon a myriad of factors, many unconventional central bank measures were taken too much with a microscopic view of economic processes. The markets are too complex to address isolated mechanics that could render a "fix". Regarding the measures taken by central banks, the question arises: were those spill-over effects of central banks' policy, besides unintended, also unpredictable? The reality is that central banks, while having the best of intentions, were more aware of the risks of unintended consequences. A good example is the low interest rate policy.

Low Interest Rates Expropriate Savings

Post-crisis regulatory reforms, such as the Dodd-Frank regulation in the US, took away a significant amount of dormant risk by increasing the capital buffers and restrictions on risk-taking. However, the unfairness of taxpayers bailing out financial risk-takers continues as low interest rate policies have their winners. By reducing interest rates, central banks favored banks over insurance companies, and banks expropriated retirees of the legitimate revenue of their life savings.[33] The amount of "lost revenues" has been estimated at almost half a trillion.[34] AIG Executive Vice President and Chief Investment Officer Douglas Dachille is "*not sure central banks even realize that keeping interest rates low is having an adverse impact on the wealth effect.*"[35] What they effectively did, is prioritize their good intentions for borrowing banks, corporations and governments over the risks that the "rest" of the economy was bearing.

Even if the low interest rates were a necessary imperfect measure to boost the economy, low interest rates will in the long run

Questions for Policymakers', *G30 Occasional Paper 92* (2015), p. 15. http://group30.org/images/uploads/publications/op92b.pdf

[33] According to SwissRe, US savers have missed a $470 billion in interest rate income, net of lower debt costs. (March 26, 2015) http://www.swissre.com/rethinking/financial_stability/turn_off_the_money_tap.html?mobile=iPad

[34] Ibid.

[35] Arthur Postal, 'Low interest rates are wreaking havoc on savors', *Life Health Pro* (August 17, 2016) http://www.lifehealthpro.com/2016/08/17/aigs-dachille-low-interest-rates-are-wreaking-havo

even be harmful for banks in addition to depositors, insurance companies and investors. Whereas banks rely on a large deposit base, they did not lower the remuneration for customer deposits as much as that they lowered their charge for loans.[36]

Could central banks have refused the additional responsibilities that the executive and legislative branches have bestowed upon them? Did they realize that they were trading their independence for additional competences? Do we have an idea of the consequences of increased central bank interventions?

The unintended side-effects of unconventional central bank policies are the effect of a judgment call that each central bank had to make. However, when making these judgments they focused too much on the objectives of economic recovery and growth – at the expense of their core responsibilities relating to financial stability. Governments and their elected officials, rather than central banks, should be concerned about economic recovery. They operate from a political framework that renders them accountable for their specific social-economic interpretation of how economic recovery should come about. This is all the more relevant in the aftermath of the financial crisis, from which we learned that economic science is often plagued with internal disagreement, unknown unknowns and unforeseen consequences. Central banks and their economic theorists should abstain from taking too many ideologically-driven strategic measures, also relating financial stability.

Dependent Central Banks?

This brings us to the debate about the 'politicalization' [of central banks, that relates to their presumed independence. The desirability of the independence of central banks has generally been widely accepted. The last 10 years, however, have led people to realize that at best it was not an absolute. The rules are unequivocal, as we see in the European treaty:

> When exercising the powers and carrying out the tasks and duties conferred upon them by the Treaties and the

[36] IMF, *Global Financial Stability Report* (2016). https://www.imf.org/external/pubs/ft/gfsr/2016/01/pdf/text.pdf

> Statute of the ESCB and of the ECB, neither the European Central Bank, nor a national central bank, nor any member of their decision-making bodies shall seek or take instructions from Union institutions, bodies, offices or agencies, from any government of a Member State or from any other body. The Union institutions, bodies, offices or agencies and the governments of the Member States undertake to respect this principle and not to seek to influence the members of the decision-making bodies of the European Central Bank or of the national central banks in the performance of their tasks.[37]

This clause of the European Treaty instituting the European Central Bank is tricky in today's circumstances. There is no pan-European fiscal policy, nor a minister of finance – whereas the economic integration is seriously strengthened. The disagreements between ECB President Mario Draghi and German Chancellor Angela Merkel are essentially about the scope of each one's authority. The ECB's activity is strongly affected by other authorities in the EU as well as domestic politics. Take for example the scenarios of the ECB's stress tests to measure how banks would survive severe economic scenarios; the baseline scenario is fixed by the European Commission. [38] And more importantly, they excluded sovereign debt problems – and by doing so were friendly to countries like France and Italy.

In the US, the independence of the US Federal Reserve is upheld by its independence from Congress for its funding, and its freedom to make monetary policy decisions without approval from Congress. Furthermore, the 14-year terms of the Fed's Board of Governors differ from the presidential terms. Nevertheless, the authorities of the Fed are scrutinized for being too immune for oversight, especially from Congress. In January 2016, Senator Rand Paul (Republican) proposed an annual audit of the Fed by the Gov-

[37] Treaty on the Functioning of the European Union, Article 130.

[38] As the European Commission determines the baseline scenario, the European Systemic Risk Board (ESRB) sets the "common adverse scenario". http://www.eba.europa.eu/risk-analysis-and-data/eu-wide-stress-testing

ernment Accountability Office to ensure increasing Congressional oversight. Even though the bill ultimately did not pass, the independence of the Fed remains debatable.[39] Given these frameworks of independence, the first step is to recognize that central banks are not as independent as we tend to assume. During the last ten years, their independence has been watered down by an accumulation of executive responsibilities. The last ten years have undressed that carapace and exposed the fragility of central bank independence at the expense of credibility. Central banks enjoy sovereign privileges as part of the executive branch. Despite their privileges, they are government agencies. They are not elected legislators, but they have significant regulatory powers. They are not judicial, but they can in certain circumstances, with little oversight, break a bank or imbed their squads in the financial institutions they regulate without judicial interference. The question to ask is what central bank independence means in these times – what should it entail?

Are Central Banks the Governments' de facto Financial Executive Branch?

Whereas the appointment of the key officials in central banks is often subject to parliamentary approval, it is the executive branch that proposes the candidates who are more or less vetted by the legislature. Who anoints you, controls you. Markets and the public know that faith of central banks is linked to the government's performance – most notably as the latter decides on fiscal policy. The (post)crisis interventions by central banks inevitably expanded their impact on social-economic issues, involving central bank activities that increasingly overlap with government authorities. As central banks have a significant influence on market sentiment and regulate and supervise major financial institutions, they do so in close collaboration with the governments.

The point is, central banks have never been totally independent. At best, in their fields of competence they enjoy an autonomy that comes from their status, reporting or appointment. As the executive power appoints the central banks' board members, they

[39] Peter Conti-Brown, *The Power and Independence of the Federal Reserve* (2016).

are likely to act more sympathetically towards the ruling political regime.

> The conventional notion of governments' central banks as independent, apolitical bodies – as staid organizations of detached expertise – is contradicted both by their emergence historically and by their conspicuous role in recent economic episodes. Though they may indeed be apolitical in the sense that they are not beholden to any single political party, they are no less impelled by self-aggrandisement or by what would normally be regarded as political considerations.[40]

The independence of central banks is eroding, along with the increase and widened scope of their responsibilities after the financial crisis. The recent pressure of the Japanese government on the Bank of Japan reminds us that the executive or parliamentary branches often make the ultimate decision. *An independent central bank is essential for ensuring stable and sustainable growth in any economy*, said Raghuram Rajan, Governor of the Reserve Bank of India (RBI). Rajan often clashed with his government counterparts on central bank policy – exactly because they righteously had different priorities.[41] Too much political interference in central banking may lead central banks to adopt measures that polish government policies or facilitate a temporal political agenda. Central banks should be aware of daily politics but operate independently from it – to not be drawn into the political arena. That is because their framework of functioning does not guarantee sufficient political accountability. Already in 2009, the BIS has addressed the accountability of central banks:

> *Several issues need to be confronted in the design of accountability arrangements:*
>
> • How can objectives be made sufficiently measurable and precise so that policy success and failure can be at-

[40] David D'Amato, 'Are Central Banks Independent?', *Institute of Economic Affairs*, (August 19, 2016).

[41] 'Independent RBI, a must for growth', *The Hindu* (July 26, 2016). http://www.thehindu.com/business/Economy/independent-rbi-a-must-for-growth/article8902594.ece

> tributed to the relevant decision makers?
>
> • How can central bankers be held accountable to elected representatives for actions taken independently of those representatives?
>
> • Where group decision-making is used to reduce idiosyncratic risk, how can the individuals involved be held to account?
>
> • How much can openness and transparency fill any gaps in accountability to elected representatives by providing accountability to the wider public?
>
> • Should obligations to be transparent be formalised and detailed?[42]

The unrealistic presumption of independence renders central banks not only less accountable, but also less credible, which decreases their effectiveness. It will be important for future cases of downturns that the legal framework of central banks' crisis management is adapted to modern needs, improved with lessons from previous crises. Central banks would need to update their statutes to accommodate for the many new duties. Even though the German Supreme Court in Karlsruhe ruled in favor of the ECB in deciding on the legality of the OMT (Outright Monetary Transactions) stimulus policies of the ECB, the case showed how the ECB's justification of how its unconventional measures are compatible with its mandate remains controversial and not too credible.[43] Similar concerns are raised in the United States.

> What is clear today that may not have been evident years ago is that despite the continuing good faith efforts of our professional and skilled regulatory agencies, failure to reorganize the regulatory structure will contribute to the buildup of systemic risk and make us more vulnerable to the next financial crisis. Given the lessons of

[42] Central Bank Governance Group, 'Issues in the Governance of Central Banks', *Accountability, transparency and oversight, Chapter 7* (May, 2009). http://www.bis.org/publ/othp04_7.pdf

[43] Paul P. Craig & Menelaos Markakis, 'Gauweiler and the Legality of Outright Monetary Transactions', *41 European Law Review 1* (2016).

> the last crisis, the toll it continues to take on American households and the economy at large, and the resulting loss of public trust and confidence in our regulatory system and once-venerated financial institutions, this is a result we can ill afford.[44]

In times of crisis, central banks are often the only financial authority that can intervene to avoid the collapse of the financial system, and sometimes the economy. Since the financial crisis, governments as well as central banks have insufficiently questioned the legitimacy and long-term consequences of central banks' crisis-related policies. Today, almost a decade after the US sub-prime mortgage crisis began and many new mandates were given to central banks, the question of central bank governance has become critical.

From Independence to Autonomy

The questioning of central banks' authority is nothing new. Historical accounts of the creation of the US Federal Reserve amply demonstrate the difficulties of establishing a central bank as a federal institution in the United States.[45]

Public criticism on policy is inherent in a well-functioning democracy. However, today's credibility deficit of many central banks is a problem that relates to their controversial power base and unconventional measures. Trust and legitimacy go together: this essentially contributes to the effectiveness of their policies and, in the long run, financial stability, the core objective of current central banks. The first step is to admit this trust issue, and recognize that something needs to be done to ensure that we better understand and support the role of some of the most critical institutions in the world.

Central banks have not been created to generate political support for the ruling government. Paradoxically, with their wide

[44] Volcker Alliance, *Reshaping The Financial Regulatory System Long delayed, Now Crucial* (2015). https://www.volckeralliance.org/sites/default/files/Reshaping%20the%20Financial%20Regulatory%20System%20-%20The%20Volcker%20Alliance.pdf

[45] Roger Lowenstein, *America's Bank. The Epic Struggle to Create the Federal Reserve* (2016).

range of responsibilities, they need a strong political backing to complement their painful decisions for the sake of the domestic economy. The recently extended scope of responsibilities of central banks was a failure of politics. As shown during the financial crisis, central banks are the only institutions who can mobilize the resources to rescue a bank or face a liquidity crisis or credit crunch.

Given these challenges, the notion that central banks are independent should be replaced by *functional autonomies* in specific policy areas. It should allow central banks to take key decisions (e.g., on interest rate policies, lender of last resort or open market policy) in line with structural and transparent economic objectives – but without the unrealistic assumption that their decision-making is "independent".

The difference between independence and autonomy is not only semantic. *Independence* implies that central banks do not depend on politics. As such, it is impossible to defend. Central banks, even in their core responsibilities, do not act in isolation and operate within the scope of democratically construed government policies and legislation. *Autonomy,* in Greek, is the ability to fix one's own rules. It is the positive application of the ability of people and institutions to master their destinies. Autonomy is not generic, but applies to specific actions and rulemaking. A perfect example is the ability of central banks to fix short-term interest rates, a core monetary policy instrument. It is part of their autonomy and core competency. We must strive for autonomous central banks that focus on key issues following a limited, narrowly defined agenda.

> The Federal Reserve, as the nation's central bank, must retain primary responsibility for—and have the tools to enhance—financial stability. However, regulatory authority must not become overly concentrated or centralized in a single agency, not only because such responsibility would be too large for any one agency to undertake effectively, but also because it would fail to provide adequate checks and balances.[46]

[46] Volcker Alliance, *Reshaping The Financial Regulatory System Long delayed, Now*

The 2015 report of the Volker Alliance stresses the importance of power balances among the several financial services authorities, and therefore argues for separating the regulatory responsibilities from the actual supervision of individual institutions. Andrew Large explains how this makes sense, where "*the skill sets needed to understand growth dynamics are very different from the forensic attention to vulnerability mitigation needed to prevent busts*".[47] Rebalancing these responsibilities can be a way to avoid what might be an incestuous relationship.

Today, the multiplication of their non-core obligations and responsibilities threatens their mere existence, by challenging their credibility, accountability and ability to manage conflicts of interests. By doing so, they assume an undemocratic power base that is unsustainable. Shifting our perception of the relationship between central banks and governments – *autonomous but mutually dependent* – would help in the restoration of public trust in central banks.

Regaining Trust: are Central Banks Too Close to Banks to Regulate Them?

Compounding the problem of political independence and autonomy is the close relationship between banks and central banks, and the resulting damaging impact on central banks' credibility. Banks depend on the facilities that central banks accommodate. Especially in recent years, the stability of banks heavily depends on central banks. As a result of new regulation, central banks literally rule the banks as they supervise them. As lenders of last resort, they provide this critical ingredient to banking: liquidity. As money supply managers, central banks decrease the banks' capital burdens by buying sovereign debt from banks. That is because banks are the main trading counterparties of open market transactions and quantitative easing executed by central banks.

Crucial (2015). https://www.volckeralliance.org/sites/default/files/Reshaping%20the%20Financial%20Regulatory%20System%20-%20The%20Volcker%20Alliance.pdf

[47] Andrew Large, 'Financial Stability Governance Today: A Job Half Done. Ongoing Questions for Policymakers', *G30 Occasional Paper 92* (2015), p. 33. http://group30.org/images/uploads/publications/op92b.pdf

Banks have access to central banks' balance sheets through different types of deposits. As regulators, central banks often (co-) regulate and supervise banks. Central banks scrutinize banks through stress tests or – for the largest financial institutions – their characterization of a systemically important financial institution ("SIFI"). Such SIFI designation may require banks to transform their activities or even their business model.

An example of a nest of interests in the central banks' relationship with banks is the scandal surrounding the treatment of Carmen Segarra. It involved the Federal Reserve of New York, which has been the subject of a damning report from Professor David Beam of Columbia University about how the closeness of central banks to banks impairs their supervisory duties[48] As a result, central banks decide to recruit more experienced inspectors. One of them is Carmen Segarra. What she discovered in her role as inspector of Goldman Sachs is what she considered to be serious irregularities in the handling of that supervision. Her superiors were in denial and Goldman Sachs allegedly intervened at the highest echelons of the Federal Reserve. Frustrated, she taped 46 hours of meetings evidencing that "closeness" between the bank and the Fed. After that, she was fired for disclosure of confidential information and went to court where the tapes were refused as evidence. Michael Lewis describes the circumstances of the firing of Ms. Segarra:

> An incident forced the Fed to ask Goldman to see its conflict of interest policy. It turned out that Goldman had no conflict of interest policy – but when Segarra insisted on saying as much in her report, her bosses tried to get her to change her report. Under pressure, she finally agreed to change the language in her report, but she couldn't resist telling her boss that she wouldn't be changing her mind. Shortly after that encounter, she was fired.[49]

[48] Jake Bernstein, 'Inside the New York Fed: Secret Recordings and a Culture Clash', *Pro publica* (September 26, 2014). https://www.propublica.org/article/carmen-segarras-secret-recordings-from-inside-new-york-fed

[49] Michael Lewis**,** 'The Secret Goldman Tapes', *Bloomberg View* (September 26, 2014). https://www.bloomberg.com/view/articles/2014-09-26/the-secret-goldman-sachs-tapes

There is nothing that infuriates central banks, regulators and other agencies more than the accusation of conflicts of interests. But even with their good intentions, how could they not have conflicted interests, given the wide scope of responsibilities that central banks exercise?

Additionally, the "revolving doors" confirm this interdependency: bankers become central bankers, after which they return to banking for higher compensation and seniority. Today, the New York Fed, the ECB and the Bank of England are governed by former bank employees coming from a limited set of banks. That is not to mention the recent hiring of the former head of the European Commission, Mr. Barroso.[50] Bank regulators also know that their knowledge and experience are highly valued in the job market and might consider, one day, going into banking. The risk is that regulators anticipate this career move, making them less intrusive or obstructive to banks' interests at the expense of financial stability. It is important that central banks recognize the risk behind such conflicts of interest and the limits of their effective control – recent history teaches us.

> Government oversight just hadn't kept up with the fast-growing and fast-changing frontiers of finance, from the exotic innovations in mortgage markets to the explosion of complex derivatives. The financial cops weren't authorized to control the system's worst neighborhoods, and they weren't aggressive enough about using the authority they had. While we clearly needed better safeguards against systemic risk in these new frontiers outside the traditional banking system, we also needed to make sure individual Americans were not left vulnerable to predation and abuse there.[51]

Focusing on central banks, are they independent enough to fulfill their regulatory responsibilities without bias?

---

[50] Laura Noonan, 'Goldman Sachs hires former EU chief José Manuel Barroso', *Financial Times* (July 8, 2016). https://www.ft.com/content/9d29a55c-44f1-11e6-b22f-79eb4891c97d

[51] Timothy F. Geithner, *Stress Test: Reflections on Financial Crises* (2014).

Central Banking Going Forward

As core institutions for financial stability, central banks have raised structural questions in many parts of the world. Answering to specific needs, they have also taken diverse directions in various countries, making the central banking model more fragmented than it used to be.

Are central banks becoming development banks, bankers' partners, liquidity providers, currency leaders or, as they traditionally were, the guardians of conservative monetary policies and inflation? As we look at the increasingly complex roles played by central banks, the question of the sustainability of these crucial institutions is becoming pivotal.

The possibility of conflicts of interests cannot be ignored as the supervisory function of central banks is intensifying. Difficulties on one side of the triangular dependency between banks, central banks and governments drags another side in the same financial instability.

Here are some scenarios of what the next crisis could look like.

If the major banks experience a serious downturn, they will sell their government bonds. This leads to an increase of interest rates of those bonds, higher costs for new government finance and a growing budget deficit. That mechanism affects central banks who hold government bonds, also indirectly as banks in crisis will call upon central banks to lend them against fragile collateral. We have seen this happening in Greece.

If central banks face a liquidity or credit crisis, they will need to sell government bonds, but will also experience difficulty lending to banks and likely will see many other central banks withdrawing their deposits or bonds. We have seen it when the Chinese central banks sold US Treasuries to provide liquidity to a market in crisis. This penalizes banks and governments.

If a sovereign debt crisis explodes (and there are enough reasons to consider this scenario for the future), banks face losses on their portfolios of sovereign debts. Those losses reduce the amount of equity held by banks and therefore create concerns of bank collapse. This puts pressure on central banks, which have started to engage in activities that bind them to the creditworthiness of banks and governments. By these activities, mostly through quantitative easing, they fundamentally changed their roles from liquidity providers to creditors. They are currently caught in many conflicts of interest as they facilitate the over-indebtedness of their countries. Such events were particularly dramatic in Greece, and to a lesser extent Ireland, Spain and Portugal.

These are only schematic consequences. The interconnection of market participants and authorities creates a risk of contagion, allowing a domino effect of negative impacts. The increased size of banks, the explosion of the balance sheet of the world's main central banks and the ever cumulating indebtedness of governments are underestimated. In fact, these circumstances can lead to a global crisis where the traditional monetary policy safeguards – mostly coming from central banks – will be unavailable. The vulnerability of central banks, given their significance for financial stability, is a serious hazard for many of the world's economies. The BIS proclaims that "*depending on central banks is unrealistic and dangerous.*"[52] In the words of Mohamed El-Erian:

> While there is a bit more that some central banks might do, this pales in significance given the challenges. Central Banks –and all of us- need governments to step up to the plate with a comprehensive policy response.[53]

Are central banks in a position to face this challenge? There is reasonable doubt on this. Unless they drastically reduce their balance sheets and reset interest rates at a realistic level, they might be a contributing factor of the next crisis, having spent most of their ammunition during the past decade to no avail.

Central banks have to assume the fragility that some of them have created by leveraging themselves to an extreme level, leading

---

[52] Claudio Borio, on-the-record remarks at the BIS Quarterly Review, media briefing (September 11, 2015). http://www.bis.org/publ/qtrpdf/r_qt1509_ontherecord.htm

[53] Mohamed El-Erian, *The Only Game in Town: Central Banks, Instability, and Avoiding the Next Collapse* (2016), p 255.

to questions of creditworthiness. Do they really believe that the public is not entitled to assess their ability to protect the financial system against another crisis after the deplorable performance in their ability to predict the last storms?

A New Governance Model for Central Banks

When the next storm will hit them, which is likely to be imminent, they will be held accountable for sacrificing their monetary policy to other considerations, and for reducing their ability to stop the Bermuda triangle tourbillon. It is time to question what were the forces that have led central banks to systematically favor corporations, banks and governments to the detriment of investors, retirees and insurance companies. The ethical question cannot be avoided if they want to regain trust, which is a necessary ingredient for central banks to be effective.

Restoring trust in central banks and ensuring that they exercise their duties with integrity requires, at the minimum, a revision of their governance. I am not talking here about the many central banking committees on financial stability that exist around the world. Rather, central banks need to redefine their decision process within the framework of the triangle next to governments and banks. Within this paper, some critical questions were addressed:

- Can central banks follow a monetary policy that does not remunerate financial risks and allows borrowers, especially sovereign borrowers, to access funding at subsidized rates while savers are expropriated of a legitimate revenue? They cannot and should not ignore the impact of those policies on the investors.
- Can central banks continue to massively fund government deficits by going beyond their open market policy function, becoming the largest source of funding for over-indebted governments around the Western world? These holdings could lead to substantial losses, while governments continue to borrow and fail to reform.
- Can central banks continue to favor banks by fund-

ing them and, as creditors, end up being responsible for credit risks associated with collaterals that are either illiquid or of low quality, or both? Central banks must accept that they are subject to the same standards of creditworthiness as commercial banks and manage their credit risks in a professional way and build a true risk management capability that they impose on other financial institutions.

• Can central banks pile up $10 trillion of assets and overextend their balance sheets to a level where it deprives them from the necessary means to intervene in future crises and maybe transform them into systemic crises? The refusal by central bankers to even admit that this is an issue proves that there is insufficient asset and liability management while indebtednesses have started to increase above one fifth of their countries' GDP.

• Can central banks independently supervise banks that they fund and borrow from, without running a structural conflict of interest between those two types of duties? An independent agency should be in charge of the supervision of individual institutions, combining their capital market and lending arms.

• Can central banks remain opaque in the language they use and the content of the information they divulge in a secretive centralbancology? Central banks, as part of the public sector, are accountable to the public at large.

• Do central banks believe that their "economic stimulus" is effective when facing a world where interest rates are no longer at a level where they represent such a stimulus? They need to limit that capacity to specific actions, without flooding the world with liquidities that become ineffective and useless.

The Bermuda triangle is now firmly interconnected and the externality that central banks were providing in crises is no longer real. Central banks should address the distributive unintended consequences of their policies, which might become a cause of a systemic crisis when interest rates increase. Before that happens, central banks, listening to the ongoing public debate, should redefine their role in the new economy.

It is the combination of these issues that impairs the resilience and effectiveness of central banks when facing the next financial crisis, which would have global systemic consequences. In general, we should prevent central banks from being the depositaries of overwhelmingly diverse and sometimes contradictory responsibilities. We should create new governance and transparency models within the triangle of the government, banks and central banks – required for the restoration of trust as a foundation of our economies.

Let's leave the last word to former ECB President, Jean-Claude Trichet. At a radio interview on October 2, 2016, I asked him what he thought of the ability of central banks to cope with the next crisis:

> It is difficult to see how central banks will exit from this accumulation of assets. They cannot solve the problems by themselves. Governments, Parliaments, private sector and social partners must act. We [central banks] cannot be the only ones to work. If one does not take the necessary measures, the next crisis will be even more dramatic than before. This message is sent by Janet Yellen, Mario Draghi and the Governor Kuroda of the Bank of Japan. Central Banks have no magic wand.[54]

***Georges Ugeux** is the founder of Galileo Global Advisors LLC, created to offer CEOs, Boards of Directors and governments independent advice on international strategy, acquisitions and capital raising. Galileo specializes in cross-border transactions to and from emerging markets. Prior to founding Galileo, Ugeux was Group Executive Vice President, International & Research at the New York*

[54] https://www.franceinter.fr/emissions/questions-politiques/questions-politiques-02-octobre-2016

Stock Exchange, where he built and managed the Exchange's International Group. He is a Lecturer in Law at Columbia Law School where he teaches international financial regulation and central banking. www.georgesugeux.com

Acknowledgments – My thanks to Isabel Verkes who has been extremely helpful in structuring and researching this article. I would like to recognize the input of my colleagues Vicky Liao and Christopher McIlwaine.

References

Authers, J.
2016 Central banks are not the enemy. *Financial Times*. (July 28) Retrieved from https://www.ft.com/content/fa7746f6-5379-11e6-9664-e0bdc13c3bef

Bank for International Settlements
2015 *85th Annual Report.* Retrieved from http://www.bis.org/publ/arpdf/ar2015e.pdf

Bank for International Settlements
2016 *86th Annual Report.* Retrieved from http://www.bis.org/publ/arpdf/ar2016e.pdf

Bernstein, J.
2014 Inside the New York Fed: Secret Recordings and a Culture Clash. *ProPublica*. (September 24). Retrieved from https://www.propublica.org/article/carmen-segarras-secret-recordings-from-inside-new-york-fed

Bland, B., & Noble, J.
2015 China cuts rates and pumps in liquidity. *Financial Times*. (August 25). Retrieved from http://www.ft.com/intl/cms/s/0/8501c04e-4af7-11e5-b558-8a9722977189.html#axzz49KFIs6xl

Caruana, J.
2011 Why central bank balance sheets matter. *BIS Papers, 66*. (December). Retrieved from http://www.bis.org/publ/bppdf/bispap66b.pdf

Central Bank Governance Group.
2009 *'Issues in the Governance of Central Banks', Accountability, transparency and oversight, Chapter 7*. BIS. Retrieved from http://www.bis.org/publ/othp04.pdf

Central banks' power. The grey man's burden.

2012 *The Economist*. (December 1). Retrieved from http://www.economist.com/news/leaders/21567359-politicians-need-set-clearer-goals-central-banksthen-leave-them-alone-grey-mans-burden

Conti-Brown, P.

2016 *The Power and Independence of the Federal Reserve.* Princeton and Oxford: Princeton University Press.

Craig, P. P., & Markakis, M.

2016 'Gauweiler and the Legality of Outright Monetary Transactions. *41 European Law Review 1*.

Eichengreen, B., El-Erian, M., & Fraga, A.

2011 *Rethinking Central Banking, Committee on International Economic Policy and Reform.* Brookings Institute. Retrieved from Rethinking Central Banking Committee on International Economic Policy and Reform', Brookings Institute (September 2011). http://bruegel.org/wp-content/uploads/imported/publications/Rethinking_Central_Banking_web.pdf

El-Erian, M.

2016 *The Only Game in Town: Central Banks, Instability, and Avoiding the Next Collapse.* Random House.

Farrell, M.

2013 Volcker: Central banks are too aggressive. *CNN Money*. (April 8). Retrieved from http://money.cnn.com/2013/04/08/news/economy/volcker-central-banks/

Fawley, B. W., & Neely, C. J.

2013 Four Stories of Quantitative Easing. *Federal Reserve Bank of St. Louis Review, 95*(1), (January/February). pp. 51-88. Retrieved from https://research.stlouisfed.org/publications/review/13/01/Fawley.pdf

Federal Reserve of Chicago.

(n.d.) Retrieved from https://www.chicagofed.org/publications/speeches/our-dual-mandate

Filardo, A., Mohanty, M., & Moreno, R.

2012 Central bank and government debt management: issues for monetary policy. *BIS Papers*. Retrieved from https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwiv8pHCw8nOAhXClR4KHSksAoQQFggcMAA&url=http%3A%2F%2Fwww.bis.org%2Fpubl%2Fbppdf%2Fbispap67d_rh.pdf&usg=AFQjCNG23uI0UINzSNS5ZrNzQL-t-2dp5Q

Financial Times Lexicon.
(n.d.) Retrieved from http://lexicon.ft.com/

G30
2015 *Crisis, Fundamentals Of Central Banking: Lessons From The Crisis.* Retrieved from http://group30.org/images/uploads/publications/G30_FundamentalsCentralBanking.pdf

Geithner, T. F.
2014 *Stress Test: Reflections on Financial Crises.* New York: Crown Publishers.

Independent RBI, a must for growth.
2016 *The Hindu*. (July 26). Retrieved from http://www.thehindu.com/business/Economy/independent-rbi-a-must-for-growth/article8902594.ece

International Monetary Fund.
2013 *Global Financial Stability Report.* Retrieved from https://www.imf.org/External/Pubs/FT/GFSR/2013/01/pdf/c3.pdf

International Monetary Fund.
2016 *Global Financial Stability Report*. Retrieved from https://www.imf.org/external/pubs/ft/gfsr/2016/01/pdf/text.pdf

Large, A.
2015 Financial Stability Governance Today: A Job Half Done. Ongoing Questions for Policymakers. *G30 Occasional Paper*. Retrieved from http://group30.org/images/uploads/publications/op92b.pdf

Lewis, M.
2014 The Secret Goldman Tapes. *BloombergView*. (September 26). Retrieved from https://www.bloomberg.com/view/articles/2014-09-26/the-secret-goldman-sachs-tapes

Lewis, R., & Harding, L.
2015 The third arrow of Abenomics: a scorecard. *Financial Times*. (September 15). Retrieved from http://www.ft.com/intl/cms/s/0/ee40a73c-521d-11e5-8642-453585f2cfcd.html#axzz4BP038AwU

Lowenstein, R.
2015 *America's Bank. The Epic Struggle to Create the Federal Reserve*. New York: Penguin Press.

Otsuka, S.
2016 The Bank of Japan and Abenomics: The struggle has just begun. *Brookings Institute*. (March). Retrieve from http://www.brookings.edu/blogs/up-front/posts/2016/03/10-bank-of-japan-abenomics-otsuka

Santis, R. A.
2012 The Euro Area Sovereign Debt Crisis Safe Haven, Credit Rating Agencies and the Spread Fever from Greece, Ireland and Portugal. *Working Paper Series, European Centr Bank*. (February). Retrieved from https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1419.pdf

Schwartz, N. D.
2016 Janet Yellen Hints That Fed May Hold Back on Raising Interest Rates. *The New York Times*. (June 21). Retrieved from http://www.nytimes.com/2016/06/22/business/economy/janet-yellen-federal-reserve-interest-rates-senate-testimony.html?_r=0

The Great Fall of China.
2015 Fear about China's economy can be overdone. But investors are right to be nervous. *The Economist*. (August 29). Retrieved from', *The Economist* (August 29, 2015). http://www.economist.com/news/leaders/21662544-fear-about-chinas-economy-can-be-overdone-investors-are-right-be-

Ugeux, G.
2015 The dogmatism of the ECB expropriates savings and investors. *Huffington Post*. (October 30). Retrieved from http://www.huffingtonpost.com/georges-ugeux/the-dogmatism-of-the-euro_b_8431776.html

Volcker, P.
2013 *Central banking at a cross road.* (May 29). Retrieved from Speech at the Economic Club of New York: https://c.ymcdn.com/sites/www.econclubny.org/resource/resmgr/Events/2013VolckerTranscript.pdf