



# Post-crisis central bank unconventional policies and financialised transmission channels

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### Abstract

The ECB started €1 trillion worth of massive large scale asset purchase programme (LSAP), known popularly as quantitative easing (QE), when the evidence from the US where LSAP and other unconventional monetary policies have been in operation for the last seven years, shows that the transmission mechanisms have not worked as expected and private investments have not returned to the pre-crisis levels. Unemployment targets have been achieved but there are serious doubts about the quality of jobs created and the accuracy of the measuring the health of labour market-labour participation rate has declined and productivity has not improved. In a financialised economy firms seek shareholder value creation and have used low cost of borrowing in the U.S. to do share buybacks and tend to use high share prices to do acquisitions, neither activity leading to higher investments that would bring long-term economic growth and job creation. Shareholder value-driven banking firms aim to achieve high return on equity while de-risking their balance sheets which means higher risk weighted credit to real economy is not desirable. This paper will first critically question ECB's hubristic claims on how transmission channels would work under the recently launched LSAP to achieve the goals of higher private investments and job creation. Then in section two financialised firm behaviour will be explained before arguing, by using relevant data and small case studies, that such firm behaviour, both in non-financial and financial sectors, obstructs transmission channels from delivering the desired economic results and financial stability. The third section will conclude by underlining why academic and policy debates on unconventional central bank policies need to address financialised firm behaviour.

**Keywords:** central banking; unconventional monetary policy; quantitative easing; European Central Bank; financialisation; shareholder value

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“Mr Draghi was asked about a comment posted on Twitter Thursday by Pope Francis. ‘My thoughts turn to all who are unemployed, often as a result of a self-centred mindset bent on profit at any cost,’ the pope said. ‘We are – we use the word frustrated – yes certainly,’ Mr Draghi responded, before justifying the focus on markets. ‘Financial markets are the only, the necessary channel through which monetary policy is transmitted.’”

(Financial Times May 2, 2013)

“Since 2008 ‘You can’t trust the markets’ has become the dominant philosophy. Central banks worried that, if they did not take action, bond yields would rise too fast, reducing the incentive for companies and consumers to borrow, and thus harming the economy. Furthermore, to the extent that lower bond yields boosted equities, that was good for consumer confidence; if QE pushed down the currency, that was good for exporters. However, market support, once given, is hard to take away. When the Fed hinted at a slowdown in its asset purchases in 2013, bond yields rose sharply—an episode known as the “taper tantrum”. Even now, with unemployment having fallen dramatically and both the American and British economies growing at a 2-3% annual rate, neither the Fed nor the Bank of England has sold off any of the assets they acquired under their QE programmes. With overall debt levels in developed economies still high, a big rise in borrowing costs would be a nasty shock to debtors. So central banks have emphasised that any tightening in monetary policy would be slow and steady, and that the “normal” level for rates may well be below those prevailing before 2007.” (The Economist September 5th 2015)

## **I. Theoretical framing of unconventional monetary policies and ECB’s unjustified trust in transmission channels**

The President of European Central Bank Mario Draghi’s trust in financial markets, expressed in response to the critical views of Pope Francis on markets, as non-problematic conduits for monetary policy to deliver the economic desirables sounds hollow at a time when the ideologically market friendly but policy wise pragmatic The Economist confidently declares markets as economically inefficient and untrustworthy since 2008 and sees central banks as solution to market failure. Two years after defending the markets against the Pope, Draghi himself ended up questioning the wisdom of markets in November 2015 when markets reacted differently than he expected to his major sequel to the quantitative easing policy he had introduced at the beginning of 2015 to fight the deflationary tendencies in the Eurozone. Draghi had to acknowledge the problematic nature of financial markets by announcing that “It [policy] was not meant to address market expectations, it was meant to address our objectives for inflation”. His deputy Vítor Constâncio went even further and declared that “[t]he markets got it wrong in forming their expectations” (Jones and Samson, 2015). While Draghi and Constâncio have critical views on markets’ expectations another member of the ECB’s governing council and the President of De Nederlandsche Bank, Dutch central bank, Klaas Knot expressed his own critical views on the effects of ECB’s quantitative easing (QE) on the markets – he stated that the market discipline under quantitative easing would disappear allowing countries like Italy, France and Belgium to delay fiscal reforms (Robinson, March 12 2015). Knot’s views on the ECB’s QE are supportive of well publicised and long-held views of the President of Bundesbank, Jens Weidman, who described the unconventional policies of central banks as emergency measures as “... a convenient analgesic for prolonging an unsustainable status quo.” (Weidman 2012). Concerns on the destabilising effects of the ECB’s QE were also raised by the private fund managers with long term investment strategies like the Dutch pension funds federation:

“Recent monetary policy decisions by the ECB, such as its Quantitative Easing policy (QE), stress the necessity of a consistent policy framework that favours long term investment in the real economy. Whether the expanded assets purchase programme of the ECB will be successful largely depends on the extent to which present holders of securities issued by euro area governments, agencies, and EU institutions are willing and able to sell those securities and use the proceeds for long term investments that foster the euro area’s real economy. Within a poorly coordinated policy framework, the increased liquidity as a result of QE could simply lead to an increased risk appetite and a search for yield in financial markets. This may easily give rise to a new period of financial instability.” (Pensioen Federatie May 2015 P.14)

This concern about the negative effects of central bank monetary policy on leverage levels in particular and on financial stability in general, of course, is not new in both academic and policy circles and echoes the academic debate between New Keynesians and Post-Keynesians. In 2011, in the wake of the 2007 financial crisis, a group of leading macro-economists, former central bankers and practitioners, who are members of the Committee on International Economic and Policy Reform – a committee that is supported by the Canada-based think tank Centre for International Governance Innovation and the Brookings Institution of the U.S.A.- summed up the key arguments of this policy debate and argued for financial stability objective and macroprudential regulation as central bank policy in their report entitled “Rethinking Central Banking”i (CIEPR, September 2011). In 2010 the Bank for International Settlement dedicated its Ninth Annual Conference on the theme of “The future of central banking under post-crisis mandates” where senior representatives from central banks and academic institutions debated policy priorities of central banks regarding interest rates and financial stability (BIS, January 2011). In many ways this post-crisis problematisation of monetary policy is a continuation of pre-crisis policy debate on whether central banks should control asset prices as well as general price level, i.e. inflation, in the economy and what the causes and dynamics of financial instability are. (See for example Arestis and Sawyer 2004 and 2015, Bernanke 2002, Borio 2011, Brancaccio and Fontana 2013, Cecchetti et al. 2003, Clarida et al 2000, Goodhart 2010, Fontana and Palacio-Vera 2006).

This policy oriented macroeconomic debate about whether central banks should prioritise financial stability or price stability or both at the same time assumes, as Dow (2014) critically comments, that central banks actually can control macroeconomic phenomena. Dow (2014) sees influence by central banks on the economy a more realistic description of central bank capability in executing monetary policy and financial stability. According to Dow in an economy where processes are complex central bank knowledge is uncertain and therefore central banks can only influence the developments in the economy but can not necessarily control them in a way the existing theoretical models of central bank policy and bank regulation assume. The above reported ECB response in November 2015 to market dissatisfaction with the new ECB policy decisions of extending the bond buying programme from September 2016 to March 2017 and reducing the policy rate to minus 0.3 per cent is another reminder to the theoretical policy debates that prioritisation, in this case the inflation target in the Eurozone, is only part of a very complex process. This gap between the choice of priority and the achievement of the goal necessitates a discussion on the way the monetary transmission mechanism works in theory and practice. But the ECB, when explaining its quantitative easing programme early in 2015, before its disagreement with the way markets interpreted its policy announcements in November 2015, made a hubristic sounding claim that it had learned from past policy experimentations and now knows how to achieve its goals and deal with the side effects and spillovers of its large asset purchase programme.

Speaking at the 2015 US Monetary Policy Forum in New York in February, Vice-President of ECB, Vítor Constâncio, stated that “Recent experience shows abundantly that those traditional relationships are not working well in the new realities of the financial system. No technical traditional monetarist channels were operating. They did not work either in other cases. This implies that QE is not about the traditional monetarist channels but about new ones, namely signalling and portfolio rebalancing due to financial frictions (Constâncio, 27 February 2015)”. Vice-President Constâncio then elaborates on these new four channels of transmission through which ECB’s unconventional policies would work to generate inflation and economic growth (Constâncio, 25 August 2015). The first channel is signalling the ECB’s commitment to maintaining an accommodative monetary policy stance that is expected to stimulate aggregate demand. The second channel is direct impact of QE on medium-term inflation expectations by market players. The third channel is lower effective cost of finance and availability of credit to the non-financial private sector. The fourth channel operates through portfolio rebalancing where private investors exchange risky assets with short-term and liquid central bank money that boosts asset prices and improves balance sheets and leverage positions of investors and banks. Consequently profitability and default probabilities improve creating a self-reinforcing positive spiral of credit extension and growth.

ECB is not concerned about the adverse financial stability consequences of its unconventional policies in the Eurozone because it believes that “there are currently no signs of a general situation of asset overvaluation in the euro area” (Constâncio, 25 August 2015). But nevertheless ECB counts financial stability risk as possible outcome of its large asset purchase programme. ECB identifies the negative side effects of its quantitative easing that it identifies as 1) medium-term inflation risk; 2) exit strategy and possible losses on the securities portfolio; 3) financial stability risks; 4) credit risk in banking sector; 5) increased inequality due to wealth effects. ECB is however confident that these five risks are manageable. First, third and fourth risks can be managed by tools -such as interest rate setting and macro-prudential regulation- available to ECB. The costs under the second risk, ECB believes, are counterbalanced by the gains from a stronger economy that would result from the QE programme. Similarly, according to ECB, a stronger economy and lower unemployment would reduce but not eliminate the fifth risk. (Constâncio, 27 February 2015)

ECB’s assessment of the success and risks of its QE programme is far less than comforting for ordinary citizens in the Eurozone and there are not really appropriate democratic channels to scrutinise such statements. Although ECB considers the US QE as success and aims to imitate it, the jury is still out whether the U.S. QE has succeeded or not in spite of the December 2015 rate rise decision and prior tapering of bond purchases. Although the unemployment rate fell to 5% triggering the rate rise, labour participation rate fell sharply since the financial crisis in 2007 and is currently 62.8 per cent, the lowest since 1978 (Balakrishnan et al 2015). Productivity too has suffered after the crisis and has not returned to pre-crisis levels although its causes are various and are not necessarily related to the financial crisis (Fernald, 2014; Hall, 2014). Both low labour participation rate and low productivity in the U.S. fuel the arguments of the proponents of the great stagnation hypothesis. One of the strong supporters of this hypothesis, Lawrence Summers, Harvard economist and the ex-U.S. Treasury secretary, disagrees with the Federal Reserve in interpreting macroeconomic data on unemployment and recently commented publicly, criticising the rate rise, that “the unresolved question is how policy can delay and ultimately contain the next recession” (Summers 2015).

Further scepticism about the success of the Fed’s unconventional policies points to growing inequality during the post-crisis period. In the US the inequality has increased since the crisis. There are various ways of measuring inequality but they all seem to conclude that it deteriorated. A recent study by Pew Research Centre shows that before the financial crisis of 2007 the median wealth of

middle-income families in the U.S. increased from \$95,879 in 1983 to \$161,050 in 2007, a gain of 68%. But the economic downturn after the crisis eliminated that gain almost entirely. By 2010, the median wealth of middle-income families had fallen to about \$98,000, where it still stood in 2013. Upper-income families more than doubled their wealth from 1983 to 2007 as it climbed from \$323,402 to \$729,980. Despite losses during the recession, these families recovered somewhat since 2010 and had a median wealth of \$650,074 in 2013, about double their wealth in 1983 (Pew Research Centre 2015, p.8). The intentional wealth effects created by unconventional policies through portfolio rebalancing tend to play an important role in increasing inequality as ECB itself acknowledges above. McKinsey consultancy estimates that for the U.S. households the total wealth effect in 2012 was about USD 5.6 trillion equivalent to 13 per cent of U.S. households total wealth in that year. But only 3 per cent of this wealth effect is due to owning shares and 40 per cent due to owning fixed income assets. More than 50 per cent, 57 per cent, is due to owning real estate because zero bound interest rates kept real estate prices high (McKinsey Global Institute, November 2013, p. 32). McKinsey also estimates that almost 50 per cent of the wealth effect went to households in the top 10 per cent of the income distribution. Saiki and Frost (2014) found that unconventional monetary policies in Japan caused increased inequality through portfolio channel as higher stock prices benefited the wealthier risky asset holder households. Widening inequality is important because it can be associated with greater financial instability (Skott, 2013; Vandemoortele, 2009; Prasad, 2010). Rajan (2010) and Van Treeck (2013) argued that this association between inequality and financial instability may have been particularly relevant in the debt-driven housing boom in the pre-crisis period in the United States. ECB's assumes rather heroically that such inequalities that arise from the wealth effect under unconventional policies will be reduced, if not totally eliminated, from the positive counterbalancing effects of private investment-led economic growth that will be fuelled by double whammy of zero bound interest rates and higher asset prices. However the evidence from the U.S. and the U.K. shows that low interest rates and higher valuation of expected higher profitability of firms in the stock market do not necessarily lead to increase in private investments. The central banks' economic models that relate unconventional policies to firm investment behaviour have not proven to be realistic. The chief financial officer of Siemens provides a timely reality check to ECB models:

“Siemens executives say the new wind turbine plant had nothing to do with QE or low interest rates. ‘Those [jobs] were not created because interest rates are low,’ Ralf Thomas, Siemens chief financial officer, says. ‘Investments are driven far more by assumptions around growth, potential profit and technological barriers to entry, rather than movements in interest rates... We don't decide to spend more just because interest rates are lower for a couple of years.’ (Bryant and Jones September 7, 2015).

Siemens' chief financial officer's version of economics of investment behaviour confirms the findings of the Bank for International Settlement economists who researched the determinants of private sector investments in G7 countries and found that uncertainty plays bigger role than interest rates for private sector investment decisions:

“Expectations of future economic conditions appear to be more important in driving investment decisions. In most economies, a reduction in uncertainty about future economic conditions has boosted investment, but in Europe uncertainty has seemingly intensified, restraining investment. Overall, the model-based evidence suggests that in most G7 economies, the recovery in investment has been consistent with what would be expected given the evolution of the various determinants of investment. Together, the results suggest that the greatest stimulus to investment would come from increased certainty of strong future economic conditions.” (Banerjee et al 2015 p.76)

Ertürk (2014) too has shown that unconventional policies in the U.K. and the U.S. have failed to bring private investment as percentage of GDP back to the pre-crisis levels and investments are still some 20 per cent less than what they were in 2007. But the stock markets both in the U.K. and the U.S. have recovered and past their pre-crisis levels. In a 2012 speech Bernanke explained the stock market recovery as a consequence of portfolio balancing channel under large scale asset purchases by the Fed and stated that “[t]his effect is potentially important because stock values affect both consumption and investment decisions” (Bernanke 31 August 2012). However high stock values in reality instead led to significant increase in share buybacks and high premium, asset stripping mergers and acquisitions (BIS March 2015, McKinsey&Company December 2015, OECD 2015). The macroeconomic theories and principles that inform the transmission mechanisms in central bank monetary policies seem to be conceptually challenged to model financialised firm behaviour, both financial and non-financial, where managers pursue shareholder value maximisation and value extracting remuneration.

In this section I have argued that the debates on post-crisis central bank unconventional policies that revolve around prioritising price levels versus financial stability do not adequately problematise the distributional and allocative consequences of unconventional policies. Also the theoretical justifications for the way the transmission mechanisms under the ECB’s quantitative easing policies are going to work are critically evaluated to argue that the ECB expectations are not based on a convincing analysis of the US experience and lack a theoretical insight on financialised capitalism. In the next section I will argue by providing evidence in the form of data and small case studies that the transmission channels under unconventional monetary policies are blocked by financialised firm behaviour, both in the financial and non-financial sector, that favours a) mergers and acquisitions and debt financed share buybacks to investments in productive capacity in non-financial sector and b) high return on equity under capital constraints to credit creation in the banking sector. Such financialised firm behaviour have not received due attention in the literature on post-crisis central bank policies.

## **II. Financialised firm behaviour in non-financial and financial sectors blocks transmission channels**

Exhibit 1 below shows that the U.S. share prices reacted quicker and with more enthusiasm than both real GDP and private investments to the Fed’s three quantitative easing programmes between 2008 and 2012. While S&P 500 is about 40 per cent higher than its pre-crisis level. real GDP is only about 7 per cent higher but more worryingly private investments are still some 7 per cent below the pre-crisis level. Seven years of extraordinary monetary policy has given the U.S. a stock market boom but not investment and growth booms. The economic models of central banks that underpin unconventional policies and assume asset prices today reflect current and future economic fundamentals are clearly out of touch with the realities of financialised capitalism where valuations in stock markets are disconnected from economic fundamentals of firms.

\*INSERT EXHIBIT 1 HERE\*

Since the 2007 crisis there has been a growing academic and policy interest in the size of finance in relation to real economy measured by bank balance sheets, derivatives and private debt levels (see Van der Zwan 2014). However another equally important aspect of financialisation that refers to the managerial behaviour of both financial and non-financial firms, I do not think, has received the due policy attention in the studies on central bank unconventional policies. Andrew Haldane (May 2015), the Chief Economist of the Bank of England, who is somehow rare among the regulators in expressing critical views on mainstream economics, discussed the importance of putting the firm

behaviour in the centre of efficient capital allocation in the post-crisis world. Andrew Haldane underlines the malign effects of shareholder value-driven firms on investments based on his empirical work on the macroeconomic consequences of shareholder value-driven firms which shows that private investments suffer from such behaviour (Haldane 2015, p.12).

Shareholder value principle, however, has come under academic scrutiny long before the 2007 crisis in the works of academics who have contributed to the financialisation literature by empirically analysing the relationship between the stock markets and non-financial firms. The financialisation literature covers a cross-disciplinary space in academic research that includes political economy, sociology, management studies, cultural studies and geography (see van der Zwan, 2014). Some researchers like Lazonick and O'Sullivan (2000), Froud et al. (2006) and Stout (2013) focus on firm behaviour in financialised capitalism. Maximization of shareholder value in firms with dispersed ownership is offered as a performative recipe by both mainstream corporate finance books and consultancy firms as a solution to the agency problem in corporations where ownership and control of capital are separated. Froud et al. (2006) discusses the mainstream finance inspired work of consultancy firms that sold to and implemented shareholder value practices in stock market listed corporations. Lazonick and O'Sullivan (2000) explore the historical rise of shareholder value maximization principle as the dominant corporate governance practice in the US corporations where distributing profits to shareholders through high dividends and share buybacks is preferred to retaining profits for long-term investments. Share price is influenced immediately by current cash payments to shareholders. Retaining profits to invest, on the other hand, does not have the same immediate effect on share price. Therefore firms that are expected to invest capital market funds in growth generating projects by central bankers instead prioritise share price that is the key measure of corporate success in stock market-based economies like the US.

As the financialisation literature demonstrates capital markets have largely failed in efficient allocation of capital because corporate governance mechanisms and investor behaviour in capital market-based economies like the US have been mostly dysfunctional almost since the 1990s causing regular stock market bubbles and crashes with significant output and job losses. International Corporate Governance Network (ICGN), which has 600 members in over 50 countries representing institutional investors with global assets under management in excess of US\$26 trillion, itself acknowledged such dysfunctionality of corporate governance mechanisms after the 2008 financial crisis.

“Some commentators have criticised shareholders for failing to hold boards to account. It is true that shareholders sometimes encouraged companies, including investment banks, to ramp up short-term returns through leverage. They were not always as close as they could have been to companies they owned.” (ICGN, 2008).

Soaring asset prices combined with low interest rates and forward guidance instead signal to financialised firms that share prices and hence the shareholder value and managerial pay can be maximised by increasing leverage to do share buybacks and by acquisitions in a bull market guaranteed by central bank forward guidance. Acquisitions involve using the acquiring company's shares which are high not necessarily because the economic fundamentals of the company are strong but because the discount rate used in valuation of the company's future profitability is low. International institutions like BIS (March 2015) and OECD (2015) too, like Haldane (2015) above, have finally caught up with the financialised firm behaviour to explain the failures in transmission mechanisms. OECD confirmed that “stock markets currently reward companies that favour dividends and buybacks and punish those that undertake more investment ... which creates higher hurdle rates for investment in the current uncertain environment.” (2015, p.31)



Firm behaviour in a shareholder value-driven economy leads to share buybacks to increase share price in short-term and also to enrich executives with stock options and other equity-linked incentives. Historically low interest rates under quantitative easing allow stock market listed companies to borrow at very cheap rates in bond markets to buy back their own shares to create “shareholder value”. Exhibit 2 below shows that there has been a significant increase in share buyback activity in the U.S. after 2009 as S&P 500 went sharply upwards fuelled by three consecutive quantitative easing programmes reaching USD 485.39 billion in 2014. As a result of high levels of share buybacks net equity issuance in the U.S. has been negative since 2008. Net equity issuance has always been negative since 2002 in the U.S. but what is significant after 2008 is that quantitative easing meant to encourage firms to raise capital to invest. Instead the U.S. firms have been borrowing in bond markets at low long-term interest rates that quantitative easing has created (see the net bond issuance column in Exhibit 2) to finance share buybacks. Consequently lower equity base arithmetically results in higher return on equity and higher earnings per share, two key performance metrics in financialised capitalism that boost share prices of firms in the stock market. OECD’s own research concluded, based on the data between 2009 and 2014, when quantitative easing has pushed the U.S. stock market up as Exhibit 1 shows that [o]n balance there is a clear investor preference against capital spending companies and in favour of short-termism (OECD 2015, p.46). The CEO of Blackrock, the world’s largest asset manager, joined this chorus of respectable critiques of financialised firm behaviour and publicly expressed his views by writing an open letter in April 2015 to the boards of the S&P 500 companies in the US:

“... corporate leaders have responded with actions that can deliver immediate returns to shareholders, such as buybacks or dividend increases, while under-investing in innovation, skilled workforces or essential capital expenditures necessary to sustain long-term growth.” (Fink 2015).

The President of Dallas Federal Reserve, Richard Fisher, too agrees that financialised firm behaviour is a major obstacle to transmission channels operating as desired. “Currently, much of the monetary base has piled up in the form of excess reserves of banks who have not found willing or able borrowers. Other forms of surplus cash are lying fallow on the balance sheets of businesses or being deployed in buying back shares and increasing dividend payouts so as to buttress company stock prices.” (Fisher 2013, 7)

\*INSERT EXHIBIT 2 HERE\*

Executive pay too is linked to this financial logic and quantitative easing end up helping managers to enrich themselves without necessarily improving the economic fundamentals of the companies they manage. CEO annual compensation fell from USD 18.8 million in 2007 to USD 10.6 million in 2009 after the financial crisis but has recovered since then to reach USD 16.3 million in 2014 (Mishel and Davis, 2015). Such financialised firm and managerial behaviour are problematised in the macroeconomic policy debate by employing concepts that derive from risk and valuation paradigms. For example Borio and Zhu (2012) have drawn attention to the endogenous dynamics and processes in monetary policy by investigating the relationship between monetary policy and risk taking in a liberalised and globalised financial system where the individual incentives at the micro level are not aligned with the central banks’ desirable global outcomes. Central bank unconventional policies cannot change financialised firm behaviour and they are not meant to. But then it means neither monetary policy nor macro prudential measures are the appropriate tools to solve structural problems of financialised capitalism. Institutional economists like Borio and Haldane seem to be aware of this technocratic impossibility. Until another major crisis of capitalism central banks can only temporarily save the dysfunctional economy. Therefore the priorities that the literature on

post-crisis central bank unconventional monetary policies identify, price stability versus financial stability or both, need to be revisited to accommodate financialised firm behaviour.

Shareholder value-driven firms also tend to do high-premium mergers and acquisitions in rising stock markets by using their own inflated valuation as currency to buy usually smaller companies. Such strategies are also encouraged by investment bankers as mergers and acquisitions generate high fee income for them (see for example Froud et al 2006 and Ertürk et al 2008). Global announced mergers and acquisitions deals have exceeded the pre-crisis 2007 level of USD 4.5 trillion and reached almost USD 5 trillion in 2015 (see exhibit 3 below). The share of the North and South America region, where the U.S. is the biggest market, is the highest since 2012 at a value of USD 2.6 trillion.

\*INSERT EXHIBIT 3 HERE\*

Individual mega deals shed more light into the logic of financialised firm behaviour. For example in 2014 the US pharmaceutical company Pfizer made a bid to acquire the UK AstraZeneca which would have been the largest foreign takeover in recent British business history. This bid caused a big controversy in the UK that involved politicians and scientists as well as the usual market players because, Pfizer's bid, which was justified by the Pfizer's management as shareholder value creating use of funds, was seen as a threat to the research and development in pharmaceutical in the UK, which is one of the rare industries that the UK is globally competitive. The opponents to the bid feared that, if successful, Pfizer would reduce investments in R&D at AstraZeneca to pay higher dividends to its shareholders (Plender, May 12 2014). There was also criticism in the US of Pfizer's use of its cash for an acquisition because these critics claimed that Pfizer's pursuit of shareholder value meant Pfizer using the "tax inversion" rules in the US and moving its headquarters to the lower tax jurisdiction of UK by buying AstraZeneca (Sanati, April 29 2014).

In a financialised economy corporations compete in the stock market to deliver shareholder value and banks are no exception to this financialised form of competition, even under state ownership as the case of RBS in the U.K. shows. The principle of shareholder value maximisation is uncritically accepted by the U.K. government who bailed out Royal Bank of Scotland at a record cost to the taxpayer at £46 billion in 2008. The remuneration package of the CEO Stephen Hester for the 80% state-owned bank included £6.4 million worth of long-term incentives that were linked to increase in share price (BBC, 22 June 2009). The U.K. government saw the taxpayers as shareholders in the 80% state-owned RBS and believed that a pre-specified increase in share price was a more justifiable performance target than recouping the total taxpayer's cost of £46 billion spent in bailing out RBS.

In a financialised economy where the hegemonic corporate governance form requires firms seeking maximisation of shareholder value and the remuneration of the managers is linked to the achievement of this objective then return on shareholders' funds becomes the key financial metric to measure firm performance. Consequently return on equity has become a universal metric to measure financial performance in all publicly listed banks. Both academics like Engelen et al. (2011) and regulators like the Bank of England's economist Haldane (2009) agree that high unrealistic return on equity targets in shareholder value-driven banks that compete in stock markets encouraged excessive risk taking by management. Engelen et al.'s (2011) show that in the banking sector there is a consensus rate of 15 per cent return on equity that banks universally aim to achieve. Since the crisis in 2007 banks have difficulty in achieving the pre-crisis return on equity profitability of fifteen percent and above. But the industry still uses return on equity as a shareholder value creating performance metric and a new post-crisis consensus rate of about eleven or twelve percent seems to be emerging (Wilson, September 9, 2012).

There are also other key metrics that are used by bank equity analysts such as fee income and cost ratio to evaluate a bank's financial performance in a financialised economy. Before the 2007 crisis the growth of bank balance sheets and merger and acquisitions to create banking conglomerates were also encouraged by the stock market in creating shareholder value. And the regulators were actively encouraging such stock market-driven creation of large complex financial institutions. RBS, which was the largest corporate failure in the UK in terms of losses suffered, was congratulated by the markets when it bought ABN-Amro because it had finally joined the global league of super-sized banks.

Since management compensation in financialised banks is determined by share price in the stock market where the equity analysts' and activist hedge fund shareholders' opinions on bank strategy are crucially important, actual risk taking behaviour is not likely to be influenced by the regulators' views on risk. Academics like Bebchuk and Spamann (2009) who study corporate governance and optimal executive remuneration contracts draw regulators' attention to this fundamental gap in regulators' thinking about risk in banking:

"Moreover, as long as management's incentives are tied to those of shareholders, management might have an incentive to increase risks beyond what is intended or assumed by the regulators, who might often be one step behind banks' executives. Regulators should attempt to make management incentives work for, rather than against, the goals of banking regulation." (Bebchuk and Spamann 2009, p.5)

As Engelen et al. (2011) have argued bank business models are driven by the objective of maximising share price in the stock market in financialised capitalism. Stock markets tend to demand 15% return on equity from banks. Since the crisis central bank monetary policies aim to fund SMEs and corporations at low interest rates to spur economic growth by providing cheap liquidity and credit to the banking system. However banks are unwilling to lend to SMEs and corporations because such bank assets are subject to higher risk weight under Basel capital rules and hence tend to reduce return on equity. Especially in the UK the government's funding for lending scheme that aimed to improve the credit flow to SMEs, as Macartney (2014) demonstrates, has been spectacularly unsuccessful causing public criticism of new Basel capital rules by the coalition minister for business Vince Cable (Ridley, August 12, 2013).

Financial intermediary behaviour under accommodating central bank monetary policy is of both theoretical and policy interest. As quoted above the ECB vice-president Constâncio stated that the ECB's quantitative easing programme's third channel aims at lowering effective cost of finance and availability of credit to the non-financial private sector. Bernanke too emphasised the key policy objective of restoring credit flow to the economy by making a distinction between Japan's quantitative easing that was driven by size of the liability side of the Bank of Japan's balance sheet and the Fed's conventional and unconventional monetary policies that were driven by both the size and composition of the asset side of Fed's balance sheet (Bernanke January 13, 2009). But the bank regulation after the crisis, especially the new Basel capital adequacy rules that aimed to de-risk and re-capitalise banks counteracts the desired credit creation channels. Exhibit 4 below shows that total assets of all U.S. commercial banks have increased by almost 50 per cent from USD 10.8 trillion in 2007, the year of crisis, to USD 15.6 trillion in 2015. However the asset category that increased most during this period is cash assets that are not related to any kind of productive or risk taking activity in the economy. Commercial and industrial loans of all U.S. commercial banks, the kind of financial intermediary activity that credit easing policies of the Fed aimed to stimulate, have declined relative to cash assets. In fact by 2015 cash assets of all U.S. commercial banks were bigger than all individual asset items except commercial and residential real estate loans. And even in that case the share of

cash assets in total assets has increased from about 3 per cent in August 2007 to over 17 per cent in November 2015 whereas the share of commercial and residential real estate loans has declined over the same period from 33.6 per cent to 24.7 per cent (see exhibit 5).

\*INSERT EXHIBIT 4 HERE\*

\*INSERT EXHIBIT 5 HERE\*

Banks in the U.S. and Europe have almost an impossible objective function of satisfying stock markets, bank regulators and central bank technocrats and politicians all at the same time. Most literature on unconventional monetary policy and financial intermediary behaviour, as I argued above, tend to ignore the stock market's role on shaping the risk and return appetite and motives of banks. The theoretical frameworks that model and anticipate bank behaviour under unconventional policies tend to focus solely on impairment and capital constraints in the banking sector (see for example Bowdler and Radia 2012 and Goodhart 2010). These theoretical frameworks see banks as firms that maximise profits from credit intermediation activities. However there has been a stream of academic work especially since the 2007 crisis that challenges this mainstream view of banks by offering empirically supported more realistic bank behaviour. These works demonstrate that business models in banking aim at fee income from retail banking and trading income from investment banking as much as, if not more than, interest income from risk-taking through credit cycles (see for example Borio and Zhu 2012; Crotty 2011; Dymski 2010; Ertürk and Solari 2007; Engelen et al 2010). It is not unusual to see such statements like in Bank of America's 2000 Annual Report: "[s]hifting the focus from loans to fee-based products and services, leveraging the balance sheet and honing the client base make us more value-added to corporations and institutions – and more profitable." (Bank of America 2000, p. 28). For example one of the key potential solvency risks in the U.K. banking in the post-crisis period arises from incalculable fines that retail banks have to pay to their customers for mis-selling insurance products. After the banking crisis of 2007, between 2009-2014 the U.K. retail banks collectively have paid £17 billion to their customers in redress because they mis-sold payment protection insurance (PPI). PPI is an insurance product that enables consumers to insure repayment of loans if the borrower dies, becomes ill or disabled, loses a job, or faces other circumstances that may prevent them from earning income to service the debt. The U.K. retail banks sold such products to customers who were not qualified and/or who were not properly informed about the product. Morgan Stanley estimates that the total cost to the U.K. banks can reach £27 billion by the end of 2016 (The Economist, February 7, 2015). This amount is larger than the £24 billion loss that RBS suffered in 2008 which was then the largest loss in UK corporate history.

Mis-selling costs weaken the capital base of the U.K. banks because both actual costs and provisions against probable future claims by customers reduce retained earnings and hence the equity. Therefore the post-crisis regulatory measures to re-capitalise the U.K. banking system to make it more resilient against economic shocks and possible deteriorating economic conditions in the future are hampered by high and incalculable costs of mis-selling. This practice, in turn, is a consequence of shareholder value-driven business models where high fee income has to be generated to meet the stock market's demands for high return on equity. Lloyds Banking Group suffered most financially in mis-selling PPI by providing £9.8 billion between 2011 and 2015, and the bank is unable to estimate accurately the total cost of mis-selling (Lloyds Banking Group, 2014). Such high cost of mis-selling weakens Lloyds Banking Group's capital base and the bank was one of the three banks in the U.K. out of a total of eight banks that could not pass the Bank of England's 2014 stress test (Bank of England December 2014, p.7).

Mis-selling is a result of banks' goal to increase fee income that stock markets demand for higher share price performance. Fee income generating activities of banks usually are not risk weighted under Basel capital adequacy rules and therefore do not require risk capital to back them. Fee income increases return on equity as the numerator can increase without a corresponding increase in the denominator. Also fee income tends to be non-cyclical unlike trading and interest income. Financial Conduct Authority's investigations into mis-selling at Lloyds TSB and Bank of Scotland between 2010 and 2012 found that when the customer demand for investment products fell after the crisis these banks adjusted their business models to sell more insurance products. At Lloyds TSB, during that period, sales of cyclical investment products decreased by 54% but sales of protection products increased by 65% (Financial Conduct Authority 10 December 2013, p.6). Mis-selling happened both before and after the crisis. Between January 2010 and March 2012 Lloyds Banking Group (Lloyds TSB, Halifax and Bank of Scotland) mis-sold over one million products to nearly 700,000 customers (Financial Conduct Authority 10 December 2013, p.3). None of the post-crisis macro-prudential measures have explicitly addressed the risks in sales-driven retail banking. The U.S. Consumer Financial Protection Bureau and the U.K. Financial Conduct Authority were established after the crisis to protect consumers through minimising informational asymmetries, promoting transparency in pricing and aiming to punish misbehaving financial intermediaries. However the risks to the financial systems that arise from sales driven business models in retail banking are not adequately addressed.

### III. Conclusion

ECB's large scale asset purchase programme, as discussed at the beginning of this paper, is based on the assumption that four distinct transmission channels will operate mainly through signalling, monetary flows and asset prices to deliver growth and jobs in the Eurozone. This assumption was held by other central banks too that have already implemented quantitative easing policies (see for example Joyce et al 2011). However comprehensive evidence supporting such transition mechanisms does not exist. Although mainstream academics tend to agree that quantitative easing reduced yields on government bonds (Li and Wei 2012) and may have lowered the unemployment rate in the U.S. (Chung et al 2011) there remains a significant amount of scepticism about both the measurement and evidence of the effectiveness of transmission mechanisms. At a conference that the Bank of England organised to evaluate the effectiveness of unconventional monetary policies and quantitative easing the conclusions drew attention to uncertainties in outcome and shortcomings of theoretical models "(BoE Quarterly Review, Q1 2012). Unconventional central bank policies pose, even for central banking community itself, more questions than answers. ECB, however, believes that it has the necessary tools to avoid the associated financial stability problems and that distributive consequences are not going to be severe and are ultimately justifiable because all will be lifted up by the rise. ECB also informs the citizens of the Eurozone that it has learned the lessons from the previous large scale asset purchase experimentation.

In this paper I critiqued the ECB's views on large scale asset purchases and argued, by providing data and small case studies, that the transmission channels in the U.S. case have not been successful in allocative outcomes. Increased asset prices facilitated primarily bond financed share buybacks and high premium merger and acquisitions rather than capital investments by firms for long term growth. Share buybacks tend to benefit the managers with stock options and short-termist activist shareholders. The wealth effect of higher share prices is positive for share owning households and consequently for aggregate demand. But as reported above only 47 per cent of wealth effect in the U.S. is estimated to come from financial markets and the remaining 53 per cent comes from real

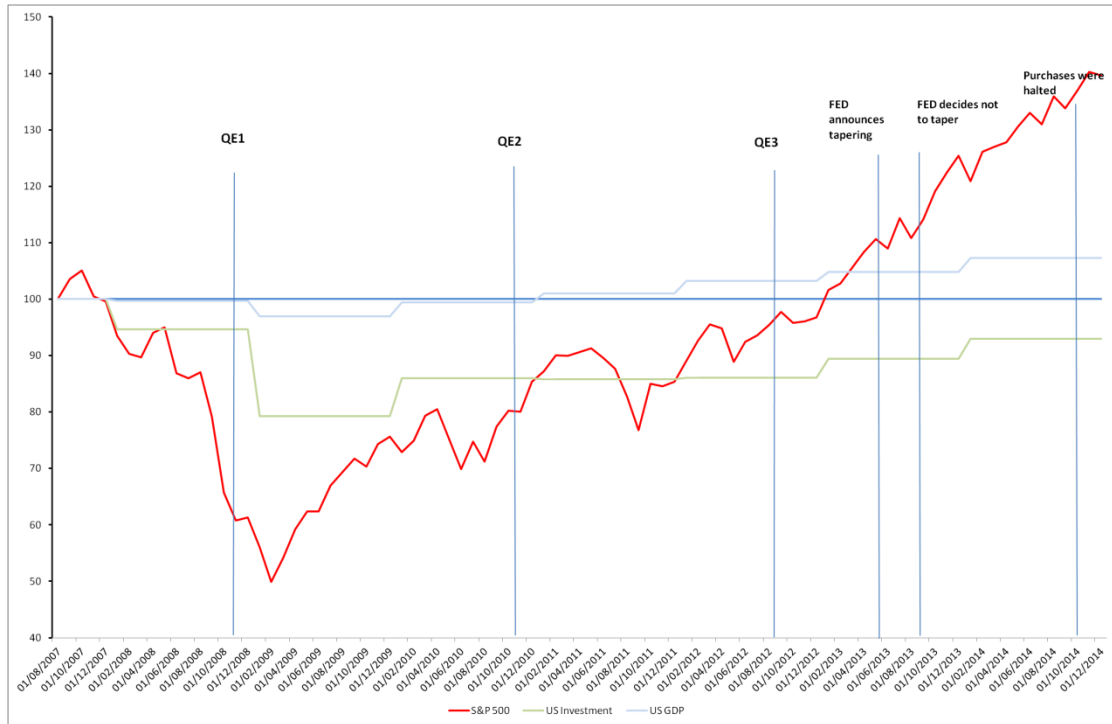


estate prices. Mergers and acquisitions, too, do not tend to generate new investments in productive capacity or create jobs. They tend to produce the opposite effect in both instances. However both mergers and acquisitions and share buybacks are ideologically justified in financialised capitalism because they create artificial and short-term share price increases that managerial pay is linked to. Such financialised behaviour that is justified with recourse to the neoliberal shareholder value creation rhetoric is also valid for financial intermediaries and tends to legitimise socially useless risk-taking activities in banks because stock markets demand them. Search for high yield in financialised capitalism naturalises unrealistic promises of financial return that are disconnected from the economic fundamentals both in core capitalist economies and emerging economies. As such systemic dislocations in financial markets are not necessarily linked to credit cycles and collateral values (see for example Feroli et al 2014) but can appear in other operations of shareholder value-driven financial firms like selling mundane retail products of insurance and asset management. Therefore the theoretical frameworks that shape academic and policy debates on monetary policy by problematising central bank priorities as price stability versus financial stability tend to ignore the allocative, distributive and stability consequences of shareholder value-driven financial firms. There has been now a growing number of academic work on financialised non-financial and financial firm behaviour that can add both analytical and policy insights into macro-economic debate on unconventional monetary policy.

EXHIBITS

Exhibit 1: U.S. Real GDP, S&P 500 and Private Investments as % of GDP

August 2007 = 100



Sources: U.S. Bureau of Economic Analysis and Bloomberg

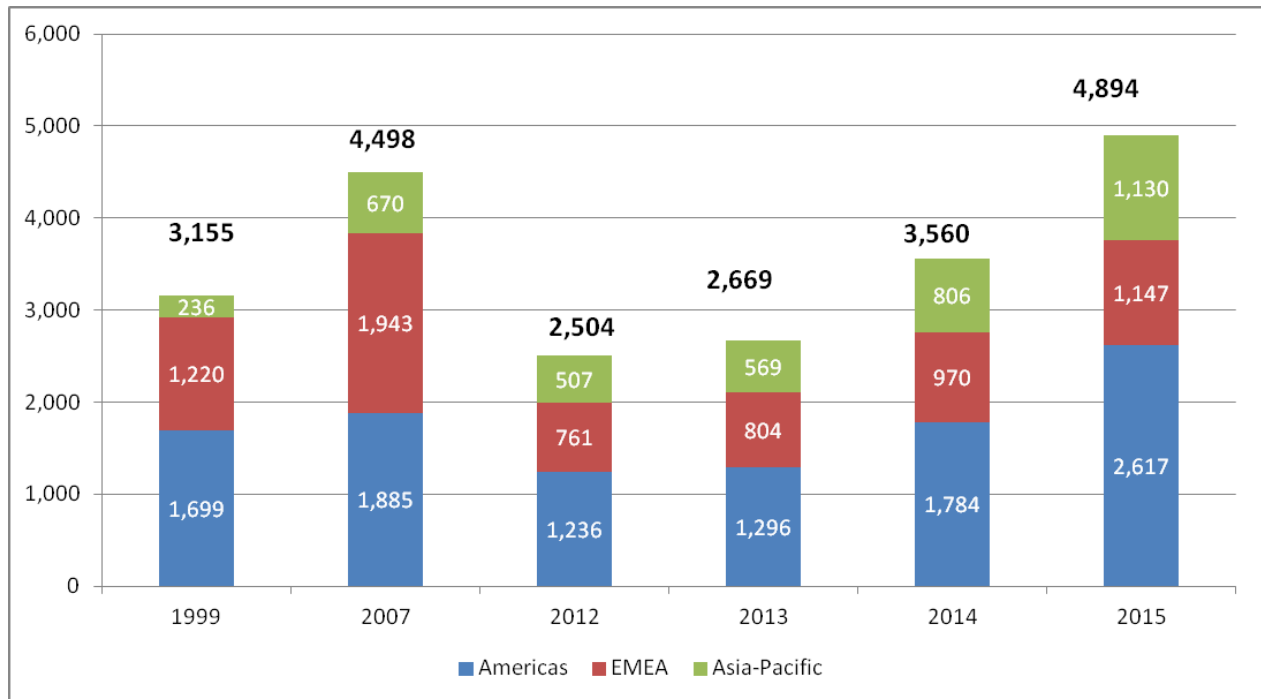
Exhibit 2: Share buybacks, equity issuance and net bond issuance in the U.S.

	US share buybacks (\$bn)	Equity issuance (\$bn)	US net equity issuance (\$bn)	Net bond issuance \$bn)
2002	116.38	67.91	-48.47	162.38
2003	108.85	60.80	-48.05	221.08
2004	163.12	101.71	-61.42	76.20
2005	280.91	87.08	-193.83	88.61
2006	381.15	106.87	-274.28	177.04
2007	506.23	113.78	-392.46	126.53
2008	361.04	66.11	-294.94	104.50
2009	135.56	87.71	-47.85	285.47
2010	287.09	96.80	-190.29	251.03
2011	384.20	107.29	-276.91	140.62
2012	361.24	124.10	-237.14	368.23
2013	462.57	175.20	-287.37	341.15
2014	485.39	160.05	-325.34	373.14

Source: Bank for International Settlement



Exhibit 3: Global Announced Mergers and Acquisition Deals (\$bn)



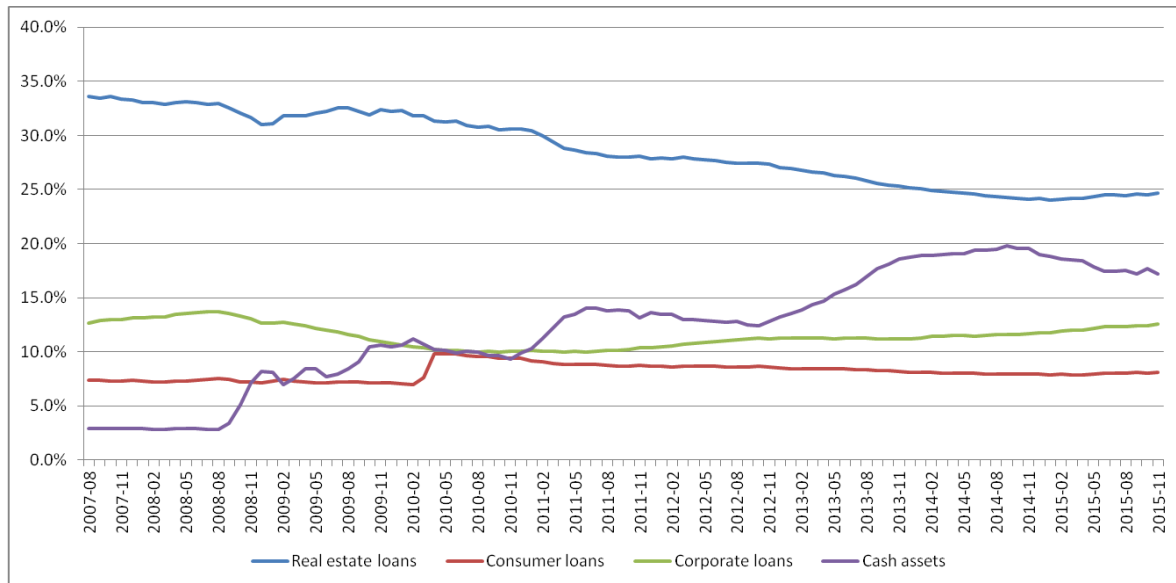
Source: McKinsey&Company

Exhibit 4: Assets of U.S. Commercial Banks 2007-2015

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Securities	2,100	2,091	2,323	2,425	2,493	2,735	2,715	2,925	3,067
Commercial and industrial loans	1,418	1,559	1,265	1,192	1,303	1,475	1,576	1,774	1,957
Real estate loans	3,600	3,819	3,777	3,613	3,494	3,550	3,531	3,636	3,840
Consumer loans	799	876	836	1,114	1,091	1,115	1,141	1,197	1,259
Cash assets	315	1,012	1,229	1,166	1,711	1,736	2,631	2,849	2,682
Total assets	10,816	12,315	11,715	11,819	12,542	13,123	14,036	15,036	15,576

Source: The Federal Reserve Board

Exhibit 5: Composition of U.S. Commercial Bank Balance Sheets between 2007-2015



Source: The Federal Reserve Board

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