Straight Through Processing Technology in Global Financial Market: Readiness Assessment and Implementation

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ABSTRACT

With rising trading volumes in domestic and cross-border security transactions, risks faced by global financial firms and markets are increasing. To manage settlement risks and maintain competitiveness in global financial markets, the U.S. Security and Exchange Commission (SEC) has decided to shorten the settlement cycle of security transactions from the current T+3 to T+1. As a result, key players in financial markets will need to develop capabilities to cope with challenges arising from this impending change. One initiative for addressing the issue is referred to in the securities industry as Straight Through Processing (STP). STP provides a nonstop flow of information from trade execution to settlement. It is to be used for cross-border trades to speed up settlement, reduce risk, and facilitate the move toward T+1. This paper presents a general model of security trading processes under the umbrella of STP, and proposes a framework of STP readiness assessment from a global perspective of electronic business, which can be used to guide the STP implementation in organizations.

Keywords: straight through processing; cross-border transactions; electronic security trading.

INTRODUCTION

The financial services sector is undergoing rapid changes on a global basis. The NYSE reported an increase from US$382 billion (13,015,000 trades) in 1980 to US$11.2 trillion (221,040,000 trades) in 2000. Global equity markets are also growing at a fast rate with the number of global security trades doubling every three years. Whereas in the U.S., the volume of equity transactions has increased 17 times since 1980, 20% of these transactions were re-
lated to cross-border trades (Baker, 2001). Financial markets in other countries are, by no means, isolated from the developments in the major global markets. For example, reported in its 2001 fact book, the Australian stock market has achieved an average daily trade volume of 58,718 trades valued at A$1.55 billion and is expected to show continued growth from local as well as global institutional and retail players.

Percentage wise, current estimates of online cross-border security trading volume are only in the 5-7% range and predominantly by sell-side users; yet online systems will continue to increase in importance as additional buy-side institutions overcome their hesitation and recognize the benefits of Straight Through Processing (STP) and order execution (Platt, 2001). Platt predicts that 10-15% of buy-side clients will be using online systems within the next 12 to 18 months and the growth trend will continue with no ceiling. “The ability to process cross-border security trades efficiently, with minimum manual intervention and fewer mistakes, not only supports larger foreign exchange institutions, but also allows smaller volume institutions to compete in a lower spread environment,” (Platt, 2001, p.18). Though they present tremendous opportunities and potential, cross-border security trades also bring about problems and challenges to financial institutions.

**CHALLENGES TO GLOBAL FINANCIAL MARKETS**

**In the United States**

As far as end investors such as pension funds, mutual funds, and corporations are concerned, today’s cross-border, post-trade securities processing environment increasingly represents poor value and dead weight on performance. Intermediary firms, such as investment managers, brokers, custodians, and clearers suffer from high fixed costs in the form of incompatible databases and manual procedures (Kirby, 1999). With every prospect of cross-border securities flows doubling every two or three years, there is a significant and growing level of risk exposure that needs to be managed. There are also significant inefficiencies in cross-border transactions across firms, as 70% of such transactions are currently performed using manually intensive methods. This has led to a failure rate as high as 15-20%, and caused delays in 60% of such trades. These failures are caused by data re-entry, lack of standards, delays, handovers, frequent manual intervention, and other breaks in the security transaction workflow. As a consequence, 40% of fund managers’ back office cost may be attributed to reconciling these transactions. While cross-border transactions are more exposed to settlement risks and inefficiency, domestic transactions are not exempt from them. According to the securities industry association, under the current T+3 settlement cycle, approximately US$1.8 trillion worth of trades remain outstanding everyday. There is a growing consensus on the need to increase productivity and efficiency by reducing operational costs, mitigating risks to participants, and eliminating volume sensitivity to enable the business to grow (Kirby, 1999).

As an effort to reduce transaction failure and operational cost, the U.S. securities industry has scheduled to move from T+3 to T+1 in mid-2005 followed by one year of processing and testing. The effort, known as T+1 or trade-plus-one-day clearing, is mandated by the Security and Exchange Commission (SEC) to settle all...
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