Introduction JAMES DEMPSEY and TOM SORELL

Sophisticated financial activity is seldom studied in analytic philosophy. This collection is a preliminary and partial attempt at addressing the neglect of that topic. It is occasioned by the tenth anniversary—in 2018—of the Global Financial Crisis. The Global Financial Crisis is also the medium through which some of the moral and metaphysical issues raised by high finance are pursued in what follows.

The background to the crisis is well known to specialists. A fall and then a collapse in U.S. real estate prices after 2006 ushered in a complex series of defaults, runs, and liquidity problems that badly affected not only Wall Street but also European financial markets and, eventually, financial markets everywhere. The crisis was not very visible to the general public until the New York investment bank, Lehman Brothers, went out of business in September 2008. After that, severe stock market disruption and credit shortages dominated the headlines. Many other U.S. banks came close to failure, and so did others in the United Kingdom and Continental Europe.

The crisis was not an act of God. It resulted from, among other things, the creation and operation of markets in exotic financial instruments. Many of the inventors of the instruments and participants in the markets made a lot of money up to 2006, and they are among the people who have been blamed for the vast losses that were suffered afterward. Agents can only be blamed for what they are responsible for. But which agents does it make sense to say are responsible for bad outcomes on the scale and of the complexity of the financial crisis? Perhaps only large, institutional actors: governments, or government-appointed regulatory

DOI: 10.1111/misp.12080 © 2018 Wiley Periodicals, Inc. agencies, corporations, including banks. The U.S. Financial Crisis Investigatory Committee¹ is scathing about the bodies in the United States that oversaw banks both before and after 2006. The channels for *lobbying* available to banks are also made much of in arguments to the conclusion that the regulatory system was weakened by legislators to the advantage of banks. These and other arguments for assigning responsibility are considered by many of the essays in this edition of *Midwest Studies in Philosophy*.

Virtually no one thinks that a small group of powerful institutions, still less a few powerful individuals, have responsibility for the crisis as a whole. But responsibilities *in* the crisis are a different matter. Journalists have made lists of some of the supposedly guilty parties and their personal misdeeds: are those attributions of responsibility defensible, or are they only a way of personalizing, perhaps unjustifiably, a complex set of decisions, many of which were reasonable from the point of view of those involved? This volume considers some of the philosophical issues raised by both general and highly personalized attributions of responsibility. Some of the issues are conceptual. Without the financial crisis in mind, philosophers have sketched conditions for attributing collective rather than individual responsibility for various kinds of outcomes. Perhaps that concept of responsibility fits the financial crisis better than the more homely notion of individual responsibility. Or perhaps, more impersonally conceived economic forces are in play.

Assignments of responsibility are often couched in a variety of narratives of the crisis. Indeed, much popular discussion, in the media and in politics, uses narratives of the crisis to support a favored account of where responsibility for the effects of the crisis, or particular aspects of the crisis, should lie. This collection also makes use of narratives, but not in the same way as popular discussion. Popular narratives of the crisis are very often presented as mutually exclusive. That is, they are used to focus blame on one party to the crisis while simultaneously exculpating some other party or parties. The narratives given in this book, by contrast, are often complementary.

We can distinguish in the narratives between the more-or-less agreed *description* of the events that constituted the crisis, and the factors that according to the narratives *account* for those events. The remainder of this introduction sets out some of the events that are central to any description of the crisis. It then captures some of the main explanations that have been offered and links these with the essays that follow.

Table 1. Financial Crisis Major Events Timeline

2007	
January–July	Subprime mortgage underwriters Ownit Mortgage Solutions and New Century
January-July	Financial Corporation file for bankruptcy. Massive downgrades of mortgage-backed securities by rating agencies. Kreditanstalt für Wiederaufbau (KfW), a German government-owned development bank, supports German bank IKB.
August	Problems in mortgage and credit markets spill over into interbank markets; haircuts on repo collateral rise; asset-backed commercial paper issuers have trouble rolling over their outstanding paper; large investment funds in France freeze redemptions.
August 17	Run on U.S. subprime originator Countrywide.
September 9	Run on U.K. bank Northern Rock.
December 15	Citibank announces it will take its seven structured investment vehicles onto its balance sheet, \$49 billion.
December	National Bureau of Economic Research subsequently declares December to be the business cycle peak.
2008	
March 11	Federal Reserve announces creation of the Term Securities Lending Facility to promote liquidity.
March 16	J P Morgan Chase agrees to buy Bear Stearns, with Federal Reserve assistance, and Federal Reserve announces creation of the Primary Dealer Credit Facility.
June 4	Monoline insurers MBIA and AMBAC are downgraded by Moody's and S&P.
July 15	U.S. Securities and Exchange Commission issues an order banning naked short-selling of financial stocks.
September 7	Federal government takes over Fannie Mae and Freddie Mac.
September 16	Lehman Brothers files for bankruptcy.
September 25	Washington Mutual, the largest savings and loan in the U.S. with \$300 billion in assets, is seized by the authorities.
October	Financial crisis spreads to Europe.
October 3	U.S. Congress approves the Troubled Asset Relief Program, authorizing expenditures of \$700 billion.
October 8	Central banks in the United States, England, China, Canada, Sweden, Switzerland, and the European Central Bank cut interest rates in a coordinated effort to aid world economy.
October 13	Major central banks announce unlimited provision of liquidity to U.S. dollar funds; European governments announce system-wide bank recapitalization plans.
October 14	U.S. Treasury invests \$250 billion in nine major banks.
2009	•
May	Results of the Supervisory Capital Assessment Program ("stress tests") announced.
June	National Bureau of Economic Research subsequently declares June to be the business cycle trough.
October	Unemployment rate peaks at 10.0 percent.

1. THE MAIN EVENTS OF THE CRISIS (2007-08)

The financial crisis started in earnest when big financial institutions, particularly in the United States, were driven into bankruptcy, or threatened with bankruptcy, by losses in the subprime mortgage market. Table 1² provides a chronology of important events, beginning in 2007.

2. Gary B. Gorton and Andrew Metrick, "Getting Up to Speed on the Financial Crisis: A One-Weekend Reader's Guide," *Journal of Economic Literature* 50 (2012): 131.

1.1 "Runs" in Many Markets

A way of summarizing what happened during this period is by saying that, at different times, investors in short-term money markets, and retail bank depositors, withdrew their funds or refused to extend loans at maturity, actions which together constituted "runs" in each sector.

A "run" on a retail bank consists of many individual depositors withdrawing their funds at once, at levels that threaten to exhaust the bank's cash and other reserves. A second kind of "run" took place in money market funds (Table 1 uses the abbreviation MMFs). These were vehicles for the purchase of (typically short-term) commercial securities. Individuals and companies bought easy-to-redeem units or shares in these funds, which made them seem similar to bank deposits. Retail money market funds worked by pooling what were in effect the deposits of small investors into the big amounts needed to buy low-risk, high-return government investments. Wholesale money market funds bought the short-term debt ("commercial paper") of big companies, including banks, as well as shares. Money market funds were the prototype of the "shadow banking" sector: investments in those funds were perceived as safe on the model of bank deposits, but investments were not insured as bank deposits were, and money market funds did not have to retain capital against redemptions, as institutions with the official and legal status of banks had to do against withdrawal of deposits. Securities backed by mortgages were among those bought on a large scale by money market funds, and when the risks of these were suddenly re-rated upward in 2007, redemptions were also attempted by retail and commercial investors on a large scale. This was the second "run."

Alongside these runs, the "repurchase" or "repo" market started to seize up. This market involved the sale of securities by commercial firms (often financial services companies) for cash, with an agreement by the sellers to repurchase those securities at a price agreed in advance—a price that gave a return for the use of the cash. The term of the repurchase agreement was typically very short—sometimes overnight—but less often a month or three months. Buyers in repurchase agreements treated the commercial paper they were sold as collateral. In the event of a failure to repurchase at the agreed price, the collateral could be sold. If the collateral sold exceeded the value of the cash lent, the defaulting issuer of the security would take a "haircut" on the sale; if the collateral was equal in value to the cash lent, it would take no "haircut." The term of the security could also be extended or "rolled over" at maturity by security holders, and, by August 2007, they began to be unwilling to do this.

1.2 The U.S. Subprime Mortgage Market on the Brink

What happened in August was not the first event in the crisis. As Table 1 shows, the beginning of the crisis can be dated to June and July and affected a pair of companies involved in financing subprime mortgages, that is,

high-risk, high-interest house purchase loans. Typically, these were offered to borrowers with relatively low incomes who could only pay relatively small initial deposits. These high-risk loans were aggressively marketed, and, in the early 2000s, often approved without adequate documentation of the borrower's ability to repay. A combination of factors accounted for the laxity of lending practice in this area. Rising house prices meant that mortgaged properties could often be resold at a profit shortly after they were bought, without a borrower's ability to repay ever being seriously tested. Relatively uncredit-worthy mortgage holders could improve their credit ratings by refinancing mortgages, based on a very brief record of not defaulting on a house loan. This meant that over a short period of time many subprime borrowers could appear better able to repay than they actually were.

In the late 1990s and early 2000s, there were substantial pools of cash in the United States and in other parts of the world whose managers were seeking safe investments. U.S. government securities were a first choice of the managers of these cash pools, but mortgage-backed investments were an increasingly popular alternative. Mortgages held by the U.S. federal agencies, Fannie Mae and Freddie Mac, were attractive because they were relatively prudently originated. But other mortgages, even less well underwritten ones, were also attractive to investors. Many in the market, including U.S. pension funds, and many European and Asian banks, were willing to pay for a share of the mortgage repayments associated with subprime loans, especially if that share got a high rating from a credit-rating agency.

The lax practices of the mortgage originators enabled them to make home loans in sufficient quantities to keep up with demand for "safe" investments like mortgages. New "securitized" financial instruments allowed subprime and other mortgages to be combined and sold on, after first being divided into differently risk-rated "tranches" or slices, the higher risk tranches paying the highest returns. The higher risk tranches of securitized mortgage packages (rated BBB or lower by rating agencies) were themselves repackaged separately into collateralized debt obligations (CDOs). Some of the lower rated BBB tranches from securitized instruments with AAA tranches were, curiously, rerated as AAA when they were reinserted into CDOs (FCIC, 127-28). These instruments were themselves traded, and they appeared on bank balance sheets as assets, sometimes functioning as collateral in other transactions. Mortgage originators sold these securitized instruments to "structured investment funds" specially established as receptacles for these securities—and these funds bought the securities through the resale of asset-backed securities to managers of the cash pools already mentioned. At least one very large financial institution, Merrill Lynch, was involved in all aspects of the mortgage market: originating, securitizing, and trading. Citigroup, too, followed this approach. Others were less heavily but still substantially invested in these assets.

The subprime mortgage market in the United States was very vulnerable to a downturn in house prices, and when this occurred, in early 2006, underwriters of those mortgages inevitably suffered. Ownit and New Century Financial

were the first major casualties in the summer of 2007, as Table 1 shows, but in August, the banking arm of Countrywide, a huge U.S. mortgage provider, experienced a run. Similar runs by retail depositors were experienced a few months later in the United Kingdom by Northern Rock, a mortgage provider financed not by deposits but by borrowing on the money markets.

1.3 The Specter of Bank Failure

A crucial event in the crisis was the failure of an investment bank, Lehman Brothers, in September 2008. Lehman Brothers had borrowed heavily to buy high-risk tranches of securitized mortgages, and these "assets" plummeted in value after the summer of 2007, when Lehman had sold its own subprime mortgage originator. Unable to borrow or agree terms with other banks interested in taking it over, Lehman suffered huge losses and a steep decline in its share price. Its failure affected other institutions, including money market funds that had invested in it, and which were unable to cope with their own set of "runs." Both mortgage-backed securities and commercial paper issued by big business underwent a steep decline in value in September 2008. The Lehman bankruptcy affected not only money market funds that held its almost worthless shares and its worthless promises to repay, but U.S. money market funds in general.3 One MMF in particular, the Reserve Management Fund, had the distinction of being the first to "break the buck"-to be unable to cover its shares at a net asset value of \$1 per share—and this largely because it faced a run from large investors who had heard of its exposure to the Lehman bankruptcy. In addition to its effect on the money market funds, the prospect of the sale of Lehman's huge property portfolio depressed the values of other real estate holdings. Again, after Lehman's failure, other investment banks became targets for short selling: traders in the derivatives markets started betting on sharply lower share prices for each of the major Wall Street firms, even the hugely profitable flagship investment bank Goldman Sachs. Lehman thus illustrated the very far-reaching systemic effects of a large Wall Street failure.

Nine months before Lehman went into bankruptcy, seven loss-making structured investment vehicles (SIVs) were taken onto Citibank's balance sheet, having lost almost half their value in the preceding four months. As already said, structured investment vehicles were specialized finance companies that sold supposedly low-risk, asset-backed short-term bonds and other securities to finance long-term lending, including mortgage lending, at higher interest rates. Before Citibank intervened, the seven SIVs were not among its liabilities: they were part of the shadow-banking regime which existed off its balance sheet. Once they were taken onto Citibank's books, at a value of \$49 billion, it could start to be doubted that Citibank had the sort of balance sheet needed to maintain its "real" or nonshadow-banking activities. Provisions

^{3.} Patrick E. McCabe, *The Cross Section of Money Market Fund Risks and Financial Crises*. 2010 http://www.federalreserve.gov/pubs/feds/2010/201051/201051pap.pdf.

for huge losses connected to SIVs affected several U.S. banks, including Bank of America and Sun Trust, in the last three months of 2007. Northern Rock in the United Kingdom was in a similar position.

SIVs were vulnerable to two developments: a collapse in the values of their chosen long-term investments, for example through a high rate of mortgage default, and lack of cash when short-term securities matured and investors who did not want to roll them over had to be paid back. The downturn in property prices in the United States engaged both vulnerabilities. Buyers of short-term bonds became scarce, and back-up funding from banks dwindled. Or, in other words, problems of liquidity became threats of bankruptcy. These linked problems of liquidity and solvency are at the heart of the events listed in Table 1. Again and again, SIVs and other institutions that had hugely over-borrowed through short-term loans, and whose mortgage-backed securities were losing value, found themselves unable to borrow more to meet their short-term commitments to repay investors.

1.4 Wider Institutional Distress

The other main casualties of the problems in the U.S. real estate market were insurance companies and the two federal mortgage enterprises, Fannie Mae and Freddie Mac. Fannie Mae started out in 1938 as a government agency providing mortgage finance to private banks investing in governmentinsured mortgages. In 1968, it was privatized, and in 1970, it was authorized to buy privately originated mortgages. Freddie Mac was created to compete with Fannie Mae with a view to the establishment of an efficient secondary mortgage market. In the 1990s, both agencies were given the task of expanding home ownership among those on lower incomes. This was in effect a mandate to enter the subprime market without taking on undue risks and while also returning a profit. The private sector competitors of Fannie Mae and Freddie Mac in the 1990s used low underwriting (risk-rating) standards to issue mortgages in the subprime market with a view to reselling them to Fannie Mae. For a time, around the turn of the millennium, the folly of this kind of lending was recognized, and the resulting mortgages were no longer allowed to be bought by Fannie Mae and count toward its targets for affordable loans. After 2004, this policy was reversed. Private mortgage issuers reverted to poor underwriting practice, attracting customers away from Fannie Mae and Freddie Mac.

Freddie Mac and Fannie Mae securitized the relatively low-risk mortgages they financed and also guaranteed the resulting securitized products. But, as we have already seen, privately generated, poorly underwritten securitized mortgages were now proliferating and being traded without the oversight of the big federal agencies. These mortgages were not designed to be repaid affordably over a term of thirty years. They were sometimes geared to quick resales and payments that only covered loan interest. In the case of the market leader in subprime mortgages, Countrywide, the holder of a mortgage

and his credit worthiness were secondary to whether a mortgage could be resold to banks as material for asset-based securities (FCIC, 105). In order to decelerate and reverse their loss of market share, Fannie Mae and Freddie Mac lowered their own underwriting standards. By the time house prices started to fall, they owned or guaranteed around half of the mortgages in the United States. With so many of these exposed to default, both agencies faced financial extinction. Despite being given access to government loans at very favorable rates, the share price of both companies fell around 90 percent between 2007 and 2008. In September of 2008, they were taken over by the U.S. government.

Coming finally to insurers, Table 1 highlights events in June and September 2008. In June, two monoline insurers had their credit ratings downgraded. Monoline insurers guarantee the repayment obligations of bond issuers. If the credit rating of the monoline insurers goes down, so does the credibility of their guarantees. The downgrading of MBIA and AMBAC was a sign of plummeting confidence in even supposedly low-risk issues of bonds. In the case of the huge insurer AIG, a credit downgrade greatly added to the collateral it had to offer in credit default swaps (CDSs) it had already committed itself to. CDSs were promises to pay on behalf of a bond issuer in case the bond issuer itself could not meet its debts. In September 2008, AIG did not have the cash to meet these obligations and had to be extended a federal government loan of \$85 billion to avert bankruptcy, and a catastrophe for the many companies whose securities AIG had guaranteed. AIG had commitments to cover, among others, huge defaults arising from securities backed by collateralized debt obligations. Even though as an insurance company it was not part of the deposit-taking and mortgage-issuing and holding system that the U.S. government was legally responsible for, it was too big and too enmeshed with other important financial institutions-not only in the United States but globally—to be allowed to fail.

2. SEVEN FACTORS EMPHASIZED IN LEADING NARRATIVES OF THE CRISIS

So much for the events of the financial crisis, at least at its epicenter in New York. We come now to factors offered to explain the crisis as described. Seven general factors are represented in commentaries on the crisis⁴:

 Low interest rates in the United States in the period leading up to the crisis encouraged a flight by investors to real estate and some financial derivatives. This factor is emphasized, for example, by Robert J. Shiller who draws on the idea that investor flight to U.S. real estate resulted

^{4.} See, for example, Andrew W. Lo, "Reading about the Financial Crisis: A Twenty-One Book Review," *Journal of Economic Literature*, 50, no. 1 (2012): 151–78; Gorton and Metrick, "Getting Up to Speed," 128–50.

- in an bubble in housing prices, the bursting of which was the trigger for the crisis.⁵
- 2. The securitization of such things as mortgage and credit card debt led to markets in financial products that were too hard to assess for risk. Securitization was the process of aggregating credit card and mortgage debt, including their repayment streams. Shares of these income-producing products would then be sold, the income varying with the risk rating of the underlying debt. Gary Gorton⁶ focuses on how these complex structures generated informational opacity with layers and layers of complex financial products built using mortgages and credit card debt as the foundation. When the housing bubble burst, it was the opacity of these structures that caused the broader contagion throughout the financial system, even though only about 2 percent of complex financial products of this kind were based on the problematic subprime mortgages.
- 3. The aggressive marketing of credit schemes to high-risk borrowers, and the quick selling on of securitized mortgage and credit card debt made it hard to detect large amounts of bad debt among large amounts of good debt. Indeed, it is an explanatory factor emphasized by Joseph Stiglitz⁷ as a central part of his polemic discussion of misaligned incentives, and by the likes of Akerloff and Shiller⁸ in their account of the mechanisms behind the crisis.
- 4. The deregulation of acquisition and merger activity by banks produced institutions whose failure threatened large-scale financial systems not just in the United States but globally. This is the problem of too-big-to-fail (TBTF) banks. Sometimes, it is formulated strategically: financial institutions in the United States that became very large through legalized acquisition and merger activity could count not just on their capital reserves to save them if things went wrong, but government bailouts. This encouraged them to keep reserves relatively low to invest recklessly with either customers' money or borrowed money. This version is further part of the account of misaligned incentives offered by Stiglitz.⁹ Bank deregulation of a different form allowed "shadow-banking" to develop in the form of retail and commercial MMFs and the over-the-counter derivatives market, where the liquidity and debt of counterparties was almost always opaque. Gillian Tett, for example, invokes the now infamous failed attempt by

^{5.} Robert J. Shiller, *The Subprime Solution: How Today's Global Financial Crisis Happened, and What to Do about It* (Princeton, NJ: Princeton University Press).

^{6.} Gary B. Gorton, Slapped in the Face by the Invisible Hand: Banking and the Panic of 2007 https://doi.org/10.2139/ssrn.1401882.

^{7.} Joseph Stiglitz, Freefall (London: Allen Lane, 2010).

^{8.} George A. Akerlof and Robert J. Shiller, *Animal Spirits: How Human Psychology Drives the Economy, and Why It Matters for Global Capitalism* (Princeton, NJ: Princeton University Press, 2009).

^{9.} Stiglitz, Freefall.

- Brookesly Born, head of the Commodities Trading and Futures Commission in the United States, to have credit default swaps regulated, as a paradigm example of the importance of this factor.¹⁰
- 5. Banks were able to use their influence with politicians to ensure their interests were favored. (This is sometimes called "regulatory capture.") Bank influence is sometimes traced to partisan campaign contributions. Alternatively, it can be seen as the result of the accumulation of "intellectual capital," or the widespread belief that Wall Street knew best, and that what was good for Wall Street was good for everyone. This is part of the story of the rise of a "financial oligarchy" presented by Johnson and Kwak. They are joined by Jeffrey Sachs in tracing this rise to an influential stream of political ideology in the United States and the United Kingdom that favored the withdrawal of the state as far as possible from the management of the economy, both from direct intervention via fiscal policy and indirect regulation of markets.
- 6. The politicization of the mortgage market in the United States contributed to the crisis of the two U.S. government mortgage agencies, Fannie Mae and Freddie Mac. Allegedly, a politician-driven policy of expanding home ownership among low-income groups increased the numbers of bad subprime mortgages, although there is still room for disagreement as to whether this policy was most clearly enacted through excessive government interference in the market or excessive deregulation.¹³ There is also disagreement on whether such policies were doomed to failure—credit was offered on unaffordable terms, but need this have been the case if government-supported real estate programs had been better targeted and administered?
- 7. Cash surpluses in foreign, including sovereign, investment funds stoked up the huge demand for the high-yielding investments, particularly in the United States in the early years of the millennium. Real estate debt was sought as an alternative to U.S. government debt, and the originate-to-distribute model for mortgage-backed assets catered for this demand. Indeed, according to Tony Dolphin, this trend can be traced back to the reaction of Asian economies to the Asian financial crash of the late 1990s, and the adoption of similar policies by China and oil exporting countries.¹⁴
- 10. Gillian Tett, Fool's Gold: How the Bold Dream of a Small Tribe at J.P. Morgan Was Corrupted by Wall Street Greed and Unleashed a Catastrophe (New York: Free Press, 2009).
- 11. Simon Johnson and James Kwak, 13 Bankers: The Wall Street Takeover and the Next Financial Meltdown (New York: Knopf Doubleday Publishing Group, 2011).
- 12. Jeffrey Sachs, *The Price of Civilisation: Economics and Ethics after the Fall* (London: The Bodley Head, 2011).
- 13. Peter J. Wallison, "The True Origins of This Financial Crisis," *American Spectator*, 2009 http://spectator.org/articles/42211/true-origins-financial-crisis [accessed 9 March 2015].
- 14. Tony Dolphin, *How To Make Capitalism Better: Conclusions from the Tomorrow's Capitalism Programme* (London): Institute for Public Policy Research/Friends Provident Foundation, 2009).

All of these proposed causes of the financial crisis are mentioned in this collection. For example, Marco Meyer's essay is a sustained examination of issues raised by (3). Meyer asks when, if ever, subprime borrowers ought to be lent money. The answer is not "never." But neither is it "commonly and no questions asked." The latter approach can be said with only a little exaggeration to have typified mortgage lending at the turn of the millennium in the United States.

The two most synoptic essays in this volume, by Tom Sorell and David Silver, mention all of (1–6), while also addressing the questions of who was responsible and how bad the crisis was morally. Sorell claims that people at the top of banks like Lehman Brothers were individually responsible alongside regulatory institutions and other public bodies. Rash and greedy or impatient individual investors and borrowers also contributed to the crisis, Sorell says, but they took the bad financial consequences often personally and directly, while many in investment banks survived the crisis wealthy and unpunished. Not only were those in charge of banks reckless; they damaged the Rawlsian social contract by subordinating the socially useful banking function of intermediation and deposit taking to speculative activity.

Silver's claim is different. According to him, it was the "moral culture" of the financial services industry as a whole, not the actions or culture of individual banks, that gave rise to the crisis. This was a culture of imprudence, greed, arrogance, and other vices. The industry spent vast amounts of money to change U.S. legislation that protected against the effects of those vices, and then took money from the U.S. and other governments to prevent or stave off a total collapse of financial services.

Most other essays in the volume apply different theories of responsibility, especially theories of collective responsibility, to selected bank and investor behavior in the precrisis and immediate postcrisis periods. Peter French argues that individuals cannot be held responsible for the whole crisis even though they can be held responsible for individual acts of intentionally mis-selling financial products that were typical in the precrisis period. This involves him in reconsidering some of his earlier views on responsibility. Steven Scalet takes his starting point from the notion or organizational purpose and asks how that helps with the allocation of responsibility for the financial crisis.

James Dempsey, developing earlier work of his own,¹⁵ considers how the concept of culture, which we have already seen invoked by Silver, helps to allocate responsibility to many in banks, not just those at the top, during the financial crisis. Vilhjálmur Árnason and Salvör Nordal attempt to show that, vague as it is, Silver's notion of moral culture does apply to Icelandic banking during the financial crisis.

Kendy Hess develops a notion of "collateral responsibility" that is not individualist, collectivist, or holist, and applies it to the activity of Countrywide, a mortgage originator that failed early in the crisis. Jeffrey Moriarty takes

^{15.} See James Dempsey, "Moral Responsibility, Shared Values, and Corporate Culture," Business Ethics Quarterly 25, no. 3 (2015): 319-40.

the financial incentives that were given to bankers to take risks. Should these have been kept under control by regulators alone? No, Moriarty says. Executives and bankers in financial services firms, respectively, offered and acted upon the incentives, and members of both groups are blameable on both counts. Catherine Greene considers the valuation of exotic financial assets and argues that legislation by itself will not address the associated risks. More is needed, in fact something like personal virtues, on the part of actors in finance.

Boudewijn De Bruin asks whether theories of individual and collective responsibility for complex events do justice to the financial crisis, any more than they do justice to climate change. In a sense, he says, no one was to blame for the financial crisis. In an article that sometimes seems to agree with De Bruin's but in fact does not, Mark Hannam denies that bankers and banking should be blamed for the crisis, defending as reasonable at the time many of the investment and securitization practices that are routinely criticized by commentators. In fact, he says, the responsibility for the crisis is shared by all of us through our connection to democratic institutions that passed the laws that allowed banking to get out of control. Joseph Heath, too, is more charitable to the bankers and regulators than other critics. Mistakes were made, to be sure, but the proliferation of certain financial instruments—especially credit default swaps—could reasonably have been viewed as a kind of insurance against financial disarray, rather than, as they appear in hindsight to be, exacerbators of the liquidity problems that were the last straw in 2008.

Although the essays mainly focus on activity included in Table 1, two broaden the temporal and geographic perspective. Seumas Miller's paper considers the manipulation of the interbank lending rate usually referred to as the "Libor scandal." This gained prominence after 2008, though some manipulation may have occurred earlier. Miller applies his own theory of collective responsibility to the Libor scandal. Jens Van 't Klooster takes up some of the effects in Europe of the crisis, in particular lending to governments from the European Central Bank. These loans, like domestic bailouts in the United States and the United Kingdom, were widely regarded as improper, but van 't Klooster also considers their constitutionality, and the way they count as an "emergency" in the sense of something justifying the exceptional exercise of exceptional powers

3. TEN YEARS ON

What has happened since 2008? U.S. share prices as measured by the S&P 500 index have gone up hugely—from 850 on the index in November 2008 to over 2600 in April 2018. The U.K. stock market also boomed in 2017 and 2018. U.S. banks now have enormous numbers of employees—in some cases

^{16.} Almost uniquely among the contributors—Greene is the other exception—Hannam has direct and sustained experience of high finance as an ex-banker in London. He has helped the editors of this volume meet many who were involved during the financial crisis in banks on both sides of the Atlantic.

about a sixth of their work force-collecting and analyzing data on their susceptibility to catastrophic losses. The international Basel 3 agreement has introduced voluntary requirements on the amounts of capital held by investment banks, and in particular "globally systemically important" banks. These measures have to some extent undone the addiction before 2008 to borrowed money for investment. In the United States and the United Kingdom, legislation has been introduced that insulates governments and taxpayers from the consequences of bank failure. Sometimes, this has been accomplished (as in the United Kingdom) by decoupling the retail and investment operations of banks. In the United States (under the 2010 Dodd-Frank Act), the numerous regulatory agencies of the pre-2008 era have been consolidated and some speculative investment by banks restricted (the Volcker Rule). In addition, "predatory lending" such as operated in the subprime mortgage market of the early 2000s has been outlawed. Securitization of mortgages and other debt has been restricted. In short, many of the seven causes of the crisis listed earlier have been acknowledged and addressed.

It would be a mistake, however, to think that a new financial crisis is unthinkable or that the effects of the financial crisis are no longer being felt. Low interest rates since the crisis have spurred large amounts of personal borrowing and are perhaps creating conditions for a new subprime market Donald. Trump promised early on in his term as president to consider some deregulation of the banking sector, another slightly ominous form of backsliding. Although bank bailouts in the United States have been repaid with interest, the same is not true in the United Kingdom, and European bank share prices are still very far below their precrisis levels. The after effects of the financial crisis are still visible in big United Kingdom government budget deficits. Finally, Brexit is clouding the prospects for financial services in the United Kingdom and Europe after 2020. Whatever happens in the next ten years, it should not be anticipated with anything like complacency.¹⁷