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Chairman Thompson, Ranking Member Craig, Members of the Committee, thank you for the opportunity to testify today. I joined the Chicago Board of Trade (CBOT) in 1972 as Vice President of Economic Research and Planning. As the exchange's chief economist, my primary responsibility was to revise existing futures contracts and develop new ones in response to evolving economic conditions. I had the opportunity to help design several features of the legislation that established the Commodity Futures Trading Commission (CFTC) and concurrently played a role in the creation of the world's first interest rate futures contract. I subsequently had the privilege of being the principal architect for U.S. Treasury futures and options. I appear today to share my experience with this committee and to congratulate the CFTC, and this committee, for an extraordinary 50 years.

Economic Challenges and Market Response

In 1973, the economic landscape shifted dramatically in the United States and globally. Grain prices surged due to a confluence of factors, including reduced U.S. crop yields from delayed spring planting and early frosts, crop failures in China and Russia, and a diminished anchovy harvest off the coast of Peru, affecting global animal feed supplies. Inflationary pressures were further exacerbated by the Arab oil embargo and the United States' departure from the gold standard, leading to unprecedented increases in food prices and interest rates. During this volatile period, the CBOT faced scrutiny. Rising food costs fueled calls for increased regulation and restrictions on speculation. The exchange's vital role in hedging and price discovery was often overlooked. As an aside and contrary to public perception, speculators were largely short during the price surge, which helped moderate the increases, while exporters were the primary longs. Recognizing the inevitability of new regulations, CBOT leadership took a proactive approach. Rather than opposing legislative action outright, we worked to shape regulations that would preserve market functionality while addressing public concerns. This period provided an opportunity for me to bring to life a financial innovation-mortgage interest rate futures that had been the focus of my academic research for four years. It was one of the key reasons I joined the exchange.

Leadership and Legislative Engagement

As the world's oldest and largest futures exchange, the CBOT spearheaded discussions on regulatory changes, setting the standard for other exchanges. CBOT President Henry Hall Wilson, supported by Chairman Fred Uhlmann and board member Les Rosenthal, played a crucial role in these negotiations. Wilson, a former Congressman and Kennedy administration official, brought invaluable legislative experience to the process. Legal counsel Phil Johnson of Kirkland & Ellis also played a pivotal role as a trusted advisor and drafter of prototype legislative language. I worked closely with Mr. Johnson and the House Agriculture Committee

staff, led by John Rainbolt, to draft legislative language that would facilitate the introduction of financial futures. As interest rates rose and market volatility increased, the necessity of hedging mechanisms became evident. A key legislative challenge was redefining what constituted a futures contract. This committee and the staff accomplished that goal. However, redefining eligible contracts was not enough. Establishing exclusive jurisdiction for the newly created CFTC was essential to enable financial futures, particularly contracts based on interest rates and equities. Initially absent from the House version of the legislation, exclusive jurisdiction was championed by Senate Agriculture Committee Chairman Herman Talmadge and his chief of staff, Mike McLeod. They recognized that fragmented oversight across multiple agencies—the Federal Home Loan Bank Board, Federal Deposit Insurance Corporation, Federal Savings and Loan Insurance Corporation, Federal Reserve, and Securities and Exchange Commission—would be unworkable. Exclusive jurisdiction was crucial, reinforcing the principle that one cannot serve two masters.

Implementation and Market Impact

The creation of the CFTC in 1975 marked a turning point for financial innovation. Interest rate and equity futures became feasible. The first contract approved under the new legislation was the Government National Mortgage Association (GNMA) mortgage interest rate futures contract, launched on October 20, 1975. It was an unequivocal success.

Benefits of the GNMA Mortgage Interest Rate Futures Contract

This contract provided essential benefits, including hedging against interest rate risk, improved price transparency in the spot market, and enhanced price discovery for future interest rates. The designation request was strongly supported by GNMA, the Federal Home Loan Mortgage Corporation (FHLMC), and other housing market stakeholders. The contract design embodied a technical concept know as Cheapest to Deliver (CTD) which became the standard for all subsequent futures on treasury securities. As interest rates surged from 8% to 16%, a futures market facilitated hedging thereby providing substantial economic advantages to depositary institutions and contributing to financial stability. The reduction in the bid/ask spread and some extrapolation of rate protection costs suggests a saving of $6,000 to $10,000 on a $260,000 home. This is a conjecture based on the facts at that time.

Expansion of Financial Futures: 30-Year Treasury Bond Futures

The success of GNMA futures paved the way for further innovations, including the introduction of 30-year Treasury bond futures in 1977. Before 1971, the U.S. Treasury had capped long-term bond yields at 4.25%. After lifting this ceiling, the Treasury began issuing long-term securities with varying maturities, culminating in the regular issuance of 30-year Treasury bonds in 1977, which provided sufficient supply for a viable futures market. It was a simple objective with technical complexities. We modified the cheapest to deliver architecture in the GNMA futures, creating a nominal 20-year bond term with an 8% coupon. This contract was launched on August 22, 1977.

Economic Benefits of the 30-Year Treasury Bond Futures Contract

At the time of its launch, the bid/offer spread in the spot market for 30-year Treasury Bonds was 1/8 to 1/4 point for the current coupon (significantly larger on bonds issued in prior years) while the futures market adopted a trading increment of 1/32nd. This shift in cash market convention helped reduce the spread from approximately 6/32nds to 1/32nd. In 2024, the U.S. issued 300 billion dollars in 30-year Treasury bonds. It is easy to infer from the reduction in the bid/offer spreads combined with hedging benefits that the futures market drove borrowing costs down significantly.

The Futures Market in 10-Year Treasury Notes

The 10-year Treasury note futures contract, launched on May 3rd, 1982, continued the innovation by the exchanges and the regulator. Regular Treasury auctions underscored the need for a futures contract tailored to this segment of the yield curve. This contract became the benchmark for U.S. interest rates, influencing mortgages, corporate bonds, and sovereign debt markets worldwide.

Economic Benefit of the 10-Year Treasury Note Futures

At the time of launch, the bid/offer spread for the 10-year Treasury note was 4/32nds, which narrowed to 1/32nd with the contract's launch. This 3/32nds reduction equated to one basis point. In 2024 the U.S. Treasury sold about $500 billion of 10-year notes. That lowered interest costs by $1.875 billion. Once again, it is easy to infer from the reduction in the bid/offer spread combined with the hedging benefits that the futures market reduced borrowing costs significantly.

Reduction in Interest Costs with the 2024 issuance to 30 Year Bonds and Ten-Year Notes

The combined issuance to the 30-year Bond and 10-year Note totaled 800 billion. A back of the envelope analysis suggests that the benefits of transparency, hedging and price discovery is about $3.75 billion. Adding in all notes and bonds issued in 2024 suggests reduced interest rate costs of 5 billion and possibly up to 10 billion in 2024. These are conjectures that are grounded in real world experience. These numbers suggest that further research would be of significant interest to economists and policy makers. These numbers don't include the benefits of options on futures.

The First Options on Futures: 30-Year Bond Futures

The introduction of options on 30-year Treasury bond futures on October 1st, 1982, despite initial skepticism, further enhanced interest rate risk management. The ability to create floors and caps on interest rates was economically justified in the submission to the CFTC. It was the same requirement for economic purpose as the GNMAs, 30-year bond and 10 years Treasury Note. While it is challenging to quantify the exact economic value of these options, their impact on price discovery and risk management was undoubtedly significant. The success of these options led to their adoption in grain markets, providing farmers with tools to set price floors while retaining upside potential.

Human Capital

In 1975, when the CFTC emerged as an independent regulatory agency I was encouraged by Donald Jacobs, Dean of the Kellogg School of Management, Northwestern University to teach the first course ever at a business school on futures and options. It became a regular part of their curriculum. Interest rate risk management is now a standard component of MBA education in the U.S. Our markets are the envy of the world partly due to human capital and our role as financial innovators. No doubt this committee and the CFTC share the credit.

Conclusion

The creation of the CFTC and its regulatory framework laid the foundation for a dynamic futures industry. These markets have delivered immense value to borrowers, including the U.S. Treasury, municipalities, corporations, and households, by providing tools for managing interest rate risk and promoting financial stability. I suggest that these three Treasury products alone have delivered a minimum economic benefit of $5 to $10 billion annually in interest rate savings by the U.S. Government while enhancing market efficiency and financial stability. We are the benchmark for sovereign and corporate debt worldwide.

While past innovations have provided significant benefits, I firmly believe the best is yet to come. With a strong regulatory framework and the continuing ingenuity of the exchanges, futures markets will remain indispensable tools for risk management and economic growth in the United States. Thank you, and I welcome any questions you may have.