CRANLEIGH

EX CULTU ROBUR

EXTENDED PROJECT QUALIFICATION

EPQ 2019

EPQ Title: Should The US Government Have Bailed out The Banks In 2008?

TABLE OF CONTENTS

ABSTRACT

In 2008 governments across the world set about supporting a failing financial sector to prevent a global financial market collapse. Governments have bailed out failing private sector organisations before, but nothing like the scale of the last financial crisis. This study briefly explains what a bailout is, looks at some historical examples of government bailouts to explain why they happen and then identifies the causes of the 2008 crisis and the reasons for the government interventions. From this, the arguments for and against the bailouts are looked at and show that whilst the bailouts were the right thing to do and profitable, they could have been implemented better. The moral hazard argument of bailouts rewarding and encouraging the behaviour that created the crisis is accepted and must always be addressed. Unfortunately, by the very nature of a systemic crisis, the benefits of a bailout outweigh the potential social costs and hence they will always occur.

INTRODUCTION

Government bailouts have taken place for just over 100 years (Gill 2017)[1] and the concept continues to be debated by economists. Simply put the idea of a bailout is to stop a private company from going into liquidation, as the financial and social cost to the government and affected population of it failing would be greater than the cost of supporting it. Each time there has been a financial crisis politicians say never again and use the lessons learned to create new legislation and sometimes regulatory bodies. Before the last crisis the most comprehensive action was taken during the Great Depression in 1933 with Roosevelt's New Deal being supported by the Glass-Steagall Act and the introduction of the Federal Deposit Insurance Corporation. However, before each crisis there has been a relaxation of legislation.

The last recession caused by the 2007 liquidity squeeze and the 2008 insolvency crisis of many of the world's largest financial institutions has been paid for by the US taxpayer, whether it be from government bailouts or a reduction in household income in real terms. At the time by the very nature of the crisis no one really understood why it was happening but saw the large financial institutions that were perceived to be the reason for the failure getting taxpayer money and with no remorse. (Collins 2015)[2]

Unlike previous financial crises, the 2008 crash was greater than the one experienced in 1929 and had the potential to put the world into a greater depression. Using lessons learned from the past, bailouts were implemented by governments and regulators that prevented global social chaos. (Tooze 2018)[3] Unfortunately, at the time commentators, voicing public opinion, did not appreciate this and saw the bailouts rewarding the behaviour and actions that created the problem.

---

[1] "History Of US Government Financial Bailouts - ThoughtCo." 3 Dec. 2017, https://www.thoughtco.com/government-financial-bailout-history-4123193. This source seems to be reliable, as it is a premier fact based and non-biased website and has been recently updated in 2017. It is a useful reference to the timeline of bailouts.

[2] "The Big Bank Bailout - Forbes." 14 Jul. 2015, https://www.forbes.com/sites/mikecollins/2015/07/14/the-big-bank-bailout/. This article by a business commentator was published by Forbes magazine, a leading US business magazine and it provides a credible point of view against the bailout. But it does not have the level of rigor of an academic paper as the points made are subjective, but the background information used in this paper is factual.

[3] "The Forgotten History of the Financial Crisis | Majalla." 23 Aug. 2018, https://eng.majalla.com/2018/08/article55257372/the-forgotten-history-of-the-financial-crisis. Adam Tooze is a Professor of Economic History and has recently published a book on the financial crisis of which this article is a summary. His background facts are reliable, and opinions are well supported.

To determine if the last bailouts out of the banks in the US was the right thing to do, we need to go back and understand what a bailout is and why governments use them. There are several definitions but the best way to understand them is to look back at previous incidents. There are many historical examples of bailouts so only most relevant have been included in this paper. Looking at the key financial crises that have occurred over the last century, it is evident that the last crash was not a new phenomenon except for the speed of its development and magnitude.

This subject has been analysed and studied by economists and many go into a depth of modelling which provide quantitative evidence but go beyond what this paper can meaningfully include. However, the research that has been included identifies agreed facts of events with data that has been checked against alternative sources. Any anecdotal views used have been checked if they are corroborated by other commentators and academic papers. The research was limited to what was freely available. Some sources managed to successfully explain the very complex elements of this subject in a straightforward manner and have been used in this paper to help explain what happened and why.

Well-intentioned government housing policy supported homeownership and the global financial markets responded to this profitable opportunity by developing financial products that enabled people who may never have considered buying a home to do so. Unfortunately, in developing these products the financial institutions and government regulatory bodies failed to identify the hazard of a housing market decline and people not being able to pay back their debts. The magnitude and speed of the resulting failure in the global financial system caught bankers and government by surprise. The question is were the bailouts necessary and effective and was the moral hazard of rewarding risky behaviour adequately considered?

LITERATURE REVIEW

To develop an understanding of the question and issues surrounding the 2008 US bank bailout the research focused on finding out what exactly a bailout is, examining the history of US government support of the private sector, identifying if similar bailouts had occurred before, and to understand what happened in 2008 and the key issues.

What is a bailout?

The Oxford Dictionary defines a bailout as 'an act of giving financial assistance to a failing business or economy to save it from collapse'. (Oxford Dictionary 2018)

Anthony Casey gives a more precise definition of, 'an ex post government transfer (a loan, cash, or other consideration) to an agent or group of agents to provide capital that is otherwise unavailable because of liquidity constraints.' Liquidity constraint is put into the context of financial market failure and ex-post means there was no prior arrangement for payment such as insurance. (Casey Posner 2015)[4]

Governments can undertake bailouts in various ways.

1. Acquire a controlling share. (Corporate Finance Institute)[5]
2. Acquire a loss-making asset which the rest of an organisation cannot support. In 2008 these assets were known as 'Toxic Debt' which were mortgages in a negative equity position and were unlikely to be paid back.
3. Issuing new money. In 2007 this was started using Quantitative Easing (QE) where the central bank created new money, which is then used to buy bonds or loan notes from struggling institutions. By doing this there is a very high risk of creating an inflation problem. (BBC)[6]

---

[4] "A Framework for Bailout Regulation by Anthony J. Casey, Eric A ...." 14 Feb. 2015, https://chicagounbound.uchicago.edu/public_law_and_legal_theory/541/. This is an academic paper prepared by two Professors of Law at Chicago University and is a reliable source and the more precise definition created by them is helpful to provide more focus for this dissertation.

[5] "Bailout Takeover - Corporate Finance Institute." https://corporatefinanceinstitute.com/resources/knowledge/deals/bailout-takeover/. This source is factual and used to give guidance to professional corporate financiers.

[6] "What is quantitative easing? - BBC News." 4 Aug. 2016, https://www.bbc.co.uk/news/business-15198789. The BBC is a renowned international news provider and this resource provided a straightforward explanation for this complicated economic tool.

Historical Examples

The 2008 crisis was not the first-time government bailouts have been used. There have been numerous private sector bailouts some of which were to help the financial sector. To get a better understanding of government bailouts this section reviews how US government has intervened during key historical financial crises.

The Panic of 1907

The need of a central US Federal Reserve (FR) to provide financial stability was accepted by the US government following the 'The Panic of 1907'. (Wikipedia)[7] (Wikipedia)[8] A failed buyout attempt of The United Copper Company started depositors of the third largest loan company, the Knickerbocker Trust Company, to withdraw their deposits fearing that it had supported the failed buyout which started a wider bank run. (Gill 2017)[9] This run was halted after wealthy bankers intervened, by pledging their own wealth, to reassure depositors savings were secure. After the event a commission recommended the federal government should be the lender of last resort which was enacted via the Federal Reserve Act 1913. (Wikipedia)[7] (Wikipedia)[8]

1929 Crisis and Great Depression

In October 1929 the US Stock Market crashed losing $378bn (2008 value) in four days. (Gill 2017)[9] It was then followed by the Great Depression of the 1930s, which spread globally. In 4 years the US economic output declined by 30%, experienced deflation of 10% per year and unemployment rose from 3% to 25%. For a long time, it was considered that the financial market crash was the cause of the depression. (Bernanke 2004)[10]

---

[7] "Panic of 1907 - Wikipedia." https://en.wikipedia.org/wiki/Panic_of_1907. This source seems reliable to provide facts of events as it has many contributors to the page with many sources.
[8] "History of central banking in the United States - Wikipedia." https://en.wikipedia.org/wiki/History_of_central_banking_in_the_United_States. This source seems reliable to provide facts of events as it has many contributors to the page with many sources.
[9] "History Of US Government Financial Bailouts – Kathy Gill, ThoughtCo." 3 Dec. 2017, https://www.thoughtco.com/government-financial-bailout-history-4123193. See note 1 for source evaluation.
[10] "FRB: Speech, Bernanke--Money, Gold, and the Great Depression ...." 2 Mar. 2004, https://www.federalreserve.gov/boarddocs/speeches/2004/200403022/default.htm. At the time Bernanke was on the Board of the Federal Reserve and is considered an authority on the Great Depression and so is a reliable factual source.

The Great Depression still haunts policy makers and research continues to understand what happened. A breakthrough publication from Friedman and Schwartz in 1963 explained that Federal Reserve monetary policy mistakes were the cause of the depression. Managing the dollar value distracted the US Federal Reserve from dealing with the domestic money supply. (Bernanke 2004)[10]

In 1933 President Roosevelt forced the closure of financially unsound banks. In the same year the Glass-Stiegel Act was passed to improve stability in the financial markets by creating the Federal Deposit Insurance Corporation (FDIC), regulating bank interest rates and legally separating commercial and investment bank activities. (Bernanke 2004)[10] The latter control was repealed in 1999. (Collins 2015)[11]

Continental Illinois - Too Big To Fail

The term 'Too Big To Fail' became synonymous with bailouts after 1984 when the seventh largest bank, the 'Continental Illinois National Bank' got into trouble. The FDIC estimated nearly 2,300 other banks were investors. 179 of these banks had invested over half their capital. Unfortunately, on this occasion fraudulent activity, poor due diligence and inappropriate incentives to take on risky business led to loss-making loans. Depositors were protected by the FDIC up to $100,000 but many had holdings greater than this and they withdrew $10.8bn of the $28.3bn of its deposits to avoid the risk of losing their money. This sudden reduction of capital led the FR to step in and eventually take over 80% of the shares as otherwise there would have been a systemic breakdown of liquidity. It was labelled by the Senate as 'Too Big To Fail' and it cost the taxpayer $49.6bn. It was the largest single bailout until 2008.(Haltom 1984)[12] (Wikipedia)[13] (Housel 2011)[14]

[11] "The Big Bank Bailout - Forbes." 14 Jul. 2015, https://www.forbes.com/sites/mikecollins/2015/07/14/the-big-bank-bailout/. See note 2 for source evaluation.

[12] "Failure of Continental Illinois | Federal Reserve History." Renee Haltom. 10 May. 1984, https://www.federalreservehistory.org/essays/failure_of_continental_illinois. This paper is a factual record of events held on the Federal Reserve website and is a reliable source of information.

[13] "Continental Illinois - Wikipedia." https://en.wikipedia.org/wiki/Continental_Illinois. This source seems reliable to provide facts of events as it has many contributors to the page with many sources.

[14] "A History of U.S. Government Bailouts -- The Motley Fool." Morgan Housel 5 Apr. 2011, https://www.fool.com/investing/general/2011/04/05/a-history-of-us-government-bailouts.aspx. This article by a business journalist was published by Motley Fool, a leading US investor website. It does not have the level of rigor of an academic paper as the points made are subjective, but the background information used in this paper is factual.

Savings and Loan Crisis

The Savings and Loan crisis of 1989 had some similarities to the 2008 crisis but on a much smaller scale and a longer period of time. Across America there were over 3,000 saving and loan institutions. Due to a changing economic environment, increasing interest rates, and relaxation of regulations (leading to systemic malpractice or even fraudulent behaviour) over 1,000 institutions failed requiring intervention via government-backed organisations which it is estimated cost the taxpayer $132billion. The bailout, in this case, was needed after it was realised that the deposit insurance corporations such as the FDIC did not have enough funds to pay depositors of failed companies and so the taxpayer had to cover the shortfall. Such a crisis of so many financial institutions had not been seen since the Great Depression and the resulting punishing tax on the healthy companies, to reimburse the tax payer, probably encouraged risk-taking in the financial industry. (Housel 2011)[11] (Casey-Posner 2015)[15]

2008 Crisis

Cause

Since 1994 US house prices increased continually, fuelled by increasing availability credit which was encouraged by Government wanting to increase wealth distribution and overtime it relaxed monetary policy. The level of house ownership was at unprecedented levels by 2006. (Thakor 2015)[16] Fannie Mae (Federal National Mortgage Association) and Freddie Mac (Federal Home Loan Mortgage Corporation) known as Government Sponsored Entities (GSE) were set up with investors to commercially support the liquidity of the secondary mortgage market. (Casey-Posner 2015)[17] By 2006 house prices peaked and began to fall as did consumer spending. It was clear the housing market was out of sync with household earning and a correction was due. US GDP fell in 2007 as industrial production flattened. (Miron 2009)[18]

---

[15] "A Framework for Bailout Regulation" by Anthony ... - Chicago Unbound." http://chicagounbound.uchicago.edu/public_law_and_legal_theory/541/. This is an academic paper prepared by two Professors of Law at Chicago University and therefore is a reliable source.

[16] "Financial Crisis of 2007–2009: Why Did It ...." 13 May. 2015, https://academic.oup.com/rcfs/article/4/2/155/1555737. This is an academic paper prepared by Professor Thakor, University of Michigan which has been well researched with supporting studies and therefore is a reliable source of information.

[17] "A Framework for Bailout Regulation" by Anthony ... - Chicago Unbound." http://chicagounbound.uchicago.edu/public_law_and_legal_theory/541/. See note 15 for source evaluation.

[18] "Bailout or Bankruptcy? A Libertarian Perspective on ... - IDEAS/RePEc." https://ideas.repec.org/p/hrv/faseco/4319665.html. Written by a leading lecturer at Harvard University and published on the Harvard Website and may be considered a reliable source.

The money to provide mortgages traditionally came from depositors in a bank who got a lower level of interest than the mortgage was providing, a simple model and low risk. However, to achieve the growth and levels of funds required to sustain the growing market financial institutions were deregulated, they bundled mortgages together and sold them onto investors and banks as a derivative product called Collateralized Debt Obligation (CDO). Additionally, they expanded into the high-risk subprime market where unsuitable borrowers were offered mortgages with very little or no security. (Casey-Posner 2015)[19]

Rating agencies, who were paid by the banks, continually rated CDOs as secure because traditionally mortgages were valued as low risk. (Collins 2015)[20] Over the years as demand increased for mortgages the information technology developments enabled financial innovation of mortgage-based derivatives which became more complicated as they were used to maintain the liquidity in the market. (Thakor 2015)[21] To survive banks had to maintain liquidity by purchasing large derivative based short term loans from other banks or money market funds. (Tooze 2018)[22] The problem was no one, including rating agencies, really understood the assumptions behind the valuations of these complicated products especially when in 2007 subprime mortgages started to default at a rate people did not expect. (Wikipedia)[23] (Casey-Posner 2015)[24]

2007 Credit Easing Bailout

During 2007 as defaults started to rise, the Federal Reserve realized that the banks were potentially facing liquidity problems and learning from the Great Depression decided to aggressively allow banks access to credit through Quantitive Easing (Ben Bernanke, chair of the Federal Reserve at the time, called it Credit Easing). This line of credit was available not only to US banks but also to

---

[19] "A Framework for Bailout Regulation" by Anthony ... - Chicago Unbound." http://chicagounbound.uchicago.edu/public_law_and_legal_theory/541/. See note 15 for source evaluation.

[20] "The Big Bank Bailout - Forbes." 14 Jul. 2015, https://www.forbes.com/sites/mikecollins/2015/07/14/the-big-bank-bailout/. See note 2 for source evaluation. This point is factual and not subjective.

[21] "Financial Crisis of 2007–2009 - Oxford Journals - Oxford University ...." 13 May. 2015, https://academic.oup.com/rcfs/article/4/2/155/1555737. See note 16 for source evaluation.

[22] "The Forgotten History of the Financial Crisis | Majalla." Adam Tooze 23 Aug. 2018, https://eng.majalla.com/2018/08/article55257372/the-forgotten-history-of-the-financial-crisis. Accessed 20 Jan. 2019. See note 3 for source evaluation.

[23] "Financial crisis of 2007–2008 - Wikipedia." https://en.wikipedia.org/wiki/Financial_crisis_of_2007%E2%80%932008. This source is a reliable to provide facts of events as it has a large number of contributors to the page with many sources.

[24] "A Framework for Bailout Regulation" by Anthony ... - Chicago Unbound." http://chicagounbound.uchicago.edu/public_law_and_legal_theory/541/. See note 15 for source evaluation.

foreign banks which were active in the dollar wholesale derivative mortgage market to maintain their liquidity. The European banks were unable to raise dollars to honour debts and were contemplating fire sales of their dollar assets. This would have caused a crash of the dollar leading to catastrophic consequences across the global financial system. The Federal Reserve stepped in to support 14 foreign Central Banks by making the Credit Easing and hence dollars available overseas. This was low profile and details were not available publicly to encourage banks, in fear of being stigmatized, to use the reserves. Despite all this, decline in the housing market accelerated in 2008. (Bernanke 2009)[25] (Tooze 2018)[26]

2008 Insolvency Bailouts

The fall in house prices impacted the valuation of the CDO's financial institutions had on their balance sheets. This scale of this impact unfolded at an unprecedented speed and a scale the banks could not keep up with. This meant the liquidity crisis had also become a problem of solvency for major financial institutions.

Bear Sterns

The first major bailout was in March 2008, Bear Sterns after going into liquidation was rescued by the Federal Reserve of New York who then arranged to sell Bear Sterns to J.P. Morgan and guaranteed $29bn of its high-risk mortgage loans. At the time Bernanke defended the bailout as it prevented a possible "chaotic unwinding" of investments throughout the US. (Wikipedia)[27] (Wikipedia)[28]

Fannie Mae and Freddie Mac

On 7 Sept 2008 the federal government took complete control of Fannie Mae and Freddie. Compared to other organisations they had a small exposure to the subprime market, 17% of their portfolio, but these loans accounted for over 50% of losses they were incurring. Because they were GSE's they did not need to have as much capital due to the government implicitly being a guarantor.

---

[25] "LSE Speech, Bernanke—"The Crisis and the Policy Response" 13 Jan. 2009, https://www.federalreserve.gov/newsevents/speech/bernanke20090113a.htm. At the time Ben Bernanke was the Chairman of the Federal Reserve and is a reliable source though it will be promoting the federal reserve's actions.

[26] "The Forgotten History of the Financial Crisis | Majalla." 23 Aug. 2018, https://eng.majalla.com/2018/08/article55257372/the-forgotten-history-of-the-financial-crisis. See note 3 for source evaluation.

[27] "Bear Stearns - Wikipedia." https://en.wikipedia.org/wiki/Bear_Stearns. This source seems reliable to provide facts of events as it has many contributors to the page with many sources.

[28] "Financial crisis of 2007–2008 - Wikipedia." https://en.wikipedia.org/wiki/Financial_crisis_of_2007%E2%80%932008. See note 23 for source evaluation.

To let them fail would have sent a signal of the government's lack of creditworthiness. Saving the GSE's raised concerns as to the fairness of the bailouts. By saving a financial institution it encouraged high risk-taking and it was asked if it would have been more effective to directly support the homeowners rather than the corporations. (Casey-Posner 2015)[29] (Amadeo 2018)[30] (Tooze 2018)[31]

Lehman Brothers

On 15 September 2008 even though Lehman Brothers was one of the biggest financial institutions at the time and that it was suffering the same problems as other banks, the US government did not bail it out. They allowed other financial institutions to pick out the good assets wiping out $46bn of its value and showed investors that the US government was not an insurance company. This provided uncertainty as the markets thought that even though banks took big risks, they were too big to fail so the government would always be there for them. (Lioudis 2017)[32] (Telegraph 2008)[33] (Wikipedia)[34] Within hours of this decision, the liquidity crisis hit the financial markets globally on an unprecedented scale. At the time many commentators celebrated the collapse as a testament to the free market working. This inconsistency in approach to bailouts has led to accusations of government abusing its power and favouring certain institutions above others as all major companies have political connections. The Treasury said it did not have any authority to act and others felt that the decision makers simply underestimated the impact the failure. (Casey-Posner 2015)[35] (Tooze 2018)[36]

---

[29] "A Framework for Bailout Regulation" by Anthony ... - Chicago Unbound." http://chicagounbound.uchicago.edu/public_law_and_legal_theory/541/. See note 15 for source evaluation.

[30] "Did Fannie and Freddie Cause Mortgage Crisis? - The Balance." https://www.thebalance.com/did-fannie-and-freddie-cause-the-mortgage-crisis-3305659. Kimberley Amadeo is an economic Commentator and Consultant. The balance is an educational website which is reliable and non-biased.

[31] "The Forgotten History of the Financial Crisis | Majalla." 23 Aug. 2018, https://eng.majalla.com/2018/08/article55257372/the-forgotten-history-of-the-financial-crisis. See note 3 for source evaluation.

[32] "Case Study: The Collapse of Lehman ...." 11 Dec. 2017, https://www.investopedia.com/articles/economics/09/lehman-brothers-collapse.asp. This article by an editor of Investopedia, a leading US investor website. It does not have the level of rigor of an academic paper as the points made are subjective, but the background information used in this paper is factual and reliable.

[33] "The collapse of Lehman Brothers - Telegraph. 9 May 2010 https://www.telegraph.co.uk/finance/financialcrisis/6173145/The-collapse-of-Lehman-Brothers.html. An article written at the time of the crisis from a leading UK newspaper which is considered reliable source for information.

[34] "Lehman Brothers - Wikipedia." N.D. https://en.wikipedia.org/wiki/Lehman_Brothers. This source is reliable to provide facts of events as it has many contributors to the page with many sources.

[35] "A Framework for Bailout Regulation" by Anthony ... - Chicago Unbound." http://chicagounbound.uchicago.edu/public_law_and_legal_theory/541/. See note 15 for source evaluation.

AIG

The next day, 16 September, American International Group (AIG) was bailed out by the government taking on $85bn of preferred shares giving it a controlling 79.9% stake and effectively nationalizing it. AIG was one of the largest insurance companies that legally misused the money from ordinary insurance premium holders to underwrite derivative financial insurance products known as Credit Default Swaps (CDS). These were purchased by banks as protection for possible losses from CDOs. (Amadeo 2018)[37] (Casey-Posner 2015)[38]

AIG was 'Too Big To Fail' and its collapse would bankrupt 1000's of other institutions globally as they had invested heavily in it. When the housing market crashed the amount of money it had to pay out in insurance claims pushed the company to the brink of bankruptcy. While the rest of the company was profitable the CDS activity was not. AIG had enough assets to cover all the claims, but it could not sell them in time to pay the claims. (Spaeth 2012)[39] (Amadeo 2018)[40] (Tooze 2018)[41]

In the end the government and hence taxpayer made a gain of $22.7 billion dollars. However, there was criticism on several points. It was accused that by bailing it out that in fact there was an indirect subsidy going to the banks that were being paid off on the risky derivative products they had bought. The level of the bailout on appearance looked in favour of AIG and the lack of transparency of the banks it dealt with has led to an accusation of corruption. Investigations have been undertaken to examine these criticisms but no evidence to prove them was found. (Salter 2013)[42]

---

[36] "The Forgotten History of the Financial Crisis | Majalla." 23 Aug. 2018, https://eng.majalla.com/2018/08/article55257372/the-forgotten-history-of-the-financial-crisis. Accessed 20 Jan. 2019. See note 3 for source evaluation.

[37] "AIG Bailout: Cost, Timeline, Bonuses, Causes, Effects - The Balance." 5 Nov. 2018, https://www.thebalance.com/aig-bailout-cost-timeline-bonuses-causes-effects-3305693. Kimberley Amadeo is an economic Commentator and Consultant. The balance is an educational website which is considered to be reliable and non-biased.

[38] "A Framework for Bailout Regulation" by Anthony ... - Chicago Unbound." http://chicagounbound.uchicago.edu/public_law_and_legal_theory/541/. See note 15 for source evaluation.

[39] "Was the AIG bailout a success? - The Week." 11 Dec. 2012, http://theweek.com/articles/469621/aig-bailout-success. Spaeth Ryu is a journalist and is a Deputy Editor of The Week magazine which is considered has a subjective view but is reliable for the facts.

[40] "AIG Bailout: Cost, Timeline, Bonuses, Causes, Effects - The Balance." By Kimberley Amadeo, 30 Sep. 2017, https://www.thebalance.com/aig-bailout-cost-timeline-bonuses-causes-effects-3305693. See note 40 for source evaluation.

[41] "The Forgotten History of the Financial Crisis | Majalla." 23 Aug. 2018, https://eng.majalla.com/2018/08/article55257372/the-forgotten-history-of-the-financial-crisis. See note 3 for source evaluation.

[42] "The AIG Bailout Revisited: Calculated Corruption or Miscalculated ...." 14 Aug. 2013, https://ethics.harvard.edu/blog/aig-bailout-revisited. Malcolm Salter is a member of the Harvard Business School faculty.

TARP – Troubled Asset Relief Programme

Despite the magnitude and speed of the bailouts of previous organisations, investors continued to withdraw funds and it became clear that more bailouts were required. In response the biggest bailout package of all time, the Emergency Economic Stabilisation Act of 2008, was signed off by President Bush on 3rd October. There was much resistance in Congress as this went against all principles that the state and therefore the taxpayer did not fund the private sector and the market should correct itself. When on 28th September Congress blocked the initial proposed bill to purchase the toxic assets, the markets reacted in terror with $1.2trillion of capital value being wiped out in the US and similar shocks in Europe. This forced a bill to be negotiated and passed, at an unprecedented speed, making $700bn bailout funds available and to be managed by the Troubled Asset Relief Program which ran until 3 October 2010. Only $440bn was disbursed in the end. (Amadeo 2018)[43] (Tooze 2108)[44] A summary of TARP is shown in Figure 1 on the next page.

Laeven and Valencia from the International Monetary Fund concluded that 'a costly systemic crisis' occurs regularly in emerging economies but for it to happen in the US and Europe on this scale it is a concern. The western financial system has become fragile when it should have more than enough funding and well-managed financial institutions. (Laeven-Valencia 2012)[45]

Harvard is one of the leading universities in the world and so this article can be considered as reliable.

[43] "Bank Bailout: Bill, Cost, Impact, How It Passed - The Balance." 5 Nov. 2018, https://www.thebalance.com/what-was-the-bank-bailout-bill-3305675. Kimberley Amadeo is an economic Commentator and Consultant. The balance is an educational website which is reliable and non-biased.

[44] "The Forgotten History of the Financial Crisis | Majalla." 23 Aug. 2018, https://eng.majalla.com/2018/08/article55257372/the-forgotten-history-of-the-financial-crisis. See note 3 for source evaluation.

[45] "Systemic Banking Crises Revisited - IMF." 14 Sep. 2018, https://www.imf.org/en/Publications/WP/Issues/2018/09/14/Systemic-Banking-Crises-Revisited-46232. An IMF working paper which is researched and written by economists from the IMF which looked at all financial crises around the world. It is a reliable source of information with global view of the financial crisis.

Figure 1 - Summary of Troubled Asset Relief Program

Over two years TARP: (Amadeo 2018) [46] (Casey Posner 2015) [47] (Bernanke 2009) [48] (US Treasury 2011) [49] ● Injected \$245bn through a Capital Purchase Program, which acquired preferred stock in banks. \$105bn went immediately to the 7 largest banks. The toxic debt was not purchased from them as time ran out to establish a system to ensure a fair price. ● Paid \$67.8bn towards the \$182bn AIG bailout. ● Provided the big three US auto companies \$80.7bn ● Loaned \$20bn to Federal Reserve for the Term Asset-Backed Securities Loan Facility (TALF) which allowed banks to continue lending money to homeowners and businesses. ● Put in place a politically controversial action providing a \$75bn to the Home Affordable and Modification Plan (HAMP) which incentivized loan providers to renegotiate, refinance or restructure the arrangements of defaulting homeowners. About 1 million homeowners benefited from the program by 2015. The US treasury disapproved giving support directly to homeowners saying it was more efficient to provide the support through the banks. One view was that the banks were the wrongdoers and the homeowners were the victims even though they entered into the debt agreement knowing the risk.

[46] "Bank Bailout: Bill, Cost, Impact, How It Passed - The Balance." 5 Nov. 2018, https://www.thebalance.com/what-was-the-bank-bailout-bill-3305675. See note 46 for source evaluation.
[47] "A Framework for Bailout Regulation" by Anthony ... - Chicago Unbound." http://chicagounbound.uchicago.edu/public_law_and_legal_theory/541/. See note 15 for source evaluation.
[48] "LSE Speech, Bernanke—"The Crisis and the Policy Response“ 13 Jan. 2009, https://www.federalreserve.gov/newsevents/speech/bernanke20090113a.htm. See note 25 for source evaluation.
[49] "TARP Bank Programs Turn Profit After Three Financial Institutions ...." https://www.treasury.gov/press-center/press-releases/pages/tg1121.aspx. This is press release from the US treasury which is factually correct but will be biased towards the government.

Discussion

The US government bailout of the banks in 2008 may be considered a success given the recession did not turn into a depression. However, this view alone is not enough and the arguments about cost-benefit, how the decisions were taken, how the bailouts were applied and impact on the moral hazard need to be explored. This discussion will show that bailing out the banks was the right thing to do, even though it could have been applied better, but the moral hazard risk of rewarding the behaviour that created the crisis always needs to be addressed every time a bailout is applied.

Benefits Outweigh the Costs

Bailouts should only be done if the cost to the taxpayer is less than if nothing is done. If a bailout is financially profitable and stops a recession developing into a depression, then it is the right thing to do.

Before examining the direct cost of the bailouts it is worth understanding what was at risk if there had been no intervention. Ben Bernanke when Chairman of the Federal Reserve in 2009 stated to a court, "September and October of 2008 saw the worst financial crisis in global history, including the Great Depression". (Tooze 2018)[50] If left unchecked the fallout from the failing financial institutions globally would have led to a depression which no one really knows how far it would have reached.

To get an idea of how much the bailouts helped, unemployment went to 25% in the 1930's Great Depression, when too little too late was done to stabilise the US financial system, whereas during the last recession unemployment peaked at 10%. (Bernanke 2004)[51] Without availability of credit the failure would have spread to other industries which were operationally profitable but would have failed if denied access to short term liquidity loans.

Indeed, with the 2008 crisis and the fear of reduced credit supply, industrial leaders took steps to

[50] "Crashed by Adam Tooze | PenguinRandomHouse.com: Books." https://www.penguinrandomhouse.com/books/301357/crashed-by-adam-tooze/9780670024933/. See note 3 for source evaluation.
[51] "FRB: Speech, Bernanke--Money, Gold, and the Great Depression ...." 2 Mar. 2004, https://www.federalreserve.gov/boarddocs/speeches/2004/200403022/default.htm. 2019. See note 10 for source evaluation.

reduce investment plans and cut costs. (Thakor 2015)[52] A study provided evidence that a greater impact on industrial production and hence employment is from a reduction in household credit as households don't buy products. (Haltenhof – Lee- Stebunovs 2014)[53] Without an intervention a downward spiralling cycle of reduced credit, leading to less investment, leading to unemployment, leading to less ability to borrow, leading to less productivity, leading to less credit and so on develops.

After four years the Great Depression was reversed in the US by Roosevelt's New Deal and it is reasonable to say the early interventions by the Federal Reserve prevented the 2007/2008 cycle from developing beyond a recession.

TARP was the big government bailout, but there were the GSEs and AIG bailouts and the Bear Sterns and AIG loans. By 2018 TARP only used $439.6bn of the $700bn made available and it did not cost the taxpayer anything as the money paid back by the banks covered all the cost of subsidies such as HAMP and it made $3bn profit. Fannie Mae and Freddie Mac provided a return of $37.9bn on the $187.5bn used to keep them afloat. The AIG stock bailout made $22.7bn and both the loans provided to Bear Sterns and AIG have been repaid with interest. (Washington Post)[54] (Amadeo 2018)[55] The bailout worked as the banks were effectively nationalised whilst they were bailed out and so, with the incentive to release themselves from Government control, they managed to rapidly raise the money to pay back the bailout.

The Federal Reserve Credit Easing, which started in 2007 continued until 2018. It was never labelled as a bailout, but as this injection of new money into the system was put in place in response to the crisis of the failing liquidity of the global credit market, it is a bailout. The Federal Reserve pumped over $4.6trillion of new money through treasury bonds into the global financial system to

---

[52] "Financial Crisis of 2007–2009 - Oxford Academic Journals." 13 May. 2015, https://academic.oup.com/rcfs/article/4/2/155/1555737. See note 16 for source evaluation.

[53] "The credit crunch and fall in employment during the Great Recession ...." https://www.sciencedirect.com/science/article/pii/S0165188914000815. Evidence based academic paper which is a reliable source used in other academic papers.

[54] "Bailout highly profitable for taxpayers, when you look at the right ...." 1 Jan. 2015, https://www.washingtonpost.com/business/economy/bailout-highly-profitable-for-taxpayers-when-you-look-at-the-right-numbers/2015/01/01/dc2a05a6-8fa5-11e4-a412-4b735edc7175_story.html. This is a reputable newspaper and is considered a reliable source of information, but it does lean towards the democrats who were in government at the time.

[55] "TARP: Definition, Cost, Who It Helped - The Balance." 15 Nov. 2018, https://www.thebalance.com/tarp-bailout-program-3305895. Kimberley Amadeo is an economic Commentator and Consultant. The balance is an educational website which is reliable and non-biased.

support banks of which half this money went to Europe. Because this action was within the authority of the Federal Reserve, it maintained a low profile to prevent those institutions accessing the new money being stigmatised and the full extent of the actions did not come to light until 2011. This continued provision of credit did get the financial system stabilised and provide time for the financial institutions to recover whilst maintaining access to credit for both businesses and households, even if at a reduced level. (Collins 2015)[56] (Tooze 2018)[57]

So far, I have not found any studies that provide empirical evidence to demonstrate if Credit Easing has been or will be financially profitable. But it is reasonable to say that without it the insolvency bailouts of TARP would not have worked as the banks would not have raised the capital to buy back the government-owned shares. In fact, credit easing has allowed the banks globally to maintain liquidity in the financial system and to strengthen their balance sheets. In terms of financial cost-benefit the US bailouts were successful even though there are many individuals and families affected by the recession that may think otherwise.

Deciding to Bailout

The US government was right to decide to bailout, but it is easy with hindsight to criticise decisions. By their very nature bailouts are applied in reaction to an unexpected crisis and how policy makers decide to provide bailouts can affect how effective they are.

In 2006 the US Treasury, learning from historical bailouts, ran models to identify what might trigger a financial crisis and all the experts at the time did not consider house price falls as a scenario. The book 'Too Big To Fail', written in 2004 by the President (Gary Stern) and Vice President (Ron Feldman) of the Federal Reserve Bank of Minneapolis, put forward concerns of the hazards being created by the growth of the large banks. (Kashkari 2016)[58] They were one opinion against many in both government and major financial institutions who argued that without solid empirical proof then there was no reason to act. It is an understandable stance to take as during

[56] "The Big Bank Bailout - Forbes." 14 Jul. 2015, https://www.forbes.com/sites/mikecollins/2015/07/14/the-big-bank-bailout/. See note 2 for source evaluation.
[57] "Crashed by Adam Tooze | PenguinRandomHouse.com: Books." https://www.penguinrandomhouse.com/books/301357/crashed-by-adam-tooze/9780670024933/. See note 3 for source evaluation.
[58] "Lessons from the Crisis: Ending Too Big to Fail - Brookings Institution." 16 Feb. 2016, https://www.brookings.edu/wp-content/uploads/2016/02/KashkariBrookings2162016.pdf. Neel Kashkari was the CEO of the Federal Reserve Bank of Minneapolis and worked in the Us Treasury during the crisis. He is insightful and is a reliable source.

boom times no one wants to be seen ‘stopping a good party’! The failure to adequately respond to concerns being raised was due to an unhealthy mix of politicians wanting to see the continued success of their home ownership policies and the large banks, with their strong political affiliations, lobbying to relax regulation of the industry to enable increased supply of profitable household credit. (Casey-Posner 2015)[59]

In 2007 when it became clear there was a global liquidity crisis developing the Federal Reserve, learning from the Great Depression, did respond both quickly and strongly by implementing the Credit Easing programme. Given at the time it was generally considered, especially by the rating agencies, that the financial institutions were solvent and were only facing a liquidity problem it was right for the government, as lender of last resort, to step in to maintain stability. (Casey-Posner 2015)[60] This decisive and strong decision put the US in a leading position globally when the high level of financial institutional interdependence using dollar-based products across the world was realised. (Tooze 2108)[61] The credit easing decision was kept low key and by doing so allowed financial institutions in 14 countries to access the credit arrangements without the risk of causing investors to panic sell. Such a ‘behind closed doors’ process does lead to mistrust and is a source of much criticism. In fairness, unlike the banks, the regulatory decision makers have opened themselves up to scrutiny by post-crisis inquiries and to date, no wrongdoing has been found. (Thakor 2015)[62]

The case to bailout insolvent companies is not so clear. (Casey-Posner 2015)[63] In a capitalist system it is the role of the market to weed out the badly run organisations from the successful. (Miron 2009)[64] To provide taxpayer money as capital to failing banks goes against both the taxpayers’ and hence politicians’ capitalist principles. This was demonstrated by the fact in the way the decision for the 2008 solvency bailouts were taken.

---

[59] "A Framework for Bailout Regulation" by Anthony ... - Chicago Unbound." http://chicagounbound.uchicago.edu/public_law_and_legal_theory/541/. See note 15 for source evaluation.
[60] "A Framework for Bailout Regulation" by Anthony ... - Chicago Unbound." http://chicagounbound.uchicago.edu/public_law_and_legal_theory/541/. See note 15 for source evaluation.
[61] "Crashed by Adam Tooze | PenguinRandomHouse.com: Books." https://www.penguinrandomhouse.com/books/301357/crashed-by-adam-tooze/9780670024933/. See note 3 for source evaluation.
[62] "Financial Crisis of 2007–2009 - Oxford Academic Journals." 13 May. 2015, https://academic.oup.com/rcfs/article/4/2/155/1555737. See note 16 for source evaluation.
[63] "A Framework for Bailout Regulation" by Anthony ... - Chicago Unbound." http://chicagounbound.uchicago.edu/public_law_and_legal_theory/541/. See note 15 for source evaluation.
[64] "Bailout or Bankruptcy? A Libertarian Perspective on ... - Harvard DASH." https://dash.harvard.edu/bitstream/handle/1/4319665/Miron_Bailout.pdf. See note 18 for source evaluation.

When it was realised that despite the Credit Easing the biggest financial institutions were facing a solvency crisis the Federal Reserve, within its regulatory authority, started work with the banks to try and find strong suitors to take on the failing banks. This was the right thing to do but possibly they could have prepared themselves for the worst sooner. The speed and magnitude at which the crisis unfolded was completely unprecedented. Even after the Lehman collapse and AIG crisis, many politicians and commentators felt TARP was not necessary. It was clear they were unaware at how close the global financial system was to collapsing. (Amadeo 2018)[65]

By bailing out Freddie Mac and Fannie Mae and sponsoring the fire sale of Bear Sterns to JP Morgan, with a taxpayer loan to cover the toxic assets, and set expectations of government support. When Lehman's was left by the government to fail, investors naturally reacted to protect themselves causing the unprecedented financial crash. It is easy for financial commentators to say that by doing this the government exacerbated the crisis, but at the time it is reasonable to believe that decision makers were struggling to understand the scale of the problem and so underestimated the impact that Lehman's failure would have. This has led to legal challenges by the shareholders of Lehman's and accusations of favouritism which have not been proven. (Casey-Posner 2015)[66] But the impact of Lehman's led to the saving of AIG and then a few weeks later, in record time, to the political agreement to implement TARP showing that decision-makers understood the need to provide some certainty to the markets. This was a good decision, but the process in making it was hurried and the subsequent application is understandably open to challenge.

Application of Bailouts

Once the decision has been made to employ bailouts then there is the problem of determining the best way of applying them. One side of the argument is that taxpayer money should be given directly to the households whilst another states it is more efficient to pay the money indirectly through the banks to stabilise the market. Luckily this argument was

[65] "TARP: Definition, Cost, Who It Helped - The Balance." 15 Nov. 2018, https://www.thebalance.com/tarp-bailout-program-3305895. See note 55 for source evaluation.
[66] "A Framework for Bailout Regulation" by Anthony ... - Chicago Unbound." http://chicagounbound.uchicago.edu/public_law_and_legal_theory/541/. See note 15 for source evaluation.

The appropriate averseness of governments to insolvency bailouts makes it difficult for legislation to prepare regulatory bodies, like the Federal Reserve, to be given authority to apply bailouts at the level required in 2008. (Casey-Posner 2015)[67] There has been public and political outrage as to the level of support given to the banks through low-interest loans, which has not reached the taxpayer and businesses. (Collins 2015)[68]

The results of the initial debate as to whether the bailout money should have been given directly to the defaulting debtors or indirectly through the banks is what came out of TARP. Sensibly congress did not accept the initial proposal for the taxpayer to take direct responsibility for the toxic assets. It did settle on a mixture of direct and indirect programmes. The major indirect support took the effective form of purchasing of preferred stock which gave it controlling shares which in turn incentivised banks to get their business sorted out and buy back the shares as quickly as possible to take back control. The shareholders of Bear Sterns and Lehman Brothers have been discriminated by the delayed implementation of the bailouts and are understandably legally challenging the government over this inconsistent support. (Thakor 2015)[69]

One of the problems of applying the bailouts was the shareholders and bankers holding out in negotiations for higher prices and not being open about their toxic assets. Several financial commentators have noted the correlation of the treasury officials past connections with the banks, such as Goldman Sachs and Morgan Stanley, that received what has been perceived as generous support. No unfair allocation of funds has been proven but the negative public perception is the banks got a good deal whilst many individuals and families have suffered. This was further amplified by the banks honouring large executive bonuses after receiving a bailout. The banks argued that by not paying their executives what they had been promised they risked losing the people who would be able to sort out the complex products which had caused the failure and therefore it was more efficient to pay it. Whilst public perception at the time found this abhorrent there was no way the government could legally interfere with operational decisions.

---

[67] "A Framework for Bailout Regulation" by Anthony ... - Chicago Unbound." http://chicagounbound.uchicago.edu/public_law_and_legal_theory/541/. See note 15 for source evaluation.
[68] "The Big Bank Bailout - Forbes." 14 Jul. 2015, https://www.forbes.com/sites/mikecollins/2015/07/14/the-big-bank-bailout/. See note 2 for source evaluation.
[69] "Financial Crisis of 2007–2009 - Oxford Academic Journals." 13 May. 2015, https://academic.oup.com/rcfs/article/4/2/155/1555737. See note 16 for source evaluation.

It became clear that the money provided to the banks was being used to strengthen balance sheets and not maintaining the credit lines to distressed homeowners and businesses. The TALF and HAMP programmes were set up to provide direct support to the small businesses and distressed homeowners. At the time HAMP came under much criticism from low-risk homeowners paying their mortgages feeling that their hard-earned taxes were now paying other people's mortgages. However, the fact is the subsidy money still went to the banks but it was a direct incentive to get them to renegotiate terms of untenable loan agreements which went some way to reduce defaulting mortgages and hence maintain house prices, benefitting all homeowners.

Alternative actions were proposed. Senator John McCain proposed buying $300bn worth of risky mortgages which may have addressed the housing market but did not address the credit problem. The Republicans proposed cutting the taxes for banks but given they were losing money this really would have no effect. They also proposed to suspend the mark to market accounting rule of valuing contracts to reduce balance sheet write-downs. An easing of the rule was put in 2009. Finally there were those who felt do nothing was the correct course of action, but they really had not learnt from the Great Depression. (Amadeo 2018)[70]

The way the bailouts were applied in 2008 will continue to be a source for research to identify the most efficient way to do it. A crisis will always challenge any prepared processes that are put in place and any reactionary bailouts will always come under criticism. Therefore the way a bailout is applied should not stop it from happening and any process used must be open to post crisis scrutiny and show that lessons from the past were considered.

Moral Hazard

Moral Hazard is a term that economists have adopted from insurance companies that refers to the problem that when people know financial support will be available for when things go wrong they will have a greater propensity to take more risk than they would do without it. The strong argument of the Bailouts creating a Moral Hazard within the supported industry has been demonstrated historically. The 1984 Continental Illinois bailout legitimised the 'Too Big To Fail' argument which led executives and investors in the 2008 crisis expecting government support. The

[70] "Bank Bailout: Bill, Cost, Impact, How It Passed - The Balance." 5 Nov. 2018, https://www.thebalance.com/what-was-the-bank-bailout-bill-3305675. See note 43 for source evaluation.

saving and loans crisis of the late 80’s punished prudent secure organisations and showed that risky behaviour will be rescued by the government deposit insurance scheme.

It is argued that the 2008 US government's actions went too far and that it interfered with the free market which would have naturally corrected itself. The effect of the bailouts was to step in during a period of market failure and save the financial markets by more or less nationalising them. This action rewarded the bad behaviour and excessive risk-taking that contributed to the crisis and as Jeffrey Miron from Harvard University puts it ‘the long run implications of bailouts is unambiguously bad’. (Miron 2009)[71] Whilst the 2008 bailouts worked it could be said that the very act of providing bailouts exacerbated the financial crisis as by their very nature and uncertainty of application they send a signal there is a serious problem which no one understands.

Many commentators at the time criticized the bailouts saying that it rewarded the risk-taking and the banks that got us into the trouble just grew bigger as they merged and took on taxpayers’ money to bolster their balance sheets. Perceptions by the taxpayer were poor saying the people who made the problem still got paid off and no one was held to properly account for it. (Collins 2015)[72]

To address this argument TARP was passed with the understanding that suitable legislation would be put in place to make sure bailouts will never be needed again. The resulting Dodd-Frank Act brought into US law in 2010 was the most comprehensive financial reform since the Great Depression. In short it puts obligations on financial institutions to protect the interest of customers and strengthens regulatory oversight to help prevent such a crisis happening again. It addressed all of the issues that led to the crisis such as overseeing credit rating agencies, monitoring large banks activities and testing to see if they have sufficient reserves (stress tests), regulating risky derivatives, increased transparency of trades and stopped banks using depositor’s money for high-risk deals. To date the banks, fearing they will become uncompetitive internationally, are

[71] "Bailout or Bankruptcy? A Libertarian Perspective on ... - Harvard DASH." https://dash.harvard.edu/bitstream/handle/1/4319665/Miron_Bailout.pdf. See note 18 for source evaluation.
[72] "The Big Bank Bailout - Forbes." 14 Jul. 2015, https://www.forbes.com/sites/mikecollins/2015/07/14/the-big-bank-bailout/. See note 2 for source evaluation.

resisting the legislation and many of the measures included in the Dodd Frank Act are being watered down or have not been implemented. (Amadeo 2018)[73]

Dodd-Frank supporters believed that it would prevent the need for future bailouts but yet it does give the FDIC authority to do so. Casey and Posner refer to it as the paradox of bailout policy as Governments do not want to rule out bailouts in case there is a social or economic need but on the other hand it does not want to commit to bailouts for fear of encouraging moral hazards. Due to the very nature of bailouts being used in unpredicted circumstances it is not possible to legislate against them. Therefore, agencies and the governments should not restrict through legislation how bailouts can happen but rather use procedure and independent watchdogs to minimise unintentional inconsistencies. (Casey-Posner 2015)[74]

It should be remembered that for top executives bailouts are a mark of failure and potential loss of operational control of their business. Whilst the argument says that excessive risk-taking is encouraged by bailouts it could be said that risk management is slackened during times of prosperity and growth supported by uncontrolled government policies.

The jury is still out as to whether the 2008 crisis bailouts has increased the Moral Hazard risk in financial institutions. If it has then it is not due to the lack of trying to legislate against it. In his speech to the London School of Economics Bernanke highlighted the added difficulty of legislation. He acknowledged that going forward that regulatory bodies would need to be strengthened to monitor the private sector activity and to assess and manage risk better. However any policies put in place will need to be done with international agreement as the economies of the world are 'too interconnected' to do otherwise. (Bernanke 2009)[75]

[73] "Dodd Frank Wall Street Reform Act Summary - The Balance." 18 Dec. 2018, https://www.thebalance.com/dodd-frank-wall-street-reform-act-3305688. Kimberley Amadeo is an economic Commentator and Consultant. The balance is an educational website which is reliable and non-biased.
[74] "A Framework for Bailout Regulation" by Anthony ... - Chicago Unbound." http://chicagounbound.uchicago.edu/public_law_and_legal_theory/541/. See note 15 for source evaluation.
[75] "Federal Reserve Board - The Crisis and the Policy Response." 13 Jan. 2009, https://www.federalreserve.gov/newsevents/speech/bernanke20090113a.htm. See note 25 for source evaluation.

CONCLUSION

There is no doubt that the 2008 financial crisis was the largest the world had experienced with the potential to devastate the world economies as demonstrated by 1930's the Great Depression. The Federal Reserve, learning from history, responded decisively and with strength when it introduced the Credit Easing in 2007. It took a global lead and put the US firmly in the driving seat. However this move was not enough, and the major banks insolvency crisis of 2008 led to another swift and decisive response by the government.

Whilst the person on the street was justifiably angry as the prosperous life they were enjoying was snatched away, with many losing their dream of home ownership, it is not right to blame the banks for all the problems. The problem lay with a mixture of uncontrolled government housing policy and increased risk-taking in banks due to relaxing risk management and deregulation. The media and commentators understandably were angry and the banks could have demonstrated more awareness of the effects of their actions but in the end the problem went beyond an individual or one organisation's behaviour.

The fact is what the world was facing in terms of global financial system failure required intervention and the large financial institutions were needed to correct the problem and minimise the impact of the failure. The insolvency bank bailouts implemented by the US government achieved this with no direct cost to the taxpayer. However it is fair to say that with the benefit of hindsight they could have done it more consistently and possibly more efficiently.

It is not possible to legislate against bailouts as to prepare for the next crisis is by definition not possible as 'it won't look like what we might be expecting'. [76] Policymakers will always use bailouts as by the very nature of systemic failure the social costs are too great.

[76] "Lessons from the Crisis: Ending Too Big to Fail - Brookings Institution." 16 Feb. 2016, https://www.brookings.edu/wp-content/uploads/2016/02/KashkariBrookings2162016.pdf. See note 58 for source evaluation.

EVALUATION

I set out to look at the 2008 global financial crisis as I was interested but did not understand the controversy surrounding the bailouts. At the beginning my opinion was open but I expected to be arguing against the bailouts based on the limited commentaries I had read. However, this project has developed my understanding and it was not long before I started to appreciate the complexity of the crisis facing political and regulatory decision makers and that there was a strong case to argue for the bailouts. The interaction between government, regulatory organisations and private sector is carefully regulated and I had not appreciated this before doing this project.

The research process of finding and looking at alternative sources and evaluating their credibility taught me the value of getting the complete picture by using empirical information or anecdotal evidence that has been based on agreed facts. There are so many academic papers and articles on the subject, but financial constraints allowed me to focus on the papers which were free to access. To produce this paper I read more than has been listed in the bibliography. By looking at alternative views allowed me to develop my arguments and forced me to go into greater depth than I expected. Indeed, I realise that even now there is so much more I could research especially with respect to the quantitive easing effects. However, with time constraints a line must be drawn. In the early planning stages I had not considered the time that I would use on research that did not contribute to the end paper, as I decided it either did not have enough credibility or did not contribute to the discussion.

Given the time constraint and the size of the topic, I had to focus the project onto the US bailouts which were the lead in the world at the time. By focusing on one country I was able to go into greater depth. The other constraint was the fact that I had very little understanding of the topic at the beginning, so I had to spend much time learning about the subject and reviewing historical cases. Again, I had not factored the amount of time needed to do this in my initial project plan.

Having gained the knowledge on bailouts, I would like to take this project forward by comparing other countries' experience of bailouts and comparing their successes. Additionally, I would like to explore the effect of the credit easing programme that completed in 2018 and see what the long-term effects it will have.

BIBLIOGRAPHY

Amadeo, Kimberly. "Did Fannie and Freddie Cause the Mortgage Crisis?" *The Balance Small Business*, Updated Dec 30,2018 The Balance, www.thebalance.com/did-fannie-and-freddie-cause-the-mortgage-crisis-3305659 Accessed 4 Jan 2018

Amadeo, Kimberly. "Did TARP Help You or the Banks?" *The Balance Small Business*, The Balance, www.thebalance.com/tarp-bailout-program-3305895 Accessed 29 Jan 2018

Amadeo, Kimberly. AIG "This Bailout Made Bernanke Angrier than Anything Else in the Recession." *The Balance Small Business*, Updated November 5 2018, The Balance, www.thebalance.com/aig-bailout-cost-timeline-bonuses-causes-effects-3305693 Accessed 26 Feb 2018

Amadeo, Kimberly. "Bank Bailout: Bill, Cost, Impact, How It Passed" - *The Balance Small Business*, The Balance. Updated 5 Nov. 2018, https://www.thebalance.com/what-was-the-bank-bailout-bill-3305675. Accessed 29 Jan 2018.

Amadeo, Kimberly. "What Did the Bank Bailout Bill Really Do?" *The Balance Small Business*, The Balance, www.thebalance.com/what-was-the-bank-bailout-bill-3305675 Accessed 18 Dec 2018

Amadeo, Kimberly. "8 Ways a Dodd-Frank Repeal Hurts You." *The Balance Small Business*, The Balance, www.thebalance.com/dodd-frank-wall-street-reform-act-3305688

BBC. "What Is Quantitative Easing?" *BBC*, BBC, 4 Aug. 2016, www.bbc.co.uk/news/business-15198789

Bernanke, Ben. (Speech 2 Mar. 2004) "The Fed - Money Stock and Debt Measures" - *H.6 Release April 26, 2018*, Board of Governors of the Federal Reserve System (U.S.), www.federalreserve.gov/boarddocs/speeches/2004/200403022/default.htm Accessed 4 Jan. 2018

Bernanke, Ben. (Speech 13 Jan 2009) Federal Reserve. "The Crisis and the Policy Response." *The Fed - Money Stock and Debt Measures - H.6 Release - April 26, 2018*, Board of Governors of the Federal Reserve System (U.S.), www.federalreserve.gov/newsevents/speech/bernanke20090113a.htm Accessed 18 Dec 2018

Casey, Anthony, and Eric A. Posner. "A Framework for Bailout Regulation." *Chicago Unbound*, chicagounbound.uchicago.edu/public_law_and_legal_theory/541/Accessed 8 Feb. 2018

Collins, Mike. "The Big Bank Bailout." *Forbes*, Forbes Magazine, 14 July 2015, www.forbes.com/sites/mikecollins/2015/07/14/the-big-bank-bailout/ Accessed 7 Feb. 2018

Corporate Finance Institute. "Bailout Takeover - Understanding How Bailout Takeovers Work." corporatefinanceinstitute.com/resources/knowledge/deals/bailout-takeover

Gill, Kathy. "The History of US Government Financial Bailouts." *Thoughtco.*, Dotdash, 3 Dec. 2017, www.thoughtco.com/government-financial-bailout-history-4123193 Accessed 7 Mar. 2018

Haltenhof, Samuel, SeungJung Lee and Viktors Stebunovs "The Credit Crunch and Fall in Employment during the Great Recession." *NeuroImage*, Academic Press, 5 Apr. 2014, www.sciencedirect.com/science/article/pii/S0165188914000815 Accessed 3 Jan 2019

Haltom, Renee. 10 May 1984. "Failure of Continental Illinois." *Federal Reserve History*, www.federalreservehistory.org/essays/failure_of_continental_illinois Accessed 4 Jan. 2019

Housel, Morgan. "A History of U.S. Government Bailouts." *The Motley Fool*, The Motley Fool, 5 Apr. 2011, www.fool.com/investing/general/2011/04/05/a-history-of-us-government-bailouts.aspx Accessed 7 Mar 2018

Kashkari, Neel. "Lessons from the Crisis: Ending Too Big to Fail" 16 Feb. 2016 https://www.brookings.edu/wp-content/uploads/2016/02/KashkariBrookings2162016.pdf Accessed 18 Dec 2018

Laeven, Luc, and Fabian Valencia. "Systemic Banking Crises Revisited." *IMF*, www.imf.org/en/Publications/WP/Issues/2018/09/14/Systemic-Banking-Crises-Revisited-46232 Accessed 20 Dec 2018

Lioudis, Nick K. "The Collapse of Lehman Brothers: A Case Study." *Investopedia*, Investopedia, 21 Dec. 2018, www.investopedia.com/articles/economics/09/lehman-brothers-collapse.asp Accessed 18 Apr 2018

Miron, Jeffrey A. "Bailout or Bankruptcy? A Libertarian Perspective on the Financial Crisis, by Miron, Jeffrey A." *51st Annual Transportation Research Forum, Arlington, Virginia, March 11-13, 2010*, Transportation Research Forum, 1 Jan. 1970, ideas.repec.org/p/hrv/faseco/4319665.html Accessed 8 Feb 2018.

Salter, Malcolm S. (14 Aug 2013) "The AIG Bailout Revisited: Calculated Corruption or Miscalculated Risk Management?" *Edmond J. Safra Centre for Ethics*, ethics.harvard.edu/blog/aig-bailout-revisited. Accessed 26 Feb 2018

Spaeth, Ryu. "Was the AIG Bailout a Success?" *The Week - All You Need to Know about Everything That Matters*, The Week, 11 Dec. 2012, theweek.com/articles/469621/aig-bailout-success Accessed 26 Feb 2018

Thakor, Anjan V. "Financial Crisis of 2007–2009: Why Did It Happen and What Did We Learn?" *OUP Academic*, Oxford University Press, 13 May 2015, academic.oup.com/rcfs/article/4/2/155/1555737 Accessed 18 Dec 2018.

Telegraph. "The Collapse of Lehman Brothers." *The Telegraph*, Telegraph Media Group, 11 Sept. 2009, www.telegraph.co.uk/finance/financialcrisis/6173145/The-collapse-of-Lehman-Brothers.html Accessed 18 Apr 2018

Tooze, Adam. "The Forgotten History of the Financial Crisis." *Majalla*, 23 Aug. 2018, eng.majalla.com/2018/08/article55257372/the-forgotten-history-of-the-financial-crisis. Accessed 10 Sep. 2018

U.S. Department of the Treasury. "TARP Bank Programs Turn Profit After 3 Financial Institutions Repay $7.4bn" *History of the Lincoln Cent*, www.treasury.gov/press-center/press-releases/pages/tg1121.aspx Accessed 18 Dec 2018

Washington Post. "Bailout Highly Profitable for Taxpayers, When You Look at the Right Numbers." *The Washington Post*, WP Company, 3 Jan. 2015, www.washingtonpost.com/business/economy/bailout-highly-profitable-for-taxpayers-when-you-look-at-the-right-numbers/2015/01/01/dc2a05a6-8fa5-11e4-a412-4b735edc7175_story.html Accessed 20 Dec 2018

Wikipedia "Bear Stearns." Wikimedia Foundation, 11 Feb. 2019, en.wikipedia.org/wiki/Bear_Stearns Accessed 1 Feb 2018

Wikipedia "Continental Illinois." Wikimedia Foundation, 7 Feb. 2019, en.wikipedia.org/wiki/Continental_Illinois Accessed 7 Mar 2018

Wikipedia "Financial Crisis of 2007–2008." Wikimedia Foundation, 20 Feb. 2019, en.wikipedia.org/wiki/Financial_crisis_of_2007–2008 Accessed 18 Dec 2018.

Wikipedia "History of Central Banking in the United States." Wikimedia Foundation, 22 Jan. 2019, en.wikipedia.org/wiki/History_of_central_banking_in_the_United_States Accessed 7 Mar 2018

Wikipedia "Lehman Brothers." Wikimedia Foundation, 13 Feb. 2019, en.wikipedia.org/wiki/Lehman_Brothers Accessed 18 Apr 2018

Wikipedia. "Panic of 1907." Wikimedia Foundation, 19 Feb. 2019, en.wikipedia.org/wiki/Panic_of_1907 Accessed 4 Jan 2019