VALUING FIXED INCOME FUTURES

THE LATEST METHODS TO VALUE U.S., U.K., JAPAN, AND GERMAN GOVERNMENT BOND FUTURES

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TECHNOLOGY TO IMPROVE RISK MEASUREMENT

•

GUIDELINES FOR HEDGING MORTGAGES WITH EURODOLLAR FUTURES

DAVID BOBERSKI

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P R E F A C E

Futures are important to America. Treasury futures facilitate the government's fiscal policy by aiding in the digestion of new Treasury bonds. Eurodollar futures help promote home ownership by effectively hedging mortgage-backed securities, making them less expensive to originate and to own. There have been missteps along the way, but students of the market should never forget that the big picture is overwhelmingly positive and touches the lives of every American. In spite of their importance, these instruments remain relatively poorly understood by the people that can least afford the deficit: traders and risk managers. In fact, the fourth largest bankruptcy in American history was triggered in 2005, when Refco, a brokerage that specialized in futures trading, revealed losses from customers who had underestimated the risk they were assuming in the market. The problem isn't a lack of research devoted to the subject; in fact, forests have been felled to produce tomes on futures. The problem is a failure to grasp that their behavior changes along with the technology available to evaluate them.

Consider how you end up chasing your tail when studying a financial instrument; whenever you gain a deeper understanding, this impacts on how you trade it. Changes in transaction patterns have an impact on the price, and the cycle repeats itself. The contradiction that has spawned an entire industry of fixed income traders is that the more an instrument is studied, the more it changes! Every day two things happen: computers become more capable, and there is a longer history available to analyze. Incorporating new information into our analysis of financial products changes how they behave. To some extent, traders are victims of their own success, since price adjustments are speeding up along with our enhanced capability to interpret the changes. Faster responses mean faster price action, and there is no end to our struggle to precisely define how the latest technological and academic advances will be reflected in market prices.

The importance of futures to the fixed income market has been vividly illustrated in recent years, as the struggle to price them in an extremely low interest rate environment has literally shut down parts of the multi-trillion dollar Treasury market. In terms of the number of failed trades, where institutions were not able to take possession of Treasury notes sold to them, the effect was comparable to a

terrorist attack or natural disaster. Every day there is enough potential energy in the Treasury futures market to either wreak havoc on the scale of a national catastrophe, or facilitate meaningful change in people's lives. Futures are important, and so is understanding them.

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FUTURES

C O N T E N T S

LIST OF FIGURES

Figure 3–6

Figure 3–7

Figure 3–8

Figure 3–9

Figure 3–10

Figure 4–1

Figure 4–2

Figure 4–3

Figure 4–4

Figure 4–5

Figure 4–6

Figure 4–7

Figure A–1

Figure C–1