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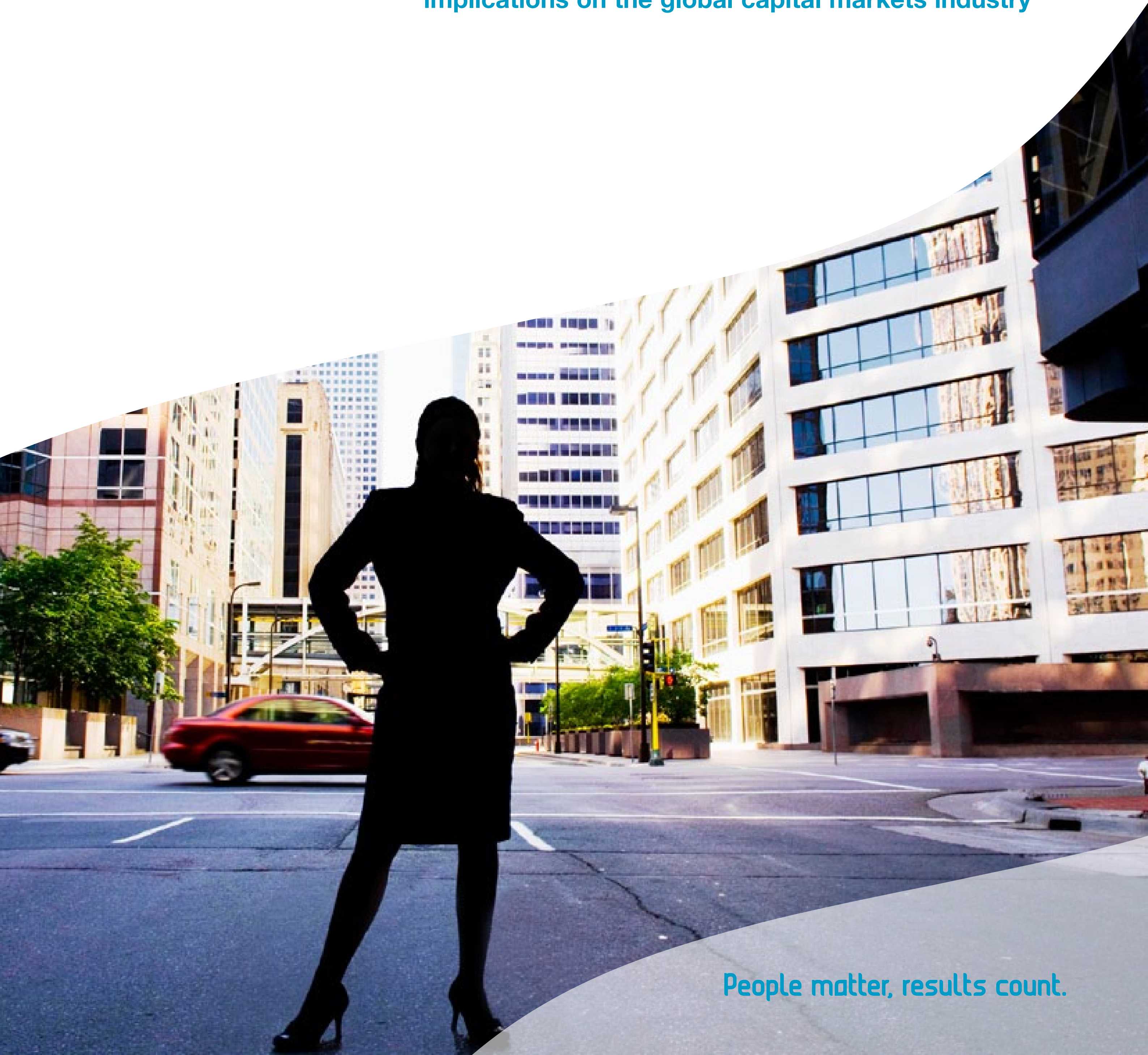
WHAT YOU NEED TO KNOW
CAPITAL MARKETS

Trends in the Global Capital Markets Industry: Sell-Side Firms

Key emerging trends across sell-side firms and their implications on the global capital markets industry



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1 Highlights

In 2010, global capital markets continued to recover with the global financial stock of equity and debt reaching a new all time high of $212 trillion[1]. Driven by these industry trends, the total number of IPOs issued and total IPO deal volume continued their upswing in 2010. However, the regional picture highlights some strong divergences, as the growth was primarily driven by emerging markets with net equity issuances in these markets more than double in comparison with the issuances in developed markets. Also, the number of trading venues is on the rise in emerging markets and financial centers like Singapore, Hong Kong, and Shanghai are gaining prominence within the global capital markets industry.

Post-crisis, the role of regulation has increased with a number of legislative acts passed to regulate global financial markets. For sell-side firms, there are many regulations which are currently at the proposal or consultation phase. These regulations are likely to have an impact on the profitability of the industry in the short and potentially medium term. Furthermore, regulations have forced sell-side firms to align their business strategies with the new regulatory environment.

Fast-growing emerging markets are attracting global sell-side players as growth continues to stagnate in developed markets. This trend is supported by the increasing number of trading venues in emerging markets, especially the Asia-Pacific region. However, this trend has also resulted in increased competition, negatively impacting smaller firms and resulting in industry consolidation. Consolidation activity has also been increasing in the high frequency trading space (for gaining competitive advantage) and in brokerage firms (as sustenance of smaller firms becomes difficult due to increasing competition).

Sell-side firms are investing heavily in enhancing their trading platform functionalities and analytics capabilities, along with improving their connectivity with global exchanges. Regulatory pressure has forced firms to invest in upgrading their reporting and risk management systems. These investments are expected to increase in the near term.

Going forward, sell-side firms should focus on developing their data management infrastructure (as high-frequency trading and shifting of over-the-counter derivatives trading on exchanges will result in increased in trade data volume), as it directly affects effective risk management and accurate trading decision making.

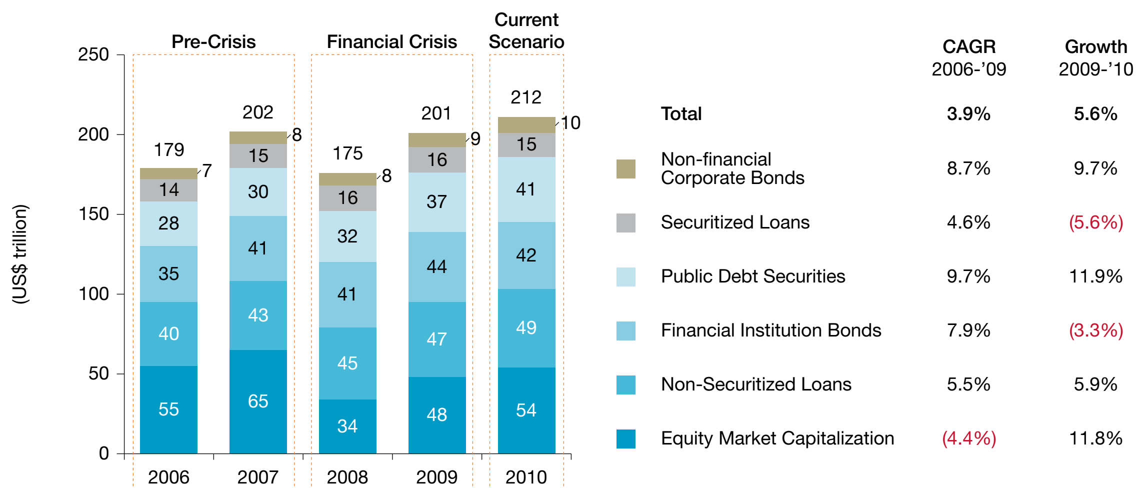
[1] Bank for International Settlements Statistics, 2010

2 Introduction

2.1. Global Capital Markets Performance

After the severe financial crisis of 2008 and 2009, global capital markets have resumed growth. The global financial stock (debt and equity outstanding) grew by $11 trillion in 2010 to reach $212 trillion, which was above the 2007 peak level. The increase in the global financial stock was partly due to the recovery of global equity markets in 2009 and 2010, and largely due to growth in government debt securities (the latter is 14.6% above the 2007 levels while equities are still 17% below the level of 2007). Cross-border capital rose for the first time since the financial crisis in 2010, but still remains below the 2007 level.

Exhibit 1: Global Financial Stock (US$ trillion), 2006–2010



Source: Capgemini analysis, 2011; Bank for International Settlements Statistics, 2006-2010

However, the recovery in global capital markets has been unevenly distributed across geographies. Developed markets such as North America, Western Europe, and Japan were the major absolute contributors to growth in the global financial stock with a market capitalization of $6.6 trillion. Growth in emerging markets (up 13.5%) was much faster than in mature markets (up only 3.9%), and speaks to a shift in the global capital markets.

At the local market level, China contributed $2.1 trillion to the growth of the emerging market financial stock which was up $4.4 trillion in 2010[2], mainly due to an increase in equity valuations and lending. Global debt outstanding grew by approximately $5 trillion in 2010, with government bonds rising by $4 trillion. While corporate bonds grew, bonds issued by financial institutions declined in 2010 mainly due to low investor confidence.

[2] Bank for International Settlements Statistics, 2010

Globally, investors continued to diversify their portfolios geographically, with global foreign investments increasing to an all-time high of $96 trillion in 2010. Increased cross-border lending, debt issuance, and foreign reserves fuelled the growth in foreign investments; with foreign direct investments also attaining a new high of $21 trillion in 2010[3].

With the focus of investors and investment firms shifting to high growth emerging markets, global imbalances have increased further. For example, most developed economies are now net debtors, with their debt funded by emerging markets. Emerging markets, with high growth potential and rising income levels, have become the new centers for raising capital.

Going forward, the growth in the capital markets of emerging countries will likely remain strong as their long-term fundamentals look solid. However, global uncertainty and volatility have the potential to affect all markets and are key risk factors for the industry over the next few years.

2.2. Global Capital Markets Players[4]

Global capital markets players can be broadly divided into three core categories:

- **Buy-Side Firms:** Mutual funds, hedge funds, pension funds, unit trusts, proprietary trading firms, and private equity
- **Sell-Side Firms:** Investment banks, brokerage houses, and independent analysts
- **Financial Intermediaries:** Stock exchanges, clearing houses, and custodian banks

This paper explores key trends prevalent across sell-side firms and their implications on these firms and the global capital markets industry.

[3] International Monetary Fund Statistics, 2010
[4] Wealth management and private banking are covered in a separate paper within our *What You Need to Know* series

3 Emerging Trends in Global Capital Markets: Sell-Side

As economic activity increased in 2010, sell-side firms saw a significant increase in their brokerage and investment banking fees. In 2010, the total fees collected by the top ten global investment banks increased by 13%, totaling $81.5 billion. The increase in investment banking fees was primarily driven by the increase in the total number of IPOs issued in 2010 and the total deal value, which increased from $115 billion in 2009 to $280 billion in 2010[5].

Though the sell-side industry improved its performance in 2010, it is unlikely that such a performance will be repeated in 2011, mainly due to necessary but costly investments into regulatory compliance initiatives, persistent market volatility, and signs of another economic slowdown.

Financial centers in emerging markets are gaining prominence in the global financial services industry and sell-side firms are increasingly expanding their footprints into these high-growth and more liquid markets.

These developments have supported the emergence of the following key trends in sell-side firms globally[6]:

1. Role of regulations has increased, impacting not only the profitability but also the business operations of sell-side firms.
2. With the rapid increase in trading venues in emerging markets (supported by strong market fundamentals), sell-side firms are pursuing growth in these markets.
3. Increased market consolidation is occurring in the high frequency trading and brokerage industries.
4. Firms are increasingly investing in trading platforms, enterprise data and reporting & risk management systems.

[5] Investment Banking Review, The Financial Times, accessed on 05/10/2011
[6] Trends shown are not necessarily comprehensive, but have been highlighted due to their relevance and potential impact on the industry

4 Trend 1: The More Prevalent Role of Regulations and Its Impact on the Profitability and Business Operations of Sell-Side Firms

"The securities finance industry continues to transform in the midst of a slow economic recovery and impending new regulations. Customers are demanding greater transparency, consolidating systems to increase efficiency and reduce costs, and improving their processes in order to better leverage their securities finance business."

Jane Milner,
Head of Strategy for Securities Finance and Collateral Management, SunGard.

Source: *10 Trends in Securities Finance*, SunGard blog, 8 September 2011. http://blogs.sungard.com/fs_capitalmarkets/2011/09/08/10-trends-in-securities-finance/

4.1. Background and Key Drivers

Regulatory pressure has increased over the last couple of years, with regulations covering the entire gambit of financial sector operations. In Europe, the regulatory structure has changed with the introduction of new regulatory bodies such as the European Systemic Risk Board and three new supervisory authorities (European Banking Authority, European Securities and Markets Authority, and European Insurance and Occupational Pensions Authority). In the U.S., the existing regulatory structure was strengthened (expanding powers of existing regulatory authorities) and new regulations such as the Dodd-Frank Act[7] were introduced.

These new regulations have not only put pressure on sell-side firms' profitability, but are also impacting these firms' business operations since regulations have differing impacts on different asset classes, thereby changing product dynamics and firms' business strategies. For regulators, reducing operational risk has been one of the key recent focus areas and firms are now investing in improving their current risk management systems.

The key drivers for the increasing role of regulations impacting the business operations of capital market firms, especially sell-side firms, are:

- Regulations around capital requirements require sell-side firms to maintain a minimum core capital level, which has put pressure on firms to raise capital:
  - Firms are finding it difficult to raise capital through capital markets due to high market volatility and an uncertain economic climate.
  - In response, firms are either divesting non-core businesses or merging with other firms to raise and meet their capital requirements (consolidating).
  - Due to a growing trend towards divestment and consolidation, firms' business operations are changing.
- Regulations are not affecting all asset classes evenly, making certain asset classes more attractive than others:
  - In Europe for example, Solvency II legislation has proposed a 39% capital charge on equity and a 29% charge on real estate investments, but no capital charge on government bonds. This has led to a change in firms' business strategy as they are incentivized to invest more in certain asset classes than others.
- Regulators have been introducing reforms around risk management and reporting to reiterate the importance of having proper internal risk management controls:
  - With new reforms in place, firms are investing in upgrading their risk management systems to gain better control of risk exposure.
  - These systems will help sell-side firms to make better business decisions based on proper analysis of data and aligning their decisions with the firm's overall risk policy.

[7] The Dodd-Frank Act was passed on July 21,2010, focusing on Wall Street reforms and investor protection

4.2. Analysis

As regulatory reforms continue to evolve, and as regulators are analyzing various industry comments to the proposed reforms and new standards, sell-side firms are expecting several amendments and clarifications to be issued in the future

Until now, most regulators across the globe have addressed issues that have direct impact on financial market stability. However, with the emergence of dark pools trading[8] and high frequency trading (HFT) strategies, regulators are focusing their attention on the impact of these trading strategies on efficient price discovery and fair access to all market participants.

The role of regulations is expected to increase in the future and will continue to change the product dynamics, impacting the profitability and overall operations of sell-side firms.

4.3. Implications

In the short-term, regulations are expected to have a negative impact on the profitability of sell-side firms, as firms will be required to raise capital above minimum capital requirements and will also be spending on upgrading risk management and reporting systems. In addition, consolidation in the sell-side industry is expected to increase as firms are looking to form strategic partnerships in order to gain competitive advantage and grow amidst highly volatile and uncertain economic environment.

Technology investments are also expected to increase in the area of risk management to enhance the functionalities of existing trading platforms. Sell-side firms are likely to invest in data management system improvements, as more and more firms are realizing the importance of data quality in measuring and reducing operational risks.

While the short-term impact on firms is likely to be negative, the longer term benefits to firms and all stakeholders are expected to far outweigh initial challenges through safer and more transparent institutions and markets.

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[8] Dark pools trading refers to private alternative trading systems or platforms which are accessible to institutional investors

5 Trend 2: A Rapid Increase in Emerging Market Trading Venues Is Driving Sell-Side Firms to Pursue Growth in These Markets

5.1. Background and Key Drivers

In 2010, emerging markets, especially in Asia-Pacific, saw a continuation in the growth of capital inflows. Such strong growth led to an increase in focus on emerging markets by sell-side firms.

Additionally, another driver for the renewed focus on emerging markets has been the rapid increase in the number of trading venues in the region. Some of the trading centers in Asia-Pacific are now on an equal footing with traditional global financial centers such as New York and London.

The key drivers supporting the tremendous rise in the prominence of emerging market trading centers within the global securities markets are:

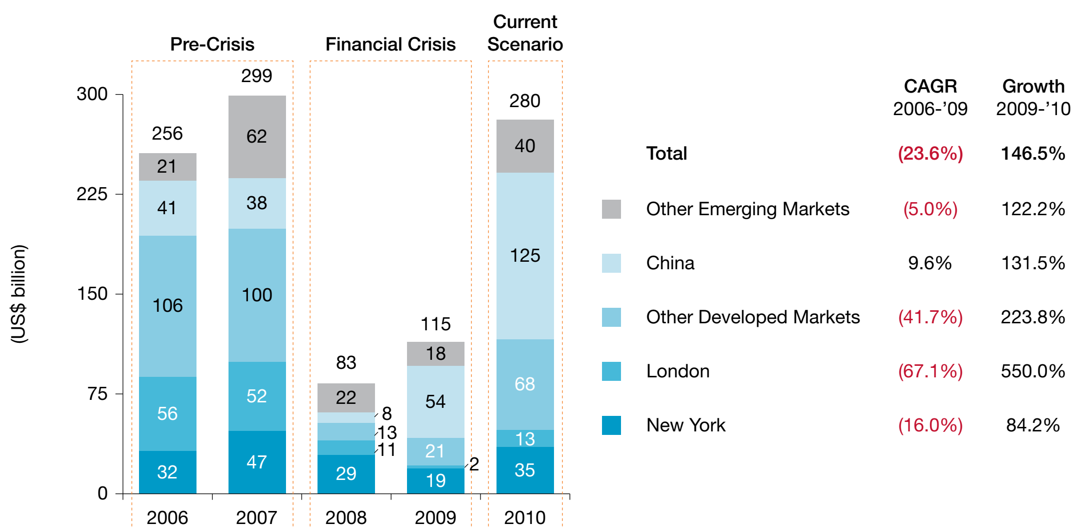
- Strong growth in investable wealth in emerging markets, supported by robust macroeconomic growth that has enabled a growing middle class.
- Advancements in technology and communications make it possible to connect different markets with negligible latency.
- Trading centers in emerging markets are investing heavily in technology to enhance their trading platforms.
- Improvements and reforms in education allow emerging markets to offer high quality finance professionals.

5.2. Analysis

The financial stock of equity and debt in emerging markets grew at a much higher rate of 13.5% in 2010 compared with 3.9% in developed markets, and the overall financial activity in emerging markets, such as Asia-Pacific, increased significantly in 2010. For example, net equity issuances in emerging markets increased by 72.7% in 2010, compared to a decrease of 76.2% in developed markets.

Exchanges in Singapore, Shanghai, and Hong Kong are now on a relatively equal standing—depending on the nature of market activity—with the traditional leading exchanges in traditional global financial centers such as New York and London. A good example of this is that the total number of IPOs issued in emerging markets exceeded the total issued in developed markets during 2010.

Exhibit 2: Transaction Volume across Different Stock Exchange Locations (US$ billion), 2006–2010



Source: Capgemini analysis, 2011; World Federation of Exchanges, 2011

The tremendous rise in financial activity in the trading venues of emerging markets has attracted many global sell-side firms to the region. As the long-term fundamentals remain strong in emerging markets, the financial activity in the region is only expected to grow in the future.

5.3. Implications

Global sell-side firms are expected to continue their expansion into high-growth emerging markets, increasing the competition levels in the region. Small players will most likely find it difficult to sustain such pressure which may lead to consolidation. Any industry consolidation will not only be driven by the desire to gain scale and grow, but also to remain competitive in the market and to build capital bases.

Firms will need to make appropriate investments into data management and application integration, and ensure that any consolidation is done with an eye to making merged or acquired processes and systems scalable for the future, and compliant with ever-changing regulations.

6 Trend 3: Increased Consolidation Expected Around High Frequency Trading and Brokerage Firms

6.1. Background and Key Drivers

High frequency trading[9] (HFT) strategies, which have been traditionally used primarily by buy-side firms (especially hedge funds), are now being adopted by sell-side firms such as investment banks. Traders use high frequency trading strategies to capture and exploit momentary inefficiencies in the market. Lately, there has been some consolidation in this space, largely due to the pressure put on HFT firms' profit margins by new and increasing compliance regulations.

On the brokerage side, in developed markets these firms have been plagued by low trading volumes and more brokerage houses are now expanding into emerging markets. The competition in this area has increased and if this rapid expansion continues in the future, competition will further increase. This increased competition is putting downward pressure on brokerage charges, making it difficult for small brokerage firms to survive.

There are many drivers leading to an increase in consolidation in this space:

- Regulations around high frequency trading (for example, the proposed ban on naked access[10] in the U.S.) are expected to have a negative impact on profit margins in the short-term.
- Dodd-Frank legislation on separating banks' proprietary trading activities from their core business will likely lead to more consolidation in the industry.
- Low trading volumes in developed financial markets have made it difficult for small brokerage houses to survive, especially for brokerage houses focusing only on execution.
- Small and medium-size brokerage houses, with low capital reserves, will not be able to invest in technology and will lose their competitive advantage.
- Overcapacity in the sell-side industry in emerging markets will likely put pressure on revenues via a reduction in fees charged to clients, thereby turning small firms into targets for acquisition.

[9] While there is no formal definition of High Frequency Trading (HFT), the U.S. Securities and Exchanges Commission attributes certain specific characteristics to it:
- The use of extremely sophisticated and high-speed computer programs or algorithms from end-to end of the investment chain, right from market data analysis to the operation of the right trading strategy to the generation, routing, and execution of orders and trades
- The use of a individual data feeds from exchanges as well as co-location of servers in order to minimize network and other types of latencies
- Maintaining very short time frames for establishing and liquidating positions, resulting in the frequent turnover of many small positions in one or more financial instrument
- Submitting a number of orders that are cancelled soon after submission
- Maintaining very few, if any, overnight positions

[10] Brokers give their most active customers (such as high frequency traders and hedge funds) direct link to exchanges without any pre-trade supervision

6.2. Analysis

Financial reform legislations in the area of high frequency trading are expected to increase the operating costs of sell-side firms in the short term. Regulations like the ban of "naked access" in the U.S., the introduction of co-location redistribution charges, and messaging traffic charges will likely increase operational costs in the short term. Large players in high frequency trading, with large capital reserves, will be able to absorb this increase in costs, but small and medium sized players will likely struggle. As a result, it is likely that there will be increased consolidation in the industry. In 2011, large high frequency trading firms are expected to become larger, resulting in a few firms dominating the market.

Globally, brokerage firms are increasingly looking to expand in emerging markets (especially Asia-Pacific) to benefit from economies of scale, gain competitive advantage, and tap the booming capital markets industry in these regions. With global players entering these markets, small and mid-tier local brokerage houses will likely experience a reduction in their revenues and profitability. Large brokerage houses are investing in improving their offerings, enhancing data analytics and research offerings, as well as in enhancing their trading platforms (such as investments into a single platform for multi-asset trading).

Many small and medium-size brokerage firms are already feeling the pressure due to increased competition, as they are not able to match large players in terms of price and technology advancements. In 2011, small firms are expected to either focus on niche market segments or be acquired by large players.

6.3. Implications

Over the last couple of years consolidation activity has been on the rise, not only in developed markets but also in the emerging markets. Consolidation in sell-side firms, especially brokerage houses, is expected to increase in the future, as increased competition will make it difficult for small brokerage houses to survive.

Going forward, firms will be investing to expand their capabilities in these emerging markets to gain competitive advantage. Mergers and acquisitions are expected to rise in the future and firms will be spending on system integration.

7 Trend 4: Firms Increasingly Investing in Trading Platforms, Enterprise Data, and Reporting & Risk Management Systems

7.1. Background and Key Drivers

Increasing regulatory pressures have forced sell-side firms to invest in upgrading their reporting systems and improving operational risk measurement and management, while increased competition is the key driver for investments in enhancing trading platforms. Along with regulators, sell-side firms have also realized the importance of managing operational risks, leading them to invest in developing enterprise-level risk management systems for better risk assessment, management, and reporting.

Data quality issues are now considered as the major source of operational risk to financial services institutions and firms are increasingly spending to develop their enterprise-level data management systems.

The key drivers for increased technology spending by sell-side firms in upgrading their systems are:

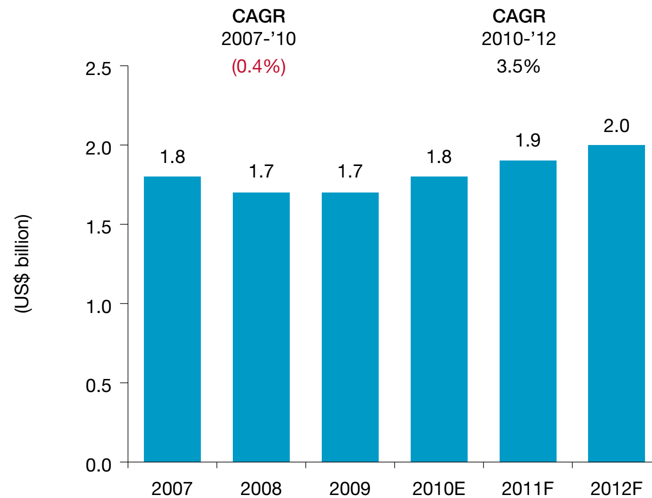
- During and after the worst of the financial crisis, the issue of inefficient management of operational risk by firms came into focus. As a result, regulators increased their push for firms to make investments in enterprise risk management systems.
- Issues with market data and reference data quality (the major source of operational risk) have driven firms' investments in enterprise data management systems.
- The demand by regulators and investors for more transparency—especially in financial statements—has resulted in firms investing in the development of flexible reporting tools.
- Establishment of global data standards and other standards in messaging and reporting are also driving sell-side firms to invest in their data management and reporting systems.
- Gaining competitive advantage has pushed sell-side firms to make significant investments in enhancing single dealer functionalities and multi-asset trading capabilities.

7.2. Analysis

In 2010, data integration spending (which includes spending on enterprise data management systems) by financial institutions rose to $1.8 billion. Though the spending was below 2007 level, it is forecast to reach $2 billion by 2012.

Sell-side firms have been spending on post-trade automation, and with the regulatory move to shift over-the-counter derivatives clearing through central counterparty clearing, are expected to increase their spending on derivatives trading technology.

Exhibit 3: Global Data Integration Spending by Financial Services Institutions (US$ billion), 2007–2012F



Source: Capgemini analysis, 2011; Data Silos-Asset Control, 2011

Sell-side firms are not only investing in enhancing their trading platforms, but are also spending on building their internal capabilities such as investments in developing real-time price engines. In addition, sell-side firms are focusing on making technology investments to reduce latency[11] and gain access to trading venues in foreign locations.

Spending on improving trading infrastructures is expected to grow in the future, but for now sell-side firms are focusing on upgrading their enterprise risk management systems, as accurate risk exposure assessment is required to make better business decisions by the management.

7.3. Implications

Sell-side firms are expected to continue to make investments in enhancing their trading and risk management systems, with a potential negative impact on profitability in the short-term. However, firms are expected to realize indirect gains such as a reduction in operational losses and better decision making in the long run.

Certain players are developing these systems in-house, but many players are outsourcing their technology initiatives. More and more firms are looking to outsource so they can focus on their core business. A sell-side firm should do a cost-benefit analysis of both outsourcing and in-house development before commencing their technology initiatives.

[11] Latency reduction is important for trading firms as quick flow of information and faster execution of trades allow firms to take advantage of any news or any irregularity in the markets

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About the Author

Rajendra Thakur is a Senior Consultant in Capgemini's Strategic Analysis Group within the Global Financial Services Market Intelligence team. He has four years of experience in the banking and capital markets industry with expertise in fixed income.

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