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The Financial Crisis Inquiry Commission and Economic Research

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The financial and economic crises of 2007–2009 were extraordinarily disruptive. They created a "Great Recession" that left millions unemployed and destroyed trillions of dollars in household wealth. The economic recovery was painfully slow, and the financial system still bears the scars. In May 2009 (as it turned out, one month before the trough of the recession), the US Congress created the Financial Crisis Inquiry Commission (FCIC) to conduct an independent investigation of the causes of the crisis. That investigation served as the evidence base for public hearings, internal and external reports, and in January 2011, a 633-page *Final Report* (Financial Crisis Inquiry Commission 2011). The report almost certainly remains the most cited source about the crisis in articles, books, and court cases; it is still used extensively in university classes in economics, policy, business, and law departments; and the results of our investigation helped inform the US Department of Justice and the Securities and Exchange Commission in fraud cases that brought in billions of dollars in fines from financial institutions.

Our investigation was shaped in substantial part by economists and other experts. Some of those experts were on our staff. Staffing was a challenge given

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the tight deadline, and experts willing to work long hours were welcome. We also benefited from research published before and during the investigation and had numerous interactions with experts who made themselves available as outside resources. We asked many researchers who had published well-cited, data-driven papers to submit testimony, brief Commissioners, and speak with our staff in recorded interviews. We also needed help from researchers who had access to key data sources and understood how to use them.

In this article, we describe ways that economists and other experts can best be a resource for government efforts like the staff work of the Financial Crisis Inquiry Commission. In particular, early research on a new issue is invaluable, even in the fog of confusion and uncertainty. Although we began our work with the FCIC barely one year after the height of the crisis, there was already a strong core of crisis literature, and many aspects of the crisis were well-understood. Central to the financial crisis were subprime mortgages—mortgages to borrowers with a relatively high risk of default—and the securities into which they were packaged. There was little debate that there had been widespread defaults on subprime mortgages, most of which had been packaged, securitized, and sold by banks and investment banks as "private-label mortgage-backed securities"—so named because they were not backed by government-sponsored enterprises. In turn, the riskiest of these securities had been repackaged and resecuritized into other financial products called "collateralized debt obligations," which were often funded short-term with asset-backed commercial paper and repurchase agreements. There was also little debate about what had happened to these products. Some of the country's largest financial institutions—including AIG, Merrill Lynch, and Citigroup—had failed or nearly failed after reporting billions of dollars of losses on collateralized debt obligations. Widespread runs on asset-backed commercial paper and repurchase agreements, in which borrowers found themselves unable to roll over short-term debt due to concerns about the mortgage market and the financial health of financial institutions, marked the two most critical episodes of the financial crisis in the summer of 2007 and the fall of 2008. The government had taken extraordinary steps to support many large companies, leading to a resurrection of the term "too-big-to-fail."

Yet many questions remained unanswered or controversial, due to lack of data or incomplete analysis. There was much debate about how the losses in subprime mortgages had gotten so bad and how they had become concentrated in those too-big-to-fail companies. Were collateralized debt obligations and asset-backed commercial paper accelerants of the crisis, or simply badly designed financial products? What role had been played by derivatives, financial products that mirror the performance of referenced assets, which were ubiquitous in the production and trading of collateralized debt obligations? How had so much of the financial system become dependent on short-term funding? Why had the managers of the country's largest banks, investment banks, and insurance companies made decisions that in retrospect proved so self-destructive?

The most contentious question of all had to do with government housing policies that subsidized homeownership. Had they played a significant role in the financial shenanigans of the boom years? More to the point, had the government-sponsored enterprises contributed to the debacle around private-label mortgage-backed securities? This question was the source of much division in the contemporaneous public debate. Both sides of the political aisle used the issue as a wedge to argue for or against official interventions in the housing market and, more broadly, the economy. Our empirical and investigative work ultimately concluded that housing policy had not been a leading cause of the crisis, and nine out of ten Commissioners agreed with that conclusion.

Other factors did emerge as important causes, as we describe below. Rather than think of the crisis as *a perfect storm,* with the implication that it was an unfortunate but unavoidable confluence of unpredictable events, the staff sought to distinguish between risks that were firmly in the public debate in the precrisis years of the mid-2000s and those that were not. On the one hand, the media of 2005 and 2006 were replete with discussions of a housing bubble and potential crash. On the other hand, there was little understanding among experts in business, government, or academia that securitization and derivatives could concentrate risks, or that short-term funding markets could be vulnerable to old-fashioned banking runs. Similarly, there was general awareness that "self-regulation" had created a hands-off relationship between regulators and financial institutions, but a poor understanding of how little appreciation some of those institutions had about their own risk exposure.

In this essay, we begin with some background on the Financial Crisis Inquiry Commission itself, including how its work was organized and staffed. We then describe four ways economists and other experts contributed to our work: joining the staff; conducting timely and relevant research; participating in hearings and interviews; and supporting various novel data projects that the staff created to answer questions for which existing data were inadequate. We close with a case study on the internal controversy over the role of government housing policy in the crisis and the analysis we conducted to address it.

Origins of the Financial Crisis Inquiry Commission: Mission and Staffing

The Financial Crisis Inquiry Commission was created by the Fraud Enforcement and Recovery Act of 2009 (Public Law 111–21), with six Commissioners to be appointed by the Congressional majority and four by the minority. The Commission was given subpoena power and authorized to hold hearings. It was required to submit a report to Congress in December 2010 (although the report was actually submitted the following month).

When the enabling legislation was signed into law in May 2009, the Democratic party had a Congressional majority. Thus, the Commission had six members

appointed by the Democratic leadership in Congress and four by the Republican leadership. The six Democratic appointees were Phil Angelides (chair), Brooksley Born, Byron Georgiou, Bob Graham, Heather H. Murren, and John W. Thompson; the four Republican appointees were Bill Thomas (vice chair), Keith Hennessey, Douglas Holtz-Eakin, and Peter J. Wallison.

Once the chair and vice chair hired an executive director, those three people largely organized the approach to the work and allocated the budget, although all of the Commissioners periodically met and weighed in. When the Commissioners met, they also reviewed and debated interim findings and considered how to report those findings to Congress. The Commission was ultimately given a budget of $9.8 million, which largely went to maintaining a staff of 87 people that rotated through a nondescript floor of an office building near the White House.

From the early days, it was clear that the Financial Crisis Inquiry Commission would operate in a challenging political environment, internally and externally. Since a majority of Commissioners had been appointed by one political party, there was little urgency for all ten Commissioners to seek common ground. In contrast, earlier Congressional commissions such as the 9/11 Commission (National Commission on Terrorist Attacks Upon the United States 2004) and the commission created in the aftermath of the savings and loan crisis of the late 1980s and the early 1990s (National Commission on Financial Institution Reform, Recovery and Enforcement 1993) had equal party representation.

Moreover, the first twelve months of the Commission's work coincided with an intense battle in Congress over the legislative response to the crisis. The senior staff assistant to the vice chair later wrote a PhD thesis on "organizational politics" that incorporated the example of a Democratic Congress that was reluctant to create an independent commission to study the causes of the crisis, lest the conclusions dilute the momentum for its desired financial reforms (Ganz 2016). On the other hand, internal discussions among Commissioners (later made public) show that for at least one Republican Commissioner, the risk was rather that the *Final Report* could support new regulations (Democratic Staff of the Committee on Oversight and Government Reform 2011). At any rate, in July 2010, while the Commission was in the middle of the allotted time for its task, the Democrat-led Congress passed the Dodd-Frank Wall Street Reform and Consumer Protection Act, the most significant financial regulatory reform in decades, with few Republican votes.

The leaders of the Financial Crisis Inquiry Commission hoped to meet the challenge of partisanship through independent and disinterested analysis. The week of his appointment in July 2009, FCIC Chair Phil Angelides told the press that he believed "the mission is so important that it can and must transcend" partisanship (as quoted in Boles 2009). In a similar spirit, Vice Chair Bill Thomas, the senior Republican on the Commission and a former college instructor, said in his opening remarks at an early hearing: "[W]e are the diagnosticians for the U.S. economy; we also have to be investigators, economists and historians. But, most of all, we have to be teachers. . . . In order to be good teachers, we must first be good students" (Thomas 2010).

The mandate to determine the causes of the financial crisis was unusually broad, compared to similar post-crisis initiatives. For example, when Congress had created the National Commission on Financial Institution Reform, Recovery and Enforcement (1993) almost two decades earlier to investigate the savings and loan crisis, whose work the FCIC staff admired and occasionally sought to emulate, the primary focus was on the broad causes of the crisis from a largely academic perspective. Ferdinand Pecora—who actually conducted the legendary investigation of the financial collapse of 1929 in a series of Senate Committee on Banking and Currency (1934) hearings, rather than through a commission—focused on institutional failures in the financial sector, rather than underlying causes. In contrast, the legislative mandate of the Financial Crisis Inquiry Commission required us to examine both the failures or near-failures of major individual financial institutions and the broad causes of the crisis. The law even gave us a list of 22 possible causes to analyze; for example, the first 10 possibilities it listed were fraud, regulatory failure, savings or fiscal imbalances, monetary policy, accounting practices, tax policy, capital and liquidity requirements, credit rating agencies, lending practices and securitization, and affiliations between banks and nonbanks.

The Commissioners decided early to pick targets carefully, recognizing it would be impossible to cover everything about the financial crisis in less than 18 months between their appointment in July 2009 and the December 2010 deadline for the *Final Report*. Time and money were both major constraints. The Commission did not expect to pay equal attention to all 22 topics mentioned in the statute; there would be no ranking of causes. Also, it could not comprehensively investigate every company that played a role in the crisis. For example, for an analysis of the role of credit rating agencies, the Commission chose to focus its investigation on Moody's rather than S&P or Fitch; for the analysis of government-sponsored enterprises, it focused on Fannie Mae rather than Freddie Mac. In some cases, the Commission made these decisions because other entities had already conducted credible investigations of some institutions, and the Financial Crisis Inquiry Commission did not need to duplicate previous work (Ward 2020). We quickly determined that our comparative advantage was in studying the financial crisis. As a result, to the degree the FCIC's *Final Report* opined on the causes of the economic crisis, the report largely reflected contemporaneous academic thinking.

The chair, vice chair, and executive director, with support from the remaining Commissioners, decided to organize the staff into two groups—research and investigation—reflecting the dual mandate from Congress. Senior hires across the staff were approved by the chair and vice chair while the executive director was largely given authority to hire less senior people without approval.

A research team led by the director of research had the primary mission to investigate the underlying causes of the crisis. Once hired, the first responsibility of the director of research was to develop a plan with the executive director, chair, and vice chair for hiring a team and organizing the work. The research staff included PhD economists who specialized in topics like mortgage finance, macroeconomics, and derivatives; academics and practitioners with deep financial and regulatory

experience, many on detail from regulatory agencies such as the Federal Reserve and the Federal Deposit Insurance Corporation; and a few academics brought in on a temporary basis to support the production of specific preliminary reports or chapters in the *Final Report*. Early hires included experts who had strong prior knowledge of the relevant academic literature.

The research team prepared "preliminary staff reports" exploring potential causes of the crisis across a wide range of topics. We published these preliminary reports prior to hearings on related topics.[1] The existing early-stage economic research and interviews with academics were a critical input. In addition, the research team analyzed confidential information collected by the Financial Crisis Inquiry Commission and participated in interviews with financial market participants. The preliminary staff reports and other work by the team helped to create a baseline understanding for FCIC staff and Commissioners of how the financial system came to be what it was in 2008 and where the fragilities were. In addition, the research team highlighted issues that may have more specifically led to institutional failures.

The investigations staff was initially led by three senior investigators hired by the executive director, chair, and vice chair. Staff had predominantly legal backgrounds. The investigative teams were ultimately combined under one director of investigations, promoted from that group. The teams led the production of "preliminary investigation reports," which were case-study investigations of specific financial firms and regulatory agencies that played pivotal roles in the crisis. These preliminary reports remained confidential at the time, but are now available through the National Archives. The preliminary investigation reports largely reflected the analysis of confidential information related to particular financial institutions and interviews of financial market participants and experts.

There was continual cross-pollination between the research and investigative teams. Members of both teams attended most interviews, promoting a common understanding of the crisis narrative that emerged across the staff over the course of the months we worked together. Research staff contributed to case studies and investigation staff contributed to research reports.

The staff was largely in place by spring 2010, almost a year after the Commission was initially formed. Roughly speaking, staff focused mostly on hearing preparation during the first half of 2010 and mostly on drafting the *Final Report* during the second half; for the report, research staff took the lead on thematic or historic chapters, while investigation staff took the lead on institution-focused chapters. As the focus changed, the composition of the staff changed modestly. For example,

[1] Stanford University's Rock Center for Corporate Governance and Stanford Law School together host an archival website for the work of the Financial Crisis Inquiry Commission, which includes not just the *Final Report*, but also background documents, information on hearings, emails, audio recordings, and more. The ten "preliminary staff reports" are available at https://fcic.law.stanford.edu/resource/reports/ (accessed on March 4, 2024). The Yale Program on Financial Stability also hosts an archival copy of the FCIC website at https://ypfs.som.yale.edu/financial-crisis-inquiry-commission (accessed on March 4, 2024).

once the focus was less on investigation and more on drafting, some investigation staff left the Commission and people with writing and editing expertise were hired.

Academic researchers on the staff were essential to our work. They helped to interpret outside research, conduct analysis, and communicate findings. However, the work of a government commission can stretch well beyond the typical skill set of an academic researcher. Staff often need to be generalists, use and communicate a range of research findings (not just the individual's preferred findings), work on a deadline, and be comfortable with less autonomy and with publishing analysis amidst substantial uncertainty. As a result, researchers from outside academia, such as those from government agencies, also played an essential role on the staff.

One lesson from our experience is that a government entity is—or should be—hesitant to hire researchers with an established and immovable point of view. Some unsolicited offers to join the staff or write parts of the report were less than helpful. For example, some prominent academic economists offered to commit significant time to the Commission with the stipulation that the findings in their previous research would be featured. Even in cases where the evidence we were gathering supported those findings, we found such agreements too risky. We needed people who, first, had a fully open mind to the unfolding evidence and, second, were willing to subordinate their own agenda and priorities to the larger project. That said, we were able to usefully interact with those academics on an informal basis and they were valuable external resources.

It should be acknowledged that even for those who have the skills and interest, getting hired can be a messy and complicated process. In our case, the Commission did the bulk of its hiring over the course of just a few months. Hiring plans may be already settled by the time researchers become aware of the staff's work. Then, subsequent hiring happened when we assessed an urgent need and looked for someone who could join the staff within just a few weeks. As a result, in the case of a short-lived project like the Commission, the way that researchers become aware of the staff's work and staff become aware of potential hires was often through word-of-mouth.

Timely and Relevant Research

When major economic and financial events happen, at least some researchers will find themselves with the combination of prior expertise, access to data, time, and enthusiasm to pivot from their existing research projects. Experts can make a valuable contribution to the understanding of an emerging issue by conducting innovative research early on, even while recognizing the inevitable limitations of work done so quickly. Early published research from 2008 and 2009 on the financial crisis was critical to the work of the Financial Crisis Inquiry Commission.

From the very start of the Commission's work, the research team sought to develop an understanding of the arguments over the causes of the crisis. The research team pored over early research about the causes of the crisis from sources

like the Federal Reserve Bank of Kansas City (2008, 2009) annual conferences in Jackson Hole, a collection of white papers from Stern Business School faculty at New York University (Acharya and Richardson 2009), reports published by Baily, Litan, and Johnson (2008) and by the Committee on Capital Markets Regulation (2009), and a collection of articles about the financial crisis in a double-issue of *Critical Review*.[2] We also reviewed two symposiums organized by this journal: the Symposium on Early Stages of the Credit Crunch in the Winter 2009 issue and the Symposium on Financial Plumbing in Winter 2010.

We often found valuable contributions outside these high-profile initiatives. In the immediate wake of the financial crisis, there was a strong global demand for new perspectives on an event that many in the economics profession had gotten wrong. Working papers sometimes had an outsized influence. Moreover, the crisis emanated largely from sectors of the financial system where few academic economists had expertise, such as investment banking, securitization, derivatives, and asset management. The term "shadow banking" had become popular to describe such activities that mirrored traditional banking activities, but were done outside the traditional banking sector and thus without the same traditional banking safeguards. New voices from academic-adjacent fields sometimes emerged with original insights on these activities. For example, Pozsar (2008) produced the first version of his very influential "shadow banking map" while at Moody's Economy.com, before moving to the Federal Reserve Bank of New York. Another example was the Harvard undergraduate who had acquired for her remarkable thesis, and generously shared with us, a database of hundreds of billions of dollars of collateralized debt obligation securities that had channeled much of the risk in the mortgage market in opaque ways (Barnett-Hart 2009). Her work had been part of the background material for the book (and later movie) *The Big Short* (Lewis 2010).

Some experts have built their careers on work they launched in those years, and some working papers had outsized influence amidst the strong demand for insights. Meanwhile, journals invited scholars to write papers on timelines that were much faster than normal. The most effective work of this kind acknowledges the sources of uncertainty and questions that remained unaddressed. Nonetheless, it is an essential start for pointing government entities in the right direction.

Outside experts can also volunteer to be a resource—helping government staff get up to speed very quickly on the state of knowledge, providing insights about where the staff should focus their efforts, and pointing to data and other evidence. To help government staff understand where the academic literature stands on an emerging issue, literature reviews are invaluable. Even if such a review is well-known among academics, directly sharing it with government staff is useful. For a few examples, the Financial Crisis Inquiry Commission relied on reviews of historical developments in financial regulation, financial literacy, and the effect of financial compensation on incentives of managers. We benefited from earlier

[2] The table of contents for this issue of Critical Review is available at https://www.tandfonline.com/toc/rcri20/21/2-3 (accessed on March 4, 2024).

work like Calomiris (2000) and Wilmarth (2002), and followed up with the authors of both. Moreover, the creation of such reviews is a great service when an urgent issue emerges that a government entity is grappling with—say, a financial crisis, a pandemic, or proposed immigration reform. Comprehensiveness, clarity, and speed are all essential for a successful review in such circumstances.

As mentioned above, sometimes unsolicited offers to help were more problematic, including from academic institutions and foundations that wanted to contribute research and time. When the offers were open-ended and came with no strings, the Commission staff often found a way to benefit. For example, one nonprofit research group shared findings related to their own inquiries into aspects of the crisis and acted as a useful sounding board for the staffs' findings. However, other outside potential collaborators had their own goals, their own timing needs, and were committed to particular points of view. As a result, the Commission ultimately turned down several offers to partner with outside institutions.

Participation in Hearings and Interviews

When researchers make public their early-stage research in response to events, it also becomes a very effective way for government staff to identify researchers working on the subject at hand. The Financial Crisis Inquiry Commission conducted a total of eleven public events—both hearings and forums—between October 2009 and September 2010, over a total of 19 days.[3] The first, second, and fourth hearings provided leading academics an opportunity to describe their prior research on the causes of the crisis. In the third hearing, the Commission sought the views of leading financial institution representatives and financial market participants, among others.

In the three events featuring those who had conducted related research, the Commission invited 17 economists to participate, including "roundtable discussions" in October and November 2009 and a two-day "Forum to Explore the Causes of the Financial Crisis" in February 2010. The roundtable discussions were broad-ranging; the two-day forum consisted of nine sessions led by economists on specific aspects of the crisis, most of whom were authors of early research on the causes of the financial crisis. Participants took a variety of approaches to the problem and represented a diversity of political perspectives. We encouraged participants not only to explain their own research findings, but to also describe points of disagreement and where there was a lack of consensus. Taken together, the papers and reports that these researchers had published served as a crash course on the existing crisis literature.

This crash course was valuable not just for the staff; it also served to educate the Commissioners, who came from very different backgrounds. Moreover, insight

[3] For information on the hearings and participants, see the archival website of the Financial Crisis Inquiry Commission website at https://fcic.law.stanford.edu/hearings (accessed on March 4, 2024).

on what could be a potential cause was just as important as insight on what avenues would be less fruitful. For example, the economic research suggested greater focus on high levels of leverage and financial contagion across the financial sector as key dynamics of the crisis, and less focus on other potential causes like systemic fraud among homeowners and risks due to models of executive compensation.

The work of the Commission then shifted to focus on the five topical hearings, which represented the core of the Commission's investigation, broadly covering crucial topics: (1) subprime mortgage lending, securitization, and the government-sponsored enterprises; (2) the so-called "shadow banking" system; (3) the credibility of credit ratings agencies; (4) the role of financial derivatives; and (5) the risks posed by "too big to fail" financial institutions. Each of these topical hearings was preceded by six to eight weeks of literature reviews and expert interviews, often with outside researchers, in which both research and investigation staff participated. Staff reached out directly to dozens of researchers who had published papers on the crisis—explaining why investors ran certain markets, why incentive problems pervaded securitization markets, and why risk management failed at so many large companies. These interactions included invitations to submit testimony, to brief Commissioners, and to speak with our staff in recorded interviews. These five topical hearings provided the Commission with many opportunities to put executives from one or more case-study companies and their regulators on the spot, sometimes with panels of economists and other experts to provide context and analysis.

Based on these experiences, we believe that the best way for a researcher to help government staff get up to speed is to be willing to explain not just research that was personally conducted, but more generally explain where the literature is broadly. Government staff need a framework to understand disagreements in the existing literature. A government report is not likely to incorporate the full worldview of a single expert, no matter how compelling. Staff is best-served when researchers can be honest brokers not just for their own research, but also in characterizing where there is and is not consensus and elucidating points of disagreement.

Moreover, for researchers to help staff pursue fruitful avenues for analysis, researchers should be willing to *think outside their models*. Of course, the real world is far more complicated than theoretical models and even empirical models. Recognizing that, staff is best served when researchers can brainstorm about the relevance of their analysis to the problem at hand. Sometimes, government staff need a number—even while appreciating the enormous uncertainty around that number.

Novel Data Projects

Novel data is often the lifeblood of the work done by the staff of a government commission. We were always very aware of the unique historical opportunity that the Financial Crisis Inquiry Commission presented to gather information on the financial crisis, due to its subpoena power and to the fact that the events we were investigating were still fairly recent. In particular, we sought to identify and create

unique datasets that would likely be impossible to create in the future (Ward and Wiggins 2020). The Commission also published the results and the underlying data, appropriately aggregated or anonymized, on its permanent website.

We focused on gathering data about important participants in areas of the financial industry that were largely unregulated and about which financial regulators had limited information prior to the crisis. The staff launched several data projects to support our research.[4] Each project helped us illustrate important elements of the crisis and its causes and contributed significantly to the *Final Report*.

The Commission tried to cast a broad net when looking for available data. For example, as noted, we relied early on for data on collateralized debt obligations on the Harvard undergrad's database until we were able to get a broader confidential dataset from Moody's. A collateralized debt obligation is a financial instrument that bundles other securities and then, much like mortgage-backed securities, sells securities in "tranches" with different credit ratings: the higher-risk tranches would bear any early losses, middle-risk tranches would only bear losses after the higher-risk tranches had lost their value, and the lower-risk tranches would only bear losses when all of the other tranches had lost value. In this way, even if the underlying assets were risky mortgage-backed securities, they could be the basis for a range of tranches ranging from lower to higher risk. Before the crisis, rating agencies gave the lowest-risk tranches their highest (that is, safest) ratings, which turned out to be a terrible mistake when the crisis hit.

Moreover, tranches of collateralized debt obligations based on pools of mortgage-backed securities were then combined into new collateralized debt obligations, sometimes called "CDO-squareds," which in turn could then be divided into new tranches of differing risks. Eventually, the Commission gathered confidential data from Moody's that we used to create charts that illustrated the explosion of collateralized debt obligations and "CDO-squareds" in the lead-up to the financial crisis in 2006 and 2007. We also created on the Commission website a CDO Library, which included pitch books, term sheets, and offering circulars for selected collateralized debt obligations, some of which were subjects of our investigations.

Three of the Commission's major data initiatives were a case study on a mortgage-backed security, a survey of hedge funds, and a survey of short-term funding market participants.

Case Study on a Representative Private-Label Mortgage-Backed Security

Long before we began our work, many sources had described aspects of the "originate-to-distribute" model in which lenders extended credit with the goal of reselling the mortgages to others who would package them into securities for investors. Because the lender would no longer bear any risk of default, this model made it more likely that lenders would extend mortgages to people who would be unable to pay. A paper by two New York Fed economists described "seven deadly frictions" in

[4] For an overview of these projects, see the archival website of the Financial Crisis Inquiry Commission at https://fcic.law.stanford.edu/resource/staff-data-projects (accessed on March 4, 2024).

the subprime mortgage market—for example, the incentives for predatory lending and the possibility of adverse selection by asset managers picking high-interest but high-risk mortgages for the securities they sold (Ashcraft and Schuermann 2009).

In an effort to illustrate these issues, staff meticulously tracked an individual mortgage-backed security from the origination of the underlying mortgages to its sale in tranches to buyers, including collateralized debt obligations and the buyers of their tranches. We collected and posted on our website dozens of documents about the deal—for example, the commitment letter from the securitizing bank, due diligence reports, prospectuses and term sheets for marketed securities, internal emails, wire instructions, and confidential emails between the bankers and rating agencies and other parties.[5] The project allowed us to illustrate in the *Final Report* on a very micro level some of the major themes we were exploring with market participants and researchers on a macro level; in particular, how complex, opaque, and open to abuse the process of securitizing and resecuritizing mortgage assets had become in the early 2000s (Cardona and Wiggins 2020). The case study on a representative subprime mortgage-backed securities could not have been completed without help from a former Fed economist.

Survey of Hedge Funds

We collected detailed information from 170 hedge funds with $1.2 trillion of managed assets, more than half the hedge fund universe by assets at the time. We found strong evidence of two phenomena that market participants and researchers had highlighted in interviews, but for which there was very little existing data.[6] First, we found that 20 percent of hedge fund investors, based on assets, requested redemptions from their funds in the fourth quarter of 2008, contradicting assumptions that hedge funds have access to "sticky money" that allows them to ride out a crisis. We also found evidence of runs by hedge funds on their own bankers, that is, runs on the so-called prime brokers, typically banks or investment banks, with whom they leave their cash.

Second, we found widespread "correlation trading," defined for our purposes as the purchase of one tranche of a collateralized debt obligation security while shorting other tranches of the same or similar securities with "credit default swaps." Credit default swaps are a type of derivative product, which market participants can use to take a position on the likelihood that the underlying loans will default on their payments.

Correlation trading was an investment strategy with the goal of making outsized returns if large numbers of subprime borrowers defaulted on their mortgages. The logic was straightforward: if the equity or junior (higher-risk) tranches lost value because of widespread mortgage defaults, it would also increase the risk of the

[5] For details, see the archival website of the Commission at https://fcic.law.stanford.edu/resource/staff-data-projects/story-of-a-security (accessed on March 4, 2024).
[6] For details, see the archival website of the Commission at https://fcic.law.stanford.edu/resource/staff-data-projects/hedge-fund-survey (accessed on March 4, 2024).

senior and lower-risk tranche. The trader would sell senior tranches short, betting that systemic losses in the mortgage sector would be so bad that they would reach the senior tranches; they would also buy equity tranches to earn a high income in the meantime, while they waited for systemic losses to become apparent.

Market participants had described the practice of correlation trading in interviews with Commission staff. We conducted the survey to find out if the trade was common enough to affect the market. We found that it was. Based on the results of our survey, we estimated that more than half of the equity tranches of all the collateralized debt obligations issued in the second half of 2016 were purchased by funds that also shorted other collateralized debt obligation tranches through credit default swaps. Undoubtedly, this strategy turned out to be very profitable for many investors. However, we concluded that these types of trades also had a deleterious effect on incentives in the structured finance market: "Investors in the equity and most junior tranches of collateralized debt obligations and mortgage-backed securities traditionally had the greatest incentive to monitor the credit risk of an underlying portfolio. With the advent of credit default swaps, it was no longer clear who—if anyone—had that incentive" (Financial Crisis Inquiry Commission 2011, p. 192).

Acquiring data from hedge fund managers about their positions and the activities of their clients during the crisis was not easy, even with our subpoena power. To reassure managers that the information they provided would be strictly confidential, we contracted with the National Opinion Research Center (NORC) at the University of Chicago to collect responses, clean and compile data, and present only aggregate data to FCIC staff. We had no access to individual responses.

Survey of Market Participants about Short-Term Funding during Runs on Major Financial Institutions

We collected data from market participants in short-term funding markets—particularly the markets for commercial paper and repurchase agreements, or repos. Commercial paper was traditionally unsecured and issued by corporations for immediate financial needs. However, during the years before the financial crisis, financial institutions had begun to use commercial paper extensively to provide long-term financing for mortgage-backed securities and collateralized debt obligations. In a repurchase agreement, a borrower sells a security for a short-term, often overnight, but agrees to repurchase it at a slightly higher price the next day. Many financial institutions had been relying on repos to finance large portions of their balance sheets, assuming they would always be able to roll over the previous debt into new debt.

During the financial crisis, as investors and counterparties suddenly became skittish about risks in mortgage-backed securities and financial institutions themselves, it suddenly became costly or impossible to roll over these short-term securities. To those financial institutions, that withdrawal of financial lending felt very much like a traditional bank run. However, the risk that it would become impossible to roll over short-term lending had not been properly understood by market participants, regulators, or researchers before the financial crisis.

We wanted to understand when and how these runs took place, and by whom. We received responses from 17 primary dealers, 18 insurance companies, 19 money market funds, and 30 other mutual funds. In this case, we did not need to call on the National Opinion Research Center to anonymize participants, as in the hedge fund survey. Instead, FCIC staff cleaned and compiled data from individual responses, calculated summary statistics for each of the four types of financial institutions, and published the results on the website.[7] We were able to show the extent of runs on short-term funding markets in summer 2007, March 2008, and September 2008. For example, on average, funds withdrew more than three-quarters of their outstanding repo loans to Lehman Brothers in the week leading up to its failure.

Availability of data about these so-called "shadow-banking" markets has increased since the Financial Crisis Inquiry Commission was active. However, it is likely that a future crisis will one day again emanate from an area that market participants and regulators are not carefully monitoring. A government commission can serve as a lasting resource in identifying and using novel datasets.

Politics and the Commission: The Dispute over Government Housing Policy

No government commission can be divorced from politics, and the Financial Crisis Inquiry Commission was no exception. On the other hand, a Commission that cannot take a stand and emphasize some explanations while rejecting others is not much use. For our Commission, by far the most divisive question was whether government housing policy had been a leading cause of the financial crisis. Typically, the term "housing policy" refers to policies that seek to promote affordable home ownership. It includes, most prominently, the government-sponsored enterprises involved in expanding mortgage finance by securitizing loans and the 1977 Community Reinvestment Act, which encourages banks to make mortgage loans in lower- and middle-income neighborhoods in their communities. Although the role of housing policy was not one of the 22 topics that our enabling legislation specifically identified for our work—the list included, quite broadly, items on "Federal and State financial regulators," "the legal and regulatory structure of the United States housing market," and the role of "financial institutions and government-sponsored enterprises"—these issues were already hotly debated in the public arena and had taken on extraordinary significance for those inclined to argue against government interventions of any kind in market outcomes.

The Commission staff grappled with research around the role of housing policy as a cause of the financial crisis. This case study shows the pitfalls of taking all relevant research at face value. Moreover, when different research findings directly contradict each other, future Commissions may have to determine which set of

[7] For discussion, see the FCIC archival website at https://fcic.law.stanford.edu/resource/staff-data-projects/market-risk-survey (accessed on March 4, 2024).

findings is more credible. In addition, staff may have to come to such determinations in the face of political disagreements and determined lobbying by researchers.

Early on, the question of housing policy came up in the Commission's discussions with researchers and market participants; in particular, one Commissioner at the outset contended housing policy was the singular cause of the crisis. That Commissioner relied heavily on the work of one researcher in particular, a former Fannie Mae executive named Edward Pinto. In March 2010, Pinto sent a 54-page memo to the Commission describing his theory that federal housing policy was the singular cause of the financial and economic crisis. Pinto (2010) argued that 27 million mortgages, or nearly one-half of the total, were subprime or otherwise low-quality prior to the crisis, and that a significant amount of these low-quality mortgages were driven by these housing policies. In short, his argument was that "most [subprime or other weak loans] were either held by or guaranteed [by] the GSEs or by agencies of the US government."

Commission staff reviewed existing economic research to test Pinto's claim. In a preliminary staff report published for the Commission's hearing on subprime lending on April 7, 2010, FCIC Staff (2010) cited a study by two Federal Reserve economists on the impact of Community Reinvestment Act affordable lending requirements. The study used data that the Fed collects annually under the Home Mortgage Disclosure Act. The data showed that only 6 percent of higher-priced (and therefore likely more risky) loans appeared to be covered by the Community Reinvestment Act. In other words, according to granular data about the housing market, most relatively risky loans were not extended by banks to meet requirements of that law.

However, not all of the Commissioners were satisfied, and they continued to debate Pinto's research internally. Commission staff found we needed to conduct our own analysis to investigate Pinto's broader claim about the extent of low-quality loans in securities backed by the government-sponsored enterprises. As noted, there was little debate that there had been widespread defaults on private-label mortgage-backed securities. The politicized question was whether housing policy had played a large role in the failure of private-label mortgage-backed securities. Government-sponsored enterprises were also involved in mortgage securitization, although mortgage securitizations backed by the government-sponsored enterprises were very different from private-label mortgage-backed securities created by banks and investment banks. The government-sponsored enterprises had a much higher standard for the mortgages they allowed banks to include in these securities. But how much higher?

To examine that question, we sought data from Federal Reserve economists who had access to a sample of loan-level mortgages from the two leading proprietary vendors at the time (Borzekowski and Edelberg 2010a). The sample was very large, representing about 60 percent of the 55 million loans outstanding in the United States at the time. Using aggregate statistics provided by the Federal Reserve economists, Commission staff compared the actual performance of mortgage loans that had been securitized by the government-sponsored enterprises with loans in

private-label mortgage-backed securities. The data allowed us to control for factors that Pinto used to identify low-quality loans, such as low FICO credit ratings or high loan-to-value ratios (in other words, loans that were large relative to the value of the underlying properties) (Borzekowski and Edelberg 2010a, b). Both the staff analysis and Pinto's analysis included Federal Housing Authority (FHA) loans in the category of government-sponsored enterprises.

We found that loans securitized by the government-sponsored enterprises performed substantially better than similar loans securitized in private-label mortgage-backed securities. In our sample, the four million loans backed by government-sponsored enterprises that had FICO credit scores below 660 had an average serious delinquency rate of 6.2 percent in 2008; in comparison, the five million loans in private-label securitizations with FICO scores below 660 had an average serious delinquency rate of over 28.3 percent. Similarly, loans backed by government-sponsored enterprises with loan-to-value ratios above 90 percent had an average serious delinquency rate of 5.7 percent, compared to 15.5 percent for similar loans in private-label securitizations.

Overall, we found that loans placed in private-label mortgage-backed securitizations accounted for the vast majority of serious delinquencies in the mortgage market during the financial crisis; conversely, loans securitized through the government-sponsored enterprises performed perhaps surprisingly well. The staff concluded: "[W]ith the benefit of the performance data from the Federal Reserve (proprietary data that Pinto did not have access to when he completed his analysis), we see that Pinto's analysis takes millions of loans from the GSE (and FHA) categories that . . . have performed relatively well—and groups them with the subprime and Alt-A securitized loans . . . that have performed relatively poorly" (Borzekowski and Edelberg 2010b).

The Commission's *Final Report* included a majority report signed by the six Democratic Commissioners, one minority dissent signed by three of the four Republicans, and a second minority dissent signed by a single Republican Commissioner. The majority referred specifically to the conclusions of the staff's analysis to support its view that housing policy was not a major cause of the financial crisis. The three-person minority dissent emphasized that a wide variety of countries experienced credit booms, housing bubbles, and financial crisis, from which it similarly concluded that "U.S. housing policy is by itself an insufficient explanation of the crisis." The remaining dissent was written by the Commissioner who had highlighted Pinto's research throughout the Commission's work. That Commissioner wrote that housing policy was the central cause of the crisis, repeating Pinto's view that "*the sine qua non* of the financial crisis was U.S. government housing policy, which led to the creation of 27 million subprime and other risky loans." His dissent did not refer to the staff's analysis.

At the last minute, politics threatened to interfere with the release of the Commission's *Final Report*. Back in summer 2010, as Congress debated additional funding for the Commission on top of the initial $8 million budget, the senior Republican on the House Oversight Committee announced an investigation into

its activities (Issa 2010). In January 2011, when control of Congress shifted from Democrats to Republicans, that investigation stepped into a higher gear, issuing subpoenas and interview requests to Commissioners and key staff. Ultimately, the new leadership of the House Oversight Committee held no hearings and issued no reports, and the Commission report was released. However, the House Oversight Committee's minority staff did issue a report (Democratic Staff of the Committee on Oversight and Government Reform 2011). Their report describes the internal controversy among Commissioners over Pinto's memos and the staff's response. Emails show the lone dissenting Commissioner urging fellow Republican Commissioners not to say anything that might undermine the effort of House Republicans to modify or repeal the Dodd-Frank Act.

In the end, Commissions established by a political process are inherently subject to political pressures. It is the job of senior leadership within the Commission staff to protect the integrity of the work. No piece of research should be taken at face value. No researchers, regardless of their prominence, should be deferred to. Taking on this responsibility is not for the faint of heart.

The Value of Government Commissions: Immediate and Time Capsule

Many research projects take years to complete. In contrast, the Financial Crisis Inquiry Commission had about 18 months from the passage of the enabling legislation to the publication of the *Final Report*. Moreover, it was working in the immediate aftermath of the Great Recession, in a situation that combined recent and traumatic events, imperfect and limited data, and strong political cross-currents. Nonetheless, the report the Commission produced was valuable, and future Commissions will no doubt produce similarly useful reports. Such reports serve both immediate and long-term purposes. The immediate purpose is to bring to the forefront a broad array of expertise and analysis, to provide a basis for understanding and policy changes. But in addition, a government commission report also serves as a time capsule for what was known at the time; it defines issues and collects data in a way that helps to point later researchers in fruitful directions.

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