Lessons Learned Oral History Project Interview

Interviewee Name and Crisis Position	Brooksley Born Commissioner, Financial Crisis Inquiry Commission; Chair, Commodity Futures Trading Commission (1996- 99)
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Introduction:

Brooksley Born, a lawyer with decades of experience in derivatives law, served as chair of the Commodity Futures Trading Commission from 1996 to 1999. At the CFTC, she advocated for federal regulation of the over-the-counter derivatives market, an effort that failed in large part because of resistance from fellow financial regulators in the Clinton administration. The unregulated OTC derivatives market contributed significantly to the Global Financial Crisis of 2007-09.

Born, who returned to private practice after her CFTC term, served as a commissioner on the U.S. Financial Crisis Inquiry Commission, which investigated the causes of the crisis and issued its seminal report in January 2011. Born is interviewed by Mary Ann Haggarty, a former Washington Post journalist, who was also Managing Director of the Financial Crisis Inquiry Commission.

This transcript of a Zoom interview has been edited for accuracy and clarity.

Transcript

YPFS: **As Ms. Born and I have already discussed, there's a lot of history here. Today, I'd like to focus on the lessons we can learn from that history, especially lessons that can help others in the public sphere as they think about and prepare for, or confront, other financial system crises. Your warnings about the dangers of unregulated OTC derivatives markets have been very well documented, as has the pushback against those warnings. The pushback eventually stripped the CFTC of its oversight and allowed that trading market to mushroom. Can you talk a bit about the subject, if only for context? What was the status of the OTC derivatives markets in the mid to late 1990s? What dangers did it present? What regulation did you think was needed? And what was the resistance that arose?**

Born: Let me first give you the legal framework. Derivatives had been regulated in this country since the 1930s, and by the mid-1970s the Commodity Futures Trading Commission was created as an independent federal regulatory agency to oversee them. The statute that created the CFTC required that most, but not all, derivatives had to be traded on-exchange, subject to statutory and regulatory oversight by the CFTC. In the 1980s, the federal banking regulators began to permit banks to trade in derivatives over-the-counter, as opposed to on regulated exchanges. Investment banks, which were subject to much lower levels of regulation than banks, were also engaging in that activity. And as that activity began to grow in the late '80s, the banks and investment banks became concerned that the trading they were doing might violate the Commodity Exchange Act's provision that derivatives had to be traded on exchange, as opposed to over-the-counter.

So, they went to the CFTC, and in 1989 the CFTC issued a policy statement that said that certain over-the-counter derivatives would not be subject to regulation by the CFTC if they consisted of customized contracts that were entered into for business reasons between sophisticated traders. I don't know if I need to define here what a derivative is.

YPFS: **I don't know that you do, but do you have a short derivatives definition?**

Born: Basically it's a bilateral contract, that is, a contract between two parties, where the value of the contract is derived—that's why it's called a derivative—from the value of some other asset or from an index, rate, event or other variable.

YPFS: **Okay, so here we are in 1989, customized derivatives contracts are permitted between investors, for business reasons, between sophisticated investors.**

Born: Right, and this over-the-counter derivatives market continued to grow. But the over-the-counter derivatives dealers, who at this point were our largest banks and investment banks, were still uncomfortable because the CFTC did not explicitly have statutory authority to exempt those contracts from the exchange-trading and other provisions of the statute. So they went to Congress in 1992 and got Congress to adopt a new provision in the governing statute that granted to the CFTC the authority to exempt transactions from some or most of the provisions of the Commodity Exchange Act, as long as the transactions were between appropriate people and doing so was consistent with the public interest.

In response to that new provision of the Act, in 1993 the CFTC adopted regulations that exempted certain over-the-counter derivatives transactions from some, but not all of, the provisions of the statute. The exempted contracts could not be standardized as to material economic terms. They had to be traded between sophisticated parties. They could not be subject to central clearing or be traded on an execution facility. And while they could be traded off-exchange and were exempted from most of the provisions of the statute, the CFTC explicitly kept responsibility for anti-fraud and anti-manipulation enforcement with respect to the market, something that the statute provided it could do.

I went into office as Chair of the CFTC in 1996, three years later. There had been enormous growth in the market after the adoption of that exemption in 1993. The volume of derivatives was growing. By mid-1997 it exceeded $28 trillion in notional amount, up from a very small market. The over-the-counter derivatives dealers were our largest banks and investment banks, but very little was known about their trading because there were no requirements for them to register or report information about their over-the-counter derivatives operations to the CFTC. They were not even required to keep records of the transactions in the market.

There had also been an increase in the kinds of end users participating in the market, the people who were buying these derivatives, ranging from commercial enterprises to school districts to pension funds to Orange County, California. Orange County's trading in over-the-counter derivatives was speculation, gambling with taxpayer money on interest rates; losses from that trading caused the largest bankruptcy of any municipality in the country, with great harm to the public. Merrill Lynch, its derivatives dealer, paid $400 million to settle claims Orange County had against it.[1]

There was a growing amount of standardization in the marketplace in terms of the product being sold as well. The CFTC had said that the contracts could not be standardized. It was trying to define a derivative that would not be appropriate for execution on one of the established futures or option exchanges—rather it had to be customized to the particular needs of the parties. But by the time I took office, a large portion of the market was called "plain vanilla swaps." Many of them were fungible in that they used the exact same terms, particularly derivatives on interest rates. And those contracts probably did not meet the standards of the CFTC's OTC exemption and therefore were potential violations of the statutory requirement of exchange trading. As illegal contracts, they were potentially voidable by the parties who were using them, which caused major uncertainty in the market. Because of the standardization of the products, the dealers were beginning to talk about the need for central clearing and execution facilities, both of which were prohibited under the CFTC exemption.

There were a lot of problems in the market too. There had been a large number of financial losses like the Orange County, California, situation. In 1997, GAO issued a report[2] finding that there were 360 instances of major losses by all kinds of institutions and entities trading in the market. GAO had also earlier done a report in 1994, shortly after the exemption had been adopted, that found that there were risks to the financial system from the fact that our largest banks and investment banks were over-the-counter derivatives dealers. It found that they were interconnected through the derivatives market in such a way that the losses of one institution could have a domino effect, spreading to the other institutions, and create significant potential damage to the financial system.

[1] https://www.latimes.com/archives/la-xpm-1998-jun-03-mn-56193-story.html

[2] Mm, GGD-98-5 OTC Derivatives: Additional Oversight Could Reduce Costly Sales Practice Disputes (gao.gov)

All these things gave us great concern at the CFTC. Also, as I mentioned, the CFTC had explicitly kept anti-fraud and anti-manipulation authority. There had been some major fraud and manipulation events in the market by the time I took office. Bankers Trust[3], which was then one of our major banks and a large over-the-counter derivatives dealer, had apparently defrauded some of its large commercial clients, including Procter & Gamble and Gibson Greeting Cards. There were revealing recordings of the traders at Bankers Trust saying things like, "We're going to rip the face off of this customer."

Furthermore, Sumitomo Corporation of Japan had manipulated the world market in copper and then had a loss of $2.6 billion when the price of copper dropped. The manipulation scheme largely used on-exchange futures contracts—not in the United States where we had controls to detect manipulation, but in London and in other countries where they had major futures exchanges, but did not have the safeguards against manipulation that the U.S. did. However, the CFTC also found in investigating Sumitomo[4] that it had used over-the-counter derivatives, sold by Merrill Lynch, in order to disguise and finance the manipulative scheme it was engaged in.

So we had major manipulations, we had major frauds, and yet the CFTC staff reported to me that we were lacking needed investigative means with respect to this market because we had not kept the recordkeeping requirements that the Act has, we had not kept any reporting requirements, we had not kept any standards for how dealers should act, even though if dealers traded on- exchange futures there were clear-cut sales practice requirements. And so I felt that the Commission had little capability of enforcing its responsibility as to fraud or manipulation.

For all these reasons, we thought we had to revisit the over-the-counter derivatives exemption. And this also occurred at a time when there was a statutory mandate for all agencies to evaluate their outstanding regulations to see if they needed to be modernized and updated. The CFTC was involved in a very comprehensive review of all of its regulations for that purpose. For example, we recognized our regulations did not provide for electronic communications so we were revising them to allow reporting by regulated entities via the internet.

YPFS: **Including the exchanges.**

Born: Absolutely. So we thought, should we be looking at this exemption and its appropriateness in light of how much the market had changed? There were different opinions within the Commission. I could have asked our enforcement

[3] A Case Study on Bankers' Trust: How they Lost Trust Bankers' Trust: How they Lost Trust | OMPRAKASH PANWAR - Academia.edu

[4] Testimony Of Brooksley Born Chairperson Commodity Futures Trading Commission Before The Committee On Banking And Financial Services United States House Of Representatives, September 18, 1996. https://www.cftc.gov/sites/default/files/opa/speeches/opaborn-1.htm. Also see the CFTC's release announcing the Sumitomo settlement here- https://www.cftc.gov/sites/default/files/opa/enf98/opa4144-98.htm

division to sue one or more of the large over-the-counter derivatives dealers for violating the statute by selling standardized contracts over-the-counter, rather than using the futures exchanges, but that did not seem to me to be a sensible approach. This was a large thriving and growing market, and we did not want to disrupt it or cause major collapses of parties trading in it, which might well have happened if we had taken the enforcement approach.

We could have proposed modifications to the CFTC rule that exempted the OTC market. But we didn't know enough about the market to do that. The market was completely lacking in transparency, and we did not have the information we needed to know how best to modify the exemption. So instead, what we decided to do was to issue what we called a concept release.

The concept release outlined the changes and developments in the market that we saw as indicating there might be a need for regulatory changes. And it asked a broad range of questions about the market: Who are the major participants? Is record keeping being done properly? Is there a need for clearing? Is there a need for transaction execution facilities? Then we provided, for public comment as part of that concept release, a list of possible regulatory changes to the exemption, some making the exemption looser and some making it tighter.. We explicitly said that any changes in the rule would be proposed, if at all, at a later date and would be subject to future public comment prior to going into effect and that they would be prospective only and would not impact current transactions.

We asked about whether central clearing, which the OTC exemption rule had forbidden, was necessary or would be appropriate to permit. The advantages would have been that central clearing substantially reduces the counterparty credit risk that we and the GAO felt was pervasive in the market and was putting, not only trading parties like Orange County and Merrill Lynch at risk, but also putting at risk the entire financial system.

YPFS: **Could you elaborate just a bit on that, beyond the counterparty to counterparty risk? At that point, what did you see that were more systemic risks, rather than the idiosyncratic risk?**

Born: The over-the-counter derivatives dealers hedge their positions. So if Merrill Lynch entered into a contract with Orange County, California, where it was taking a position about the direction of interest rates, then Merrill Lynch would enter into offsetting contracts with other parties that hedged its risk on that contract. And those contracts might be with Lehman Brothers or other dealers or large institutions. If Orange County was unable to meet its financial requirements under the contract that it had with Merrill Lynch, Merrill Lynch of course would not get paid. But Merrill Lynch would still have an offsetting responsibility to pay its other counterparty or counterparties.

So any collapse of one institution put its trading partners at risk, not only of losing the amount of money they were owed by the collapsing party, but of having to pay third parties offsetting amounts. So the losses could domino or spread throughout the leading financial institutions who were trading with one another and put all of them at risk.

Another source of contagion created by this market is that the large derivatives dealers often held large positions that were similar to those held by others. If the underlying interest rate or asset value suddenly moved against them, all such large institutions could suffer losses simultaneously and perhaps be forced to liquidate assets in a falling market. Moreover, in such a situation, the lack of transparency in the market also created the potential for uncertainty that could lead to panic in the market and runs on financial institutions.

YPFS: **As we sit here, that contagion risk appears apparent to you, me and many others. But, can you talk about why in 1997 there was resistance to addressing this as being in the public's interest? Where did that resistance came from, and who were its allies?**

Born: Let me just say some other things that we raised in the concept release.

YPFS: **Of course.**

Born: We were asking questions about central clearing, use of transaction execution facilities, exchange-like or online, requirements for over-the-counter derivatives dealers like record keeping, reporting, sales practice requirements, capital requirements, disclosure requirements, and internal controls.

When we published the concept release in May 1998, there was a fire storm of opposition. There was fierce opposition from all of the big over-the-counter derivatives dealers, which were our largest financial institutions. This unregulated, nontransparent market was, as we discovered later, one of their largest profit centers. They were making a tremendous amount of money, partly because the market was not transparent and was not competitive. There was often little clear pricing information available to their counterparties. The dealers wanted to preserve this lack of transparency.

At that point, there had been 20 or 30 years of deregulatory pressures, largely stimulated by the financial services industry, but also championed by people like Federal Reserve Board Chair Alan Greenspan. The financial services industry at this point had great political power. They were among the very largest campaign contribution donors. They had large forces lobbying before both Congress and the executive branch financial regulators. And they exerted a tremendous amount of power.

They opposed regulation or oversight of the over-the-counter derivatives market, and they convinced the other financial regulators; Bob Rubin, who was the Secretary of the Treasury, Larry Summers, who was the Deputy Secretary, Alan Greenspan, who was the Federal Reserve Board Chair, and Arthur Levitt, who was the head of the SEC, all came out immediately at the urging of the big banks to condemn the concept release.[5] Secretary Rubin maintained the CFTC had no jurisdiction over the market, which was clearly incorrect. Congress—after the 1994 GAO report on the systemic risk from the growing over-the-counter derivatives market—had asked the President's Working Group, which consisted of the Secretary of the Treasury, the Chair of the Federal Reserve Board, and the Chairs of both the SEC and the CFTC, to comment on the GAO report. Lloyd Bentsen, who was then Secretary of the Treasury, wrote to Congress that the CFTC had responsibility for the market and would take any regulatory steps that were necessary to protect against systemic risk. The President's Working Group therefore deferred to the CFTC. Now, of course, they were taking the opposite position that the CFTC had no jurisdiction over this market, even though the market had in effect been created because of the OTC exemption that the CFTC created in 1993. I think the immediate response of the other financial regulatory personnel showed the amount of regulatory capture that existed, partly because of the political power of the industry and partly because of other factors like the revolving door. The likelihood of future employment in the financial services industry certainly had an effect on policymaking. Congress was captured as well. As Dick Durbin, the Senator from Illinois, said 10 years later in 2009, "frankly, the banks own the place," referring to Congress.

Also, derivatives--exactly how they operate and what the risks posed by them are—they are a rather esoteric concept. They are not investments like securities, contrary to a mistaken impression held by some fairly sophisticated people. They are only for speculation purposes, that is, gambling, or for hedging, that is, insuring an existing risk that you have. Certainly, even some intelligent members of Congress and some federal financial regulators did not fully understand the way they operated. The large banks and investment banks had a lot of economists, accountants and lawyers who could participate in lobbying efforts and explain these issues in a way that was favorable to deregulation.

Also, the fallacy of self-regulation—that is, that the market and market participants would protect against systemic risk because their self-interest was enough to protect the public interest—was widely held and had been growing since the Reagan administration. This view resulted in some active dismantling of existing financial regulation and also in ignoring the need for regulation of new markets, new products, and new participants in the markets, like the over-the-counter derivatives market and hedge funds, for example.

As a result of all these forces, there was a big effort by the relevant members of Congress, by the financial services industry, and by the other financial regulators to tell the CFTC to abandon any examination of these issues. Many of them took the position that the CFTC should not even ask questions about the over-the-counter derivatives market and that it should be barred from having any jurisdiction over

[5] See "JOINT STATEMENT BY TREASURY SECRETARY ROBERT E. RUBIN, FEDERAL RESERVE BOARD CHAIRMAN ALAN GREENSPAN AND SECURITIES AND EXCHANGE COMMISSION CHAIRMAN ARTHUR LEVITT" (https://www.treasury.gov/press-center/press-releases/Pages/rr2426.aspx).

it. And there were a number of congressional hearings[6] with a lot of pressure put on the CFTC to back down from its inquiries.

While this was going on, in September 1998, four months after we had issued the concept release, Long-Term Capital Management (LTCM), which was the largest hedge fund in the world, suddenly appeared, without advance notice to any federal financial regulator, to be on the brink of collapse. And its collapse, the Federal Reserve Board determined, would have serious impact on the financial system as a whole. LTCM had managed to acquire $1.25 trillion in notional amount of over-the-counter derivatives using 14 large over-the- counter derivatives dealers even though it had less than $5 billion in capital. The over-the-counter derivatives dealers had no idea of the size of LTCM's position with other dealers. They only knew about the size of its position with them. And when LTCM was unable to meet the collateral calls of its over-the- counter derivatives dealers, it became apparent that its failure would have a serious impact on 14 of our largest banks and investment banks. So, the Federal Reserve Bank of New York orchestrated a bailout, having those over-the-counter derivatives dealers take over Long-Term Capital Management and slowly resolve its debts, rather than have it be a flash point collapse and bankruptcy that could spread harm throughout the financial system.

Despite this example of the dangers of the over-the-counter derivatives market, the Federal Reserve Board and the other financial regulators still maintained that no regulation was needed of the market. This was so, even though the LTCM situation showed the lack of transparency, the almost unlimited leverage, and the excessive speculation in the market, as well as the lack of adequate prudential controls by some of our largest banks and investment banks in dealing with this market. Despite these revelations, a month later, in October 1998, Congress in adopting the CFTC's appropriations bill provided that the CFTC could not take any regulatory action relating to the OTC derivatives market for the following six months, which happened to be the remaining period of my term in office.

Thereafter, after I left office in mid-1999, Larry Summers became the Secretary of the Treasury and worked with the President's Working Group on recommendations to Congress about how the over-the-counter derivatives market should be handled. The President's Working Group advocated that there should be virtually no regulation of the over-the-counter derivatives market.[7] As a result, in December 2000, right before the end of the Clinton administration, Congress

[6] See Testimony of Chairman Alan Greenspan-The Commodity Exchange Act and OTC derivatives-Before the Committee on Agriculture, Nutrition, and Forestry, U.S. Senate. July 30, 1998. (https://www.federalreserve.gov/boarddocs/testimony/1998/19980730.htm), and Testimony of Chairman Arthur Levitt Before the Senate Committee on Agriculture, Nutrition, and Forestry, Concerning the Regulation of the Over-the-Counter Derivatives Market and Hybrid Instruments. July 30, 1998 (https://www.sec.gov/news/testimony/testarchive/1998/tsty0998.htm)).

[7] Over-the-Counter Derivatives Markets and the Commodity Exchange Act: Report of The President's Working Group on Financial Markets. November 1999.
https://stg.treasury.gov/system/files/236/Over-the-Counter-Derivatives-Market-Commodity-Exchange-Act.pdf

passed the Commodity Futures Modernization Act[8] which deregulated over-the-counter derivatives. The only power given to a federal regulator with respect to the market was that the SEC had power to regulate fraud with respect to single-stock over-the-counter derivatives, a type of contract that the Act permitted for the first time.

The statute also preempted state regulation, providing that states could not enforce their gaming laws or their bucket shop laws to regulate the over-the-counter derivatives market. The adoption of this deregulatory act was, as the Financial Crisis Inquiry Commission later found, a major turning point in the path to the financial crisis.

YPFS: **What lessons would you draw from that experience and what do you wish someone had told you back in 1996?**

Born: Going into office, I had not fully understood the enormous political power that the financial services industry wielded and its commitment to deregulation. The industry and complicit regulators like Alan Greenspan has spread the fallacious theory that self-regulation alone was sufficient to protect the public interest, and this led to deregulatory action like the Commodity Futures Modernization Act and the repeal of Glass Steagall[9]. Also, new financial markets, products and participants had been allowed to develop without needed government oversight and regulation.

It seemed to me that the major lesson from all this was that self-regulation is not sufficient to protect the public interest--that greed and recklessness by major market participants, by our largest banks and investment banks, do not make for a safe market. In fact, they add to the risk in the market tremendously, and that is the reason business regulation is needed—not only to protect the customers and counterparties of the financial services industry, but also to protect the financial system itself, the U.S. economy and the public interest. The political power of the financial services industry has led to a significant degree of regulatory capture among federal financial regulators and undue deference to the industry by members of Congress.

YPFS: **Let's move forward. In the early 2000s, after the CFMA, the OTC derivatives market just boomed, I mean billions.**

Born: More than $670 trillion in notional amount at the time of the financial crisis.

YPFS: **And complex securities such as credit default swaps and collateralized debt obligations, that derived from low- quality mortgages just boomed, and as we**

[8] Public Law 106-554

[9] The Gramm–Leach–Bliley Act (GLBA) also known as the Financial Services Modernization Act of 1999 repealed Glass-Steagall Act of 1933. Pub.L. 106–102

know, then busted. In hindsight, what should regulators have known about these securities and would it have made a difference?

Born: Adequate information about the over-the-counter derivatives market would have made a tremendous difference. If this had been a regulated market, it would have been transparent. Federal regulators would have been able to see the size of the positions, the extent of the trading, the amount of speculation, and the interconnectivity among market participants. They could have stepped in when they saw the extent of counterparty credit risk to require central clearing, reducing the risk by interposing the clearing facility between the parties. They could have seen the extent of speculation that was inflating the risk posed by the mortgage market by multiplying it exponentially in terms of potential losses.

There are steps that derivatives regulators take on futures and option exchanges to reduce and contain speculation. They can require speculators to report their positions, to abide by position limits and to sell their positions if speculation becomes excessive. They can require traders to put up more collateral or margin with respect to a speculative position than they do as to a hedging position. These were tools that had been developed over the decades that were available, had this been a transparent market, had the entities who were the major players in the field been required to register, report, and been subject to the kind of regulations that the CFTC was exploring in the concept release. In fact, Dodd-Frank[10] adopted many of the regulations discussed in the concept release.

YPFS: Are there any lessons that you want to elaborate on here from the pre- crisis through the crisis period, or should we move ahead to what comes after? Because we still have some of that to cover.

Born: I think it is very important to try to limit the political power of industries, whether the financial services industry or the pharmaceutical industry or whatever, so they do not overcome objective policymaking and regulation relating to them. Our largest financial institutions had become so large and interconnected that they could not be adequately supervised or managed and indeed could not be allowed to fail without endangering the financial system as we later learned. Reducing the size, complexity and financial power of the largest industry participants through the use of the antitrust laws and other means is very important.

I also think campaign finance reform is essential to limit their political power. Regulation of lobbying by industry participants needs to be strengthened. I think making sure of the independence of regulatory agencies from the political process is very important. We saw regulatory agencies and policymaking by Congress that did not serve the public interest, but instead were serving the short-term interests of powerful financial industry players.

[10] The Dodd–Frank Wall Street Reform and Consumer Protection Act- PUBLIC LAW 111–203

YPFS: **Now moving ahead, you were a member of the Financial Crisis Inquiry Commission and in that role, you pushed to delve into the role of OTC derivatives. From your perspective, how was that investigation done? What did you find? And then we can move onto conclusions and recommendations.**

Born: The Commission engaged in a very expansive and professionally conducted investigation, looking at millions of pages of documents from many parties that had played a role in the crisis, interviewing hundreds of people about their perspective and experiences, holding 19 days of hearings, a number of which dealt at least in part with over-the-counter derivatives. The Commission was limited in our mandate to investigating the causes of the financial crisis and elucidating them. We had no mandate to suggest solutions or remedies to the problems so we focused essentially on the causes.

What we found in terms of over-the-counter derivatives was that allowing this enormous unregulated market to grow without oversight or regulation led to substantial financial systemic risk and contributed to the magnitude of the crisis. The market was not transparent. It was highly leveraged. There was excessive speculation. It created interconnections between systemically important financial institutions that had the effect of allowing losses to cascade through the system.

Specifically, we found that a kind of over-the-counter derivatives contract called credit default swaps (CDS) played a major role in both fueling the securitization of mortgages and inflating the tremendous losses from the collapse of the housing bubble. Credit default swaps are similar to insurance policies. A party who is entitled to payment of a debt could go to an over-the-counter derivatives dealer--for example, AIG, a large CDS dealer in the period leading up to the crisis--and purchase an assurance that, if that debt were defaulted upon, AIG would pay the amount of the debt. In return the purchaser paid a premium to AIG.

These contracts were used by investors in collateralized debt obligations (CDOs) and other mortgage-related securities to give them protection against default on the obligations. They provided investors with additional confidence that CDOs were very safe investments and so encouraged them to invest and expand the amount of securitization.

Even though CDSs functioned like insurance and were sold by a large insurance company, AIG, among others, they were not regulated like insurance but instead were treated as unregulated over-the-counter derivatives under the Commodity Futures Modernization Act. For example, entities that wanted to bet against the housing market, like Goldman Sachs, could go to a seller like AIG and obtain credit default swaps as bets on the housing market even though they did not own the underlying mortgage-backed security or CDO. Unlike insurance policies, purchasers were not required to have an insurable interest. So that meant that many times more money was resting on the stability of the mortgage market than the size of the mortgage market itself because there was a lot of speculation or gambling on the market.

Finally, when high-risk mortgages were no longer available in large quantities because there was little demand for mortgages, CDSs were used to create synthetic mortgage securities that were merely bets on the mortgage market. And they, too, amplified greatly the amount of losses that occurred when the mortgage market collapsed. In these ways credit default swaps fueled the housing bubble and multiplied the losses from its collapse many times over. Moreover, when the housing bubble collapsed, AIG was unable to post collateral on its enormous positions in credit default swaps. Because of the danger its failure posed to other large financial institutions which were its counterparties, to its thousands of insurance customers and to the finance system as a whole, it was bailed out by the Federal Reserve with more than $180 billion in public funds.

In addition to the role played by credit default swaps in the financial crisis, the FCIC found that the interconnections created by over-the-counter derivatives of all kinds among the biggest financial institutions, and also with other large corporations and institutions, caused rippling effects of losses to spread throughout the financial system and multiplied the risks in the financial crisis. For example, when Lehman Brothers went into bankruptcy in September 2008, it was a party to more than 900,000 over-the-counter derivatives contracts. Its failure created panic in the market and almost brought down the financial system.

YPFS: **You voted with the six-person majority to back the FCIC report; four commissioners dissented. Do you have thoughts about the split in the commission? How did it affect the overall work and the conclusions, and did it touch the work on derivatives?**

Born: The Republican members of the Commission did not vote in favor of the FCIC report. They filed two different dissents, one by Peter Wallison, which maintained that the cause of the financial crisis was government policy favoring affordable housing, and another by the other three Republican members. The dissent of those three actually agreed with much of the majority report, but tended to suggest that the financial crisis was basically a natural occurrence resulting from market forces and was not subject to human control. In taking that position, I think they were affected by the self- regulatory beliefs that were being pushed by the financial services industry and that were widely accepted by the Republican Party.

The Republican dissent found that, except for credit default swaps, over-the-counter derivatives did not play a role in the crisis, which was also the position that Alan Greenspan himself took after the crisis. They ignored the contagion fueled by over-the-counter derivatives generally. Again, I think that was because there was a strong political interest in pleasing the financial services industry by trying to rebut the need for more regulation.

YPFS: **What was the value of the commission's work?**

Born: Essentially, I think that our report laid out in detail the steps that led to the financial crisis in a way that made it clear that the crisis was essentially the result of many years of deregulatory pressure, many years of allowing financial markets, market participants, and products to develop without regulation: shadow banking, hedge funds, the over-the-counter derivatives market. And the report also showed that the crisis was marked by recklessness and greed on the part of many of the institutional players in the markets. It was caused by human failure and could have been prevented. It was caused by forgetting the lessons we learned from the Great Depression that had resulted in substantial financial services industry regulation and the erosion of the safeguards that were imposed. Although the Commission did not have a mandate to recommend remedies, the report laid out the causes and the human failures clearly enough so that remedies could be fashioned. In fact, a number of remedies responding to the causes of the crisis were adopted by Congress in the Dodd-Frank Act prior to our report's coming out.

YPFS: **Are there lessons from your commission experience that might translate to other commissions on other issues, financial or COVID-19?**

Born: These are essentially very extensive, in-depth investigations. They require adequate time, financial resources, investigatory powers and human resources, people who understand how to conduct complex investigations. You need an excellent chair, and ideally, other excellent commission members. But beyond that, you need a staff that has a lot of expertise and ability to conduct a very complex and large investigation.

YPFS: **As you mentioned, after the crisis Congress passed the Dodd-Frank Act. Huge, thousands of pages. Among the many provisions, it increased regulation of OTC derivatives, including the requirements for some central clearing. Can you talk a bit about the major Dodd-Frank provisions on derivatives, and then maybe some that might not be there?**

Born: The Dodd-Frank Act in 2010 in effect reversed the Commodity Futures Modernization Act adopted in 2000 in that it returned federal regulation to much of the over-the-counter derivatives market and gave the CFTC and the SEC authority to regulate it—the SEC regulating securities-based over-the- counter derivatives and the CFTC regulating other derivatives. The Act imposed federal fraud and manipulation prohibitions on the market and also provided ways to limit excessive speculation, and those were important improvements.

Another very important reform was to require central clearing of many over- the-counter derivatives. Unfortunately, there are exemptions from the Act and additional exemptions from the requirement of central clearing, so many derivatives are still not subject to central clearing. Probably less than half of the over-the-counter derivatives are being centrally cleared, which is tragic because it means there is a lot of danger still.

Central clearing has the advantage of allowing a central clearinghouse to become the counterparty to both sides of an over-the-counter derivatives transaction, so that it eliminates counterparty credit risk and puts the credit risk into the clearinghouse. It is very important to make sure the clearinghouse is adequately funded and protected by its requiring margin payments, marking contracts to market pricing, and promptly closing out positions if margins are not paid. There is concern on the part of regulators, both in the U.S. and internationally, to make sure that our clearinghouses are adequately protected and that they are financially secure. But the requirement of central clearing was a big step.

One of the problems is that only a portion of interest rate swaps and a portion of credit default swaps are currently being cleared. Few other derivatives are being centrally cleared in significant numbers. Even fewer of these instruments are being executed on regulated exchange-like execution facilities. The Dodd-Frank Act provides that cleared over-the-counter derivatives should be traded on swaps execution facilities or on traditional futures and option exchanges. However, that it is only required if in fact there are execution facilities willing to take the cleared derivatives. Unfortunately, that is a limited number to this day.

Furthermore, clearing itself is not very useful unless there are good pricing mechanisms so that you can tell what the value of the instruments being cleared is on a daily basis. Exchange trading provides that kind of pricing through an open and competitive market. Without that, a clearinghouse has more difficulty ascertaining accurate pricing and setting accurate margin requirements.

The Dodd-Frank Act also imposes a requirement of swap data reporting--transaction reporting and pricing reporting--which is a very useful provision that applies even to uncleared derivatives. This should constitute a significant step toward transparency, but only if data can be easily accessed and properly analyzed by regulators and the industry.

I should also add that Dodd-Frank did include some other important provisions relating to derivatives. It imposed regulation on derivatives dealers: registration, reporting, disclosure, sales practices standards, and capital requirements. And that was a very important step. It also imposed regulation on some other major market participants.

However, exempted from the requirements of the Act for clearing and exchange trading, and even for putting up margin, are end-user contracts if the end user does not elect to be subject to those requirements. And that means a nonfinancial commercial entity that is entering into derivatives for business purposes can opt not to have some of the major protections of the Act.

YPFS: **So technically the soybean farmer can opt out of it?**

Born: Right. And those are the entities that really need those protections the most.

YPFS: **As you mentioned there's still a huge—nobody knows quite how huge—uncleared over-the-counter derivatives market.**

Born: Well, the Bank for International Settlements says there was over $607 trillion in notional amount of over-the-counter derivatives as of the end of 2020. And probably less than half of that is subject to central clearing.

YPFS: **So, what can and should be done about that opaque market? Do regulators have the access to the data they need?**

Born: I don't think so. We just had the collapse of Archegos.[11] That seems to be a replay of Long-Term Capital Management in 1998. It is a large, unregulated investment vehicle speculating through over-the-counter derivatives, this time a kind of security swap, with virtually unlimited leverage. It avoided disclosure of its position as required by the securities laws by using over-the- counter derivatives that mimicked securities. It entered into these transactions through a number of over-the-counter derivatives dealers which probably had no idea that the entity was exposed to large positions taken with several other dealers. Goldman Sachs, Nomura, Deutsche Bank, Credit Suisse and others were its dealers. Suddenly Archegos was unable to meet its collateral obligations on its contracts and defaulted. Luckily it looks like Archegos' collapse did not cause cascading losses through the financial system that could not be contained. Apparently its dealers were able to manage the substantial losses they have incurred. But it does show that this is still a dark, highly leveraged and speculative market. There is a large part that is unknown to anybody. This may be the result of a failure on the part of the Securities and Exchange Commission to adequately and fully implement and enforce the Dodd-Frank Act's requirements as to securities-based over-the-counter derivatives.

YPFS: **How do you get the transparency?**

Born: Very easily. You require virtually all of the market to be traded on regulated exchanges, open and transparent to the public and to the regulators. Competitive trading on such exchanges will provide necessary price discovery. You also require virtually all of the market to be cleared through a regulated central clearing operation, with rigorous margin requirements, marking to market of the pricing and position limits on speculation. That is the playbook that the regulated futures and options markets have operated under for decades as provided in the Commodity Exchange Act.

YPFS: **Do you see any possible path to getting there, either with existing structures or others?**

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[11] See, "Regulators around the world monitor collapse of US hedge fund" by Rupert Neate and Kalyeena Makortoff. The Guardian. 29 Mar 2021 16.09 (https://www.theguardian.com/business/2021/mar/29/credit-suisse-nomura-archegos-sell-off-hedge-fund) and "SEC Investigating Archegos for Potential Market Manipulation" by Heather Perlberg, Matt Robinson, and Sridhar Natarajan. Bloomberg. October 8, 2021. https://www.bloomberg.com/news/articles/2021-10-08/sec-investigating-archegos-for-potential-market-manipulation

Born: Certainly, the Dodd-Frank Act is a first step in that direction, and its provisions could be expanded by legislative amendment to extend to a point where the market would be a lot safer.

YPFS: I don't want to keep you all morning, but I do hope I can get you to talk about how should policymakers, today's policymakers, think about those dangers and lessons that we can draw from this post-crisis period?

Born: Recent problems go beyond Archegos. There have been tremendous manipulations of interest rates by using over-the-counter derivatives since the Dodd-Frank Act. There have been tremendous manipulations of forex using over-the-counter derivatives. There have been collapses of over-the-counter derivatives dealers which stole their customers' money, MF Global for example, and there have been other tremendous losses, like JPMorgan's London Whale who created a loss of $6 billion. The CFTC during the Obama administration made great strides in trying to corral the manipulations, and I hope that more will be done to fully implement and enforce the Dodd-Frank Act by both the CFTC and the Securities and Exchange Commission under the Biden Administration. It would be very useful for the Administration to conduct a new assessment of dangers in the financial system in general. The Dodd-Frank Act is more than ten years old now, and it is time to evaluate how well it has been implemented and what additional protections are needed. I am concerned that shadow banking in the form of unregulated or underregulated financial markets, products and participants has been growing.

YPFS: One of the structures set up in Dodd-Frank was the Financial Stability Oversight Council, FSOC. Do you see difference between that and essentially the President's Working Group that you dealt with and any role it should have?

Born: It has become a statutory body now, and I think it is important because we have a highly splintered system of financial regulation on the federal level among a large number of agencies. FSOC's purpose is to bring these regulators together and have them pool information from all aspects of the financial system and coordinate efforts to rein in systemic risk. I hope that FSOC is more effective than the President's Working Group was. It will only be effective if its members are not subject to regulatory capture. It might be more unwieldy than the President's Working Group because it is quite a bit bigger with 10 members.

YPFS: Ten voting members.

Born: Right. There were only four of us voting members of the President's Working Group in 1998.

YPFS: Just to sum up, are there other lessons you would like to point out? Are there any that you would think could apply for recovery from the COVID- 19 crisis?

Born: Again, and I am repeating myself, it is very important for policymakers, regulators and supervisors to distance themselves from thinking that their purpose is to further the interest of a particular industry. It is very easy, when enormous political power and money are being expended by an industry, to forget that the industry's interests are not the public's interest's And there is no reason to have regulation if it is not to further the public interest.