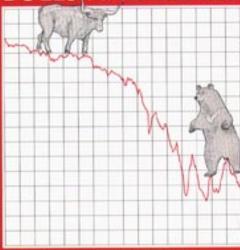
Electronic Bulls and Bears: U.S. Securities Markets and Information Technology

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ELECTRONIC BULLS AND BEARS



U.S. Securities Markets and Information Technology



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Foreword

Communication and information technologies—the telegraph, then ticker tape, telephones, and now computers—have historically played important roles in structuring and improving the operation and performance of securities markets. In 1975, Congress-realizing the potential of computer and telecommunications systems for improving competitiveness among U.S. securities markets and dealers-enacted the Securities Exchange Act Amendments. This Act sets forth goals for an electronically integrated 'national market system' that would lead to improved liquidity, higher efficiency, fairness to all domestic investors, and greater attractiveness of U.S. markets to international investors.

This report, Electronic Bulls and Bears: U.S. Securities Markets and Information Technology, responds to requests by the House Committee on Energy and Commerce and the House Committee on Government Operations to assess the role that communication and information technologies play in the securities markets. The Committee desired a benchmark for gauging progress made toward the national market system envisioned by the 1975 Act. This report assesses the current use of information technology by U.S. securities exchanges and over-the-counter dealers, by related futures and options markets, and by associated industries and regulatory agencies.

OTA characterizes the present U.S. securities markets as the most liquid, efficient, and fairest in the world, but still there are serious problems besetting or threatening the U.S. markets. Some of these problems result from the reluctance to accept and adapt technologies that may threaten traditional roles and long-standing business relationships. Others are caused by the forces of information technology that now link securities, futures, and options markets into a seamless web of transactions. There is also a mismatch between the capabilities of technology to link these markets and the fragmented jurisdictions of the agencies that are charged with regulating them.

Technology is a double-edged sword that must be used with care and skill. Information technologies will never supplant human function and reason, but when properly and judiciously used they can help achieve the objectives of the 1975 Act.

OTA thanks the Advisory Panel and the many workshop participants, contractors, contributors, and reviewers who contributed to the report. All were unfailingly generous with their knowledge, judgment, and time in helping OTA in this assessment. OTA, of course, bears sole responsibility for the contents of this report.

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NOTE: OTA appreciates and is grateful for the valuable assistance and thoughtful critiques provided by the advisory panel members. The panel does not, however, necessarily approve, disapprove, or endorse this report. OTA assumes full responsibility for the report and the accuracy of its contents.

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