One of the contributory factors to the recent global financial crisis is the level of imprudent loans made by US banks and financial institutions. This article shows that US government legislation and regulation led to this behaviour. In pursuit of social justice objectives, the US government created an artificial market that ultimately had unintended and adverse consequences for the financial system.

In an analysis of the sub-prime crisis, Yuliya Demyanyk and Otto van Hemert summarise the situation as follows:¹

Rapid appreciation in housing prices masked the deterioration in the subprime mortgage market and thus the true riskiness of subprime mortgage loans. When housing prices stopped climbing, the risk in the market became apparent.

This suggests that at least two features of the market need to be explained: first, why lending standards deteriorated; and second, why there was such a rapid appreciation in housing prices. In this article I focus very narrowly on the first question, looking at why lending standards deteriorated.

Banks and financial institutions in the United States made mortgage loans to individuals who were unlikely to be in position to repay those loans. Indeed, many banks and financial institutions were very aggressive in making these loans. The term ‘predatory lending’ has been used to describe such behaviour. This type of behaviour for the banking system as a whole is contrary to what we might otherwise expect. After all, bankers are normally perceived to be conservative and prudent. As Ludwig von Mises indicated: ‘Imprudent granting of credit is bound to prove just as ruinous to a bank as to any other merchant’.² This is well known and understood. Yet US banks and financial institutions have been accused of imprudent credit practices that have led to ‘toxic debt’ being spread around the global financial system, resulting in the global financial crisis (GFC) that began in 2007.

I argue in this article that inappropriate US government intervention in and regulation of the housing market are to blame for the so-called predatory

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loans. To be sure, there will always be individuals and institutions that make loans on the basis that they cannot be repaid, with the intention that the lender repossesses the house. That kind of fraudulent behaviour is not what I discuss here. Predatory loans cannot be a successful business model for the banking system as a whole. Yet in the United States that is the model that appears to have been adopted for a large section of the housing market. This article sets out the perverse incentive structure that US legislation and regulation established, which led to predatory lending.

Of course, there is much more to US housing policy and the current crisis than the regulatory failure that I describe in this article. The causes of the crisis will be debated for decades. There are many potential candidates, and the contribution of each is likely to spark great controversy. A recent special issue of Critical Review examines several arguments relating to the crisis. Joseph Stiglitz discusses irresponsible private behaviour, Juliusz Jablecki and Mateusz Machaj discuss the Basel accords, White investigates the role credit-rating agencies played and Wallison discusses the contributions to the crisis made by Fannie Mae and Freddie Mac and other features of the US housing market. Land-use regulation also played a role, and is analysed by Edwin Mills. At a more macroeconomic level, Carmen Reinhart and Kenneth Rogoff have provided an exhaustive history of boom and busts, including the sub-prime crisis.

The Deterioration in Lending Standards

In the 1970s, US social justice activists alleged that banks and other financial institutions were discriminating against minorities – usually African Americans and Hispanics – in a practice known as ‘redlining’. The US Congress passed two important pieces of legislation to deal with this potential problem. First, the 1975 Home Mortgage Disclosure Act (HMDA) required banks and financial institutions to collect and report data on their mortgage applicants. Second, the Community Reinvestment Act (CRA) of 1977 required banks and financial institutions to conduct business over the entire geographic region where they operated. Later, the HMDA was amended to permit the collection of data for both accepted and rejected mortgage applications, including details of the race and gender of the applicant. In 1992, the Boston Federal Reserve produced a working paper, subsequently published in the prestigious peer-reviewed American Economic Review, that provided empirical evidence showing that banks were discriminating against minorities.

The article begins by stating: ‘Any barriers to obtaining credit, particularly mortgage credit, would clearly inhibit the ability of minorities to

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4 Mills (2009).
5 Reinhart and Rogoff (2009).
escape or improve poor neighborhoods.’7 While trivially true, this statement makes no distinction between barriers that exist for sound business reasons and those barriers that exist for less sound reasons. The article investigates a sample of mortgage applications in the Boston area that consisted of ‘all applications for conventional mortgage loans made by blacks and Hispanics in 1990 and for a random sample of 3,300 applications made by whites’ – in other words, a non-random sample of applicants. The article indicates that 1,200 minority applications were made. The weightings of the different ethnic groups did not represent their population weights. Furthermore, the data did not include applications made by Asian Americans. A number of regression analyses were undertaken in the formal modelling. These regressions, however, tend to report (approximately) between 2,500 and 3,000 observations. Missing observations account for the discrepancy between their complete, yet unbalanced, dataset of some 4,500 observations and the final dataset included in the analysis. More than a third of the dataset is not included in the analysis. Nonetheless, Munnell et al report:8

The results of this study indicate that minority applicants, on average, do have less wealth, weaker credit histories, and higher loan-to-value ratios than white applicants, and that these disadvantages do account for a large portion of the difference in denial rates. Including the additional information on applicant and property characteristics reduces the disparity between minority and white denials from the originally reported 18 percentage points, or a relative rejection ratio of 2.8 to 1, to just over 8 percentage points, or a relative rejection ratio of roughly 1.8 to 1. Put another way, white applicants with the same property and personal characteristics as minorities would have experienced a rejection rate of 20 percent rather than the minority rate of 28 percent. Thus, in the end, a statistically and economically significant gap between white and minority rejection rates remains.

This conclusion suggests that, while there wasn’t as much racism in the mortgage market as expected, nonetheless some racism persisted after controlling for non-race-related characteristics.

Taking the results at face value, the policy issue is whether or not an eight percentage point difference is large or small. It may well be statistically significant, but is that difference economically significant? Stephen Ziliak and Deirdre McCloskey (2008) have written extensively on the importance of determining economic significance in addition to statistical significance.9 They have created a 19-point test that evaluates good statistical practice and applied that test to articles published in the American Economic Review during the 1990s, including the Munnell et al article.10

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10 The criteria are set out at Ziliak and McClosky (2008), pp 66–73.
Ziliak-McCloskey test ranks the Munnell et al article as being ‘very poor’ – it scored on fewer than six of the 19 requirements.\textsuperscript{11} Munnell et al did not actually establish whether the eight percentage point difference was economically significant; they simply assumed it to be so because it was statistically significant. In a play on words, Ziliak and McCloskey refer to this as being the standard error in much empirical analysis.

At the time, Gary Becker, the pioneer of the economics of discrimination and an economics Nobel Laureate, argued that the mythological flaws in the Munnell article made it ‘of dubious value in formulating social policy’.\textsuperscript{12} Becker also pointed to the fact that the study did not include Asian Americans who were more likely to get a mortgage loan relative to white Americans. In other words, the evidence suggested that US banks and financial institutions were not only discriminating against African Americans; they were also discriminating against white Americans. Despite this early criticism, the Munnell et al article was widely accepted as providing definitive proof that banks and financial institutions were discriminating on the basis of race when making loan decisions.

It has subsequently been revealed that the data used in the Munnell article were deeply and fundamentally flawed. Theodore Day and Stan Liebowitz report, after correcting the most severe data errors, that they find no evidence of racial discrimination – banks and other financial institutions had not engaged in redlining.\textsuperscript{13} Unfortunately the Munnell et al article originally appeared in 1992, and had already been very influential in public policy. For example, the \textit{Community Reinvestment Act} (CRA) was amended in 1995, directing regulators to examine how banks and financial institutions met the credit needs of the community.


\begin{quote}
Even the most determined lending institution will have difficulty cultivating business from minority customers if its underwriting standards contain arbitrary or unreasonable measures of creditworthiness.
\end{quote}

Considerations such as the age, location and condition of the property are ‘arbitrary’. Furthermore: ‘Policies regarding applicants with no credit history or problem credit history should be reviewed. Lack of credit history should not be seen as a negative factor.’ Banks were advised to review loan obligation ratios and requirements for down-payments. According to Stan Liebowitz:\textsuperscript{15}

\begin{quote}
\textsuperscript{11} Ziliak and McCloskey (2008), p 92.
\textsuperscript{12} Becker (1993).
\textsuperscript{13} Day and Liebowitz (1998).
\textsuperscript{14} See www.bos.frb.org/commdev/commaff/closingt.pdf, p 13.
\textsuperscript{15} Liebowitz (2008); see also Liebowitz (2009).
\end{quote}
Those ‘outdated’ standards existed to limit defaults. But bank regulators *required* the loosened underwriting standards, with approval by politicians and the chattering class.

While the Boston Fed argued that these ‘recommendations [were] intended as guidelines’, it also set out legal requirements for compliance in an appendix. According to Eamonn Butler:16

[T]he government was now forcing the institutions to make loans to people who they knew were not creditworthy.

And to make sure all this happened, more taxpayer funds were given to monitoring groups such as ACORN [Association of Community Organizations for Reform Now]. As public scrutiny of bank mergers and acquisitions increased following their 1994 Riegle-Neal deregulation, these groups were actually able to hold the banks to ransom. Under the CRA, if a lender wants to change its business operation in any way – merging with another bank, opening or closing branches, or developing new products – it must convince the regulators that it will continue to make sufficient loans to the government’s preferred groups of borrowers. ACORN and others can file petitions with the regulators to stop the banks’ plans.

This is not mere scare-mongering or hypothetical possibility; Thomas Sowell relates actual events where this type of thing happened.17 In 1993, the US Federal Reserve Board refused permission for the Shawmut National Corporation to acquire the New Dartmouth Bank due to Shawmut’s record on racial discrimination. As Sowell makes clear, Shawmut had no record of discrimination – no person had ever lodged a complaint against the bank; rather, there appeared to be a statistical discrepancy when it came to lending to minorities. After Shawmut paid $960,000 in settlements, the Federal Reserve withdrew its opposition to the merger.

Paul Craig Roberts wrote in a 1993 opinion piece entitled ‘How to Rob a Bank Legally’:18

The Justice Department, the Federal Reserve, and the FTC [Federal Trade Commission] are happy because they have succeeded in establishing that banks must divert a percentage of their capital into bad loans to minorities in order to avoid regulatory problems with the federal government. As Attorney General Janet Reno stressed: ‘I am hopeful that the industry will learn from Shawmut’s experience. Do not wait for the Justice Department to come knocking.’

In response, Lawrence Lindsey, then a member of the Federal Board of Governors, wrote that Roberts’ article was inaccurate.19 He claimed that the

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16 Butler (2009), pp 53–54.
17 Sowell (2009).
18 Roberts (1993).
Federal Reserve did not require banks to make bad loans and that ‘[p]reservation of a safe and sound banking system is our first responsibility’. Lindsey is now employed at the US think-tank The American Enterprise Institute for Public Policy Research, and in testimony to the US Senate Finance Committee in 2008 he made this comment:20

The regulatory community was placed under intense political pressure to come up with ways of providing access to credit for those populations, and did so, most notably with new rules under the Community Reinvestment Act. I was involved in that process and am proud of what was accomplished. In fact, most of those individuals could be and did turn out to be responsible borrowers and homeowners. But there can also be little doubt that in hindsight the new regulations did contribute to some of the excessive expansion in credit that has occurred. I note this mainly to provide a cautionary tale. Even very well intentioned and largely successful regulations can have unintended consequences. That does not mean that such actions were wrong, but that we should be very careful in how we use legislation and regulation in ‘solving’ current problems.

It is worth reflecting of what those ‘new rules under the Community Reinvestment Act’ actually meant. Peter Wallison explains:21

In 1995, the regulators created new rules that sought to establish objective criteria for determining whether a bank was meeting CRA standards. Examiners no longer had the discretion they once had. For banks, simply proving that they were looking for qualified buyers wasn’t enough. Banks now had to show that they had actually made a requisite number of loans to low- and moderate-income (LMI) borrowers. The new regulations also required the use of ‘innovative or flexible’ lending practices to address credit needs of LMI borrowers and neighborhoods. Thus, a law that was originally intended to encourage banks to use safe and sound practices in lending now required them to be ‘innovative’ and ‘flexible.’ In other words, it called for the relaxation of lending standards, and it was the bank regulators who were expected to enforce these relaxed standards.

Lindsey seems to suggest that unintended consequences of government policy were unknown in the 1990s, yet Roberts had identified the problem in 1993, while Ted Day and Stan Liebowitz had written in 1998: ‘The currently fashionable “flexible” underwriting standards of mortgage lenders may have the unintended consequences of increasing defaults for the “beneficiaries” of these policies.’22

19 Lindsey (1993).
20 Lindsey (2008).
21 Wallison (2009b).
By November 2007, 14 per cent of US mortgages were sub-prime. While that number may appear to be somewhat low, Danielle DiMartino and John Duca report that sub-prime loans were growing very rapidly, comprising 40 per cent of all new loans in 2006.\textsuperscript{23}

The actual timing of the crisis is explained by monetary factors. John Taylor provides empirical evidence for the connection between risk-taking in the housing market and low-interest monetary policies of the early and mid-2000s.\textsuperscript{24} Taylor had previously argued that US interest rates were far below what they should have been, and this caused over-investment in the housing market and over-pricing of the housing stock:\textsuperscript{25}

During the period from 2003 to 2006 the federal funds rate was well below what experience during the previous two decades of good economic macroeconomic performance – the Great Moderation – would have predicted ... With low money market rates, housing finance was very cheap and attractive – especially variable rate mortgages with the teasers that many lenders offered. Housing starts jumped to a 25 year high by the end of 2003 and remained high until the sharp decline began in early 2006.

When cheap finance was no longer available, beginning in mid-2005, borrowers had some difficulty refinancing their loans – in particular, those borrowers with adjustable-rate mortgages faced much higher interest rates. This led to an increase in mortgage delinquency and then to a realisation that loan quality was generally lower than had been expected. This in turn led to a tightening of credit standards and a subsequent increase in delinquency as even more borrowers couldn’t refinance their loans, and so on. An excellent discussion of the timing of the crisis itself can be found in DiMartino and Duca.\textsuperscript{26}

The overall lesson to be learned from this is that public policy very often has unforeseen consequences. This is not a new lesson, and this will not be the last time this lesson is learned. Ultimately, the crisis is due to government forcing banks to make loans at unreasonably low rates. Rather than have some individuals priced out of the market, government intervened and effectively lowered the price ceiling facing those individuals. This would have been less of a problem had interest rates not being artificially low after 2003. But when interest rates did fall too low, moral hazard problems arose whereby highly leveraged individuals could speculate in housing using finance from highly leverage institutions. In an effort to increase home ownership for minorities, the US authorities had engineered a decline in mortgage quality standards for all borrowers. This, combined with cheap finance, fuelled a speculative housing bubble.

\textsuperscript{23} DiMartino and Duca (2007).

\textsuperscript{24} Taylor (2009).

\textsuperscript{25} Taylor (2007), p 2.

\textsuperscript{26} DiMartino and Duca (2007).
Control by Regulation

Increasingly, governments attempt to use market forces, market instruments and market mechanisms to meet their intervention and planning objectives. Governments routinely devise schemes to manipulate and influence behaviour away from economic efficiency and market-based allocation of resources. Rather than employing command and control techniques, they devise a series of inducements and incentives to which individuals will respond, and so act in manner consistent with government (and even bureaucratic) preferences. As I argued in the previous section, this is what happened in the US housing market.

Ludwig von Mises describes this type of government intervention as the creation of artificial markets. He makes it very clear that artificial markets cannot replicate the efficiency and performance of non-artificial markets:

[I]t is not possible to divorce the market and its functions in regard to the formation of prices from the working of a society which is based on private property in the means of production and in which, subject to the rules of such a society, the landlords, capitalists and entrepreneurs can dispose of their property as they think fit.

Artificial markets require that capitalists and entrepreneurs engage in particular transactions – even if they do not wish to do so. Misean artificial markets violate the rule of law when they dictate that particular transactions must occur. To direct a bank or financial institution to enter into a transaction is not the enforcement of a general rule, but rather is arbitrary and discriminatory. As Friedrich Hayek writes:

We must now turn to the kinds of governmental measures which the rule of law excludes in principle because they cannot be achieved by merely enforcing general rules but, of necessity, involve arbitrary discrimination between persons. The most important among them are decisions as to who is to be allowed to provide different services or commodities, at what prices or in what quantities – in other words, measures designed to control the access to different trades and occupations, the terms of sale, and the amounts to be produced or sold.

The US government, over time, dictated that banks make loans under conditions they would not normally accept to individuals who could not repay those loans. The government forced banks and financial institutions to make loans where before they would either have charged a much higher rate or not made the loan at any price. The US government intervention was a direct assault on the price mechanism. As Hayek explains:

A free system can adapt itself to almost any set of data, almost any general prohibition or regulation, so long as the adjusting mechanism itself is kept functioning. And it is mainly changes in prices that bring about the necessary adjustments.

In other words, the government had regulated the economy by creating artificial markets. These markets, however, are likely to be inefficient and lead to economic distortions, ultimately resulting in failure and dislocation. Despite the appearance of market failure, this type of economic problem can be directly attributed to government.

One of the assumptions in the artificial market was that markets could absorb all the risks being created. It is true that economists believe that markets can best allocate risks to those individuals and institutions willing and able to bear the risk. That proposition, however, does not suggest that any number of risks can simply be passed into the market with no consequence. Mortgage loans were being securitised and on-sold to investors. These securitised loans were given ratings by rating agencies that suggested they were very low-risk investments. This practice is a violation of the Modigliani and Miller theorems. These theorems are named after the Nobel Prize-winning economists Franco Modigliani and Merton Miller – the theorems are explained in a series of articles in the late 1950s and early 1960s.30

The Modigliani and Miller theorems relate to the valuation of firms and their capital structures. Under some strict assumptions, the value of a firm is independent of the manner in which the cash flows of the firm are divided into either debt or equity. The risk of the firm is determined by the underlying assets, not how claims on those assets are organised. Similarly, the risk of making imprudent loans does not disappear simply because the claims on those loans are repackaged. It is true that some of the risk may be diversified away, but only if the risk were randomised. It is clear that the risks within the loan portfolios were not randomised. These theorems are especially sensitive to their assumptions relating to taxation and asymmetric information. If the securitised portfolios had some tax advantage or reduced asymmetric information, they may have added value. Yet it is not clear whether that actually occurred.

In short, the US government hoped to make use of market mechanisms to promote its social justice agenda. In doing so, it forced banks to make bad loans and then offload those loans in the market, expecting that the market could absorb those loans without any adverse consequences. A better understanding of markets and the Modigliani-Miller theorems would have warned them of the risks that this policy entailed.

Lessons That Should be Learned
In addition to the well-known issue of unintended consequences, there are other lessons to be learned from this experience. Markets cannot be cheaply

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30 A textbook explanation of these theorems can be found in Tirole (2006).
and easily distorted to achieve non-market objectives. While providing minority Americans with their own homes may be a noble objective, it is quite clear in retrospect that regulating markets to provide this outcome has proven to be very expensive. That is not to say that governments have no role to play in markets; rather, that role is severely constrained.

Government regulation is not always benign. Over two decades, the CRA and HMDA evolved from data collection and market coverage rules to legislation that allowed the US government to extort money and favours from the banking system. Regulators were able to allege discriminatory practices without having to produce a single victim of discrimination. Regulators were able to effectively set and enforce lending quotas for minorities. No wonder banks and financial institutions were eager to make loans that appear to have been predatory. Regulatory distortions in markets are large, and the costs associated with those distortions can be much larger than initially anticipated.

My final point relates to the use of academic inquiry in public policy-making. The Munnell article was described as being definitive, with the then Boston Fed President Richard Syron stating that no other studies would be needed. The lead author, Alicia Munnell, is quoted as saying: ‘The study eliminates all the other possible factors that could be influencing [mortgage] decisions.’ The study could only explain 32 per cent of the variation in the data – this is surprisingly low given Munnell’s broad and very definitive statement. One possible explanation for this result is omitted variable bias. Munnell et al recognise this could be an issue in their article and discuss the point in some detail. While they are confident that they do not have an omitted variable bias, they do concede: ‘How much of the remaining unexplained variance is due to possible omitted variables and how much to random error cannot be identified.’ We also know that the study ended up with a truncated sample, having excluded Asian Americans from the analysis. Results of empirical analysis such as the Munnell article should be interpreted carefully and cautiously. As Gordon Tullock explains, new results need to be treated with suspicion until they have been verified again and again. While this study has been severely criticised, even when in working paper form, it has never been retracted, nor has the American Economic Review published a rebuttal.

It is commendable that government regulators attempted to employ rigorous techniques to justify their intervention, yet it is also quite clear that the Munnell article was flawed. Reliance on that flawed data and on that flawed article has led to substantial loss of wealth.

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34 Tullock (1966).
Conclusion

This article has considered a very narrow aspect of the economic crisis. It is quite clear that the US government, over a period of decades, put in place a regulatory system that encouraged—indeed, almost mandated—banks to make imprudent loans. The warning signs were in place by the early 1990s, with some commentators expressing concerns about bad loans.

This is a story about aggressive social policy being pursued by ‘market mechanisms’, with little careful analysis of the potential problems that may arise. There is no doubt that the government officials involved were well-meaning. Lawrence Lindsey, for example, is ‘proud of what was accomplished’. In one sense he is quite correct: many of the people who would not otherwise ever have qualified for a loan did receive loans and have paid them off, and do now own their own homes. While this is a fine outcome for those individuals, is it too churlish to suggest that these are probably the most expensive homes in human history?

References


