

# Trends in the Global Capital Markets Industry 2012: 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

As a result of the ongoing debt crisis in the Eurozone and slowing growth in emerging markets, such as India and China, 2011 turned out to be a relatively difficult year for global capital markets. Most of these macroeconomic issues also persisted in the first half of 2012.

In 2011, low confidence led investors to shy away from the riskier equity markets and look for relatively safer bets in the debt markets. Interest in commodities increased among fund houses due to their ability to act as risk diversification tools. Gold emerged as the biggest beneficiary of this trend and continued its bull run in 2011.

Overall, the global sell-side industry experienced a relatively difficult year in 2011 with the total income of the top ten global investment banks falling from \$81.5 billion in 2010 to \$80.4 billion in 2011. M&A deal making activity however increased by 9% during 2011.

A combination of difficult market environment, increasing scrutiny of market regulators, and a competitive market scenario is reshaping the way the sell-side industry operates.

## 2. Introduction

### 2.1. Global Capital Markets Players<sup>1</sup>

Global capital market 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 reviews and summarizes the key trends prevalent across sell-side firms and their implications on these firms and global capital markets.

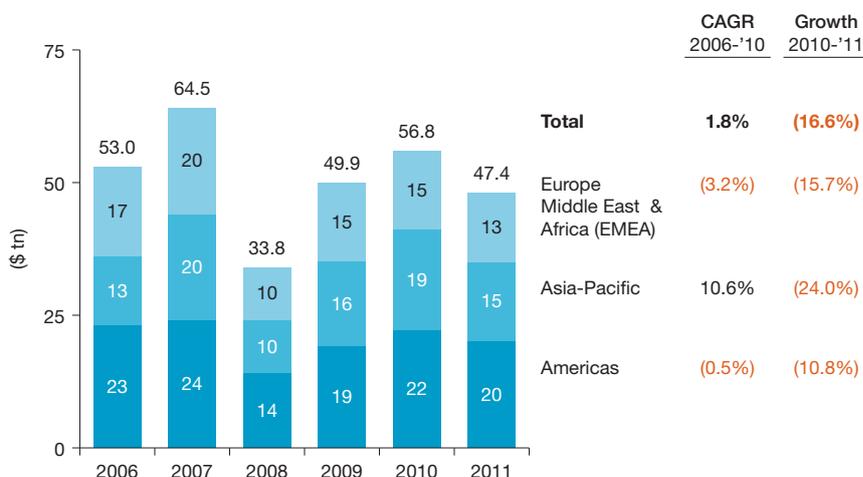
### 2.2. Global Capital Markets Performance

As a result of the ongoing Eurozone debt crisis and slowing growth in emerging markets such as India and China, 2011 turned out to be a difficult year for capital markets.

Global equity market capitalization declined 16.6% or \$9.4 trillion in 2011, as the sovereign debt crisis in the Eurozone weakened investor sentiment. Asia-Pacific however, was the worst-affected market with its combined market capitalization falling by around 24% during the year.

Markets in Europe, the Middle East, and Africa collectively fell by 15.7% due to investor concerns around growth prospects of the Euro Zone. The very existence of the euro was questioned leading to investors becoming underweight of European equities. Equity markets in the Americas however emerged as the notable exception and outperformed other regional peers despite the S&P downgrade of the U.S. This was due to relatively poor fundamentals of Europe and slowing emerging markets in Asia-Pacific.

Exhibit 1: Global Equity Market Capitalization (\$ trillion), 2006–11



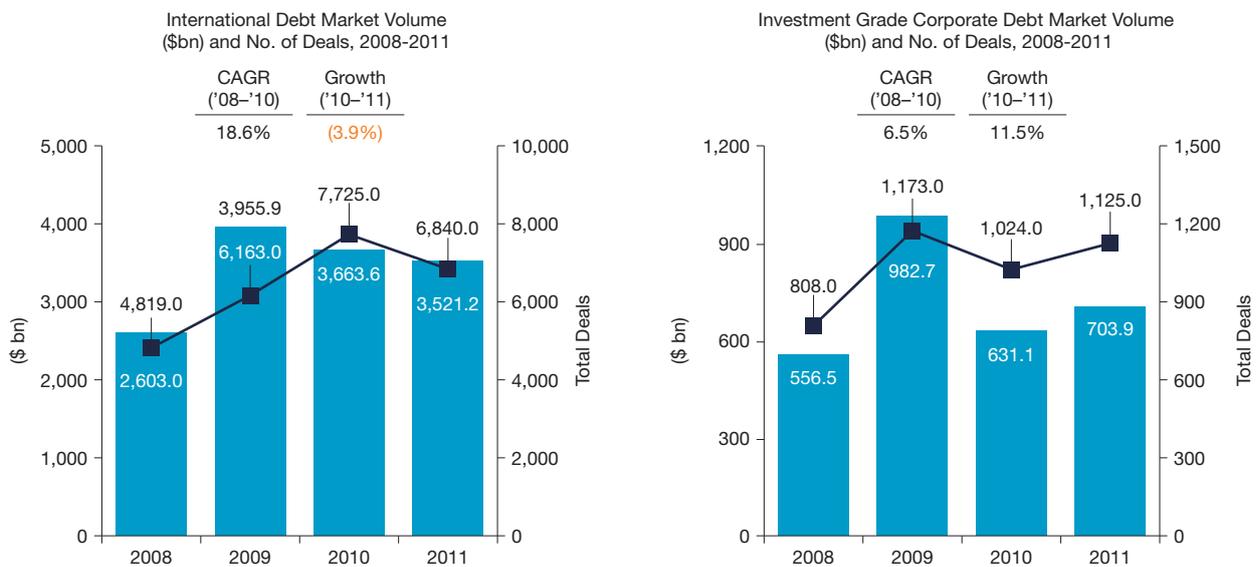
Source: Capgemini Analysis, 2012; World Federation of Exchanges, 2012

<sup>1</sup> Wealth management and private banking are covered in a separate paper within our *What You Need to Know* series

The government bond market witnessed slow activity in 2011 due to excess supply from government auctions. International debt market volume declined 3.9% to \$3,521.2 billion from \$3,663.6 billion in 2010. Euro-denominated bonds were the worst impacted and witnessed their volumes decline by 51.3% to \$81.8 billion in 2011 from \$168.1 billion in 2010. Non-resolution of the sovereign debt crisis, looming recessionary fears in several major Eurozone economies, and already high levels of public debt of certain peripheral European nations (Portugal, Ireland, Italy, Greece, and Spain) dimmed investor interest in government bonds and were the primary reasons behind the fall in volumes.

On the other hand, corporate bond issuance grew in 2011 despite higher yields, as firms chose the debt route over depressed equity markets. Volumes of investment grade corporate debt grew 11.5% from \$631.1bn in 2010 to \$703.9 billion in 2011. The volumes of high-yield corporate debt, on the other hand, declined 9.5% from \$306.8 billion in 2010 to \$277.8 billion in 2011 due to investors' proclivity to avoid risky investments. Worsening economic fundamentals resulted in more companies falling under the high-yield bonds category during the year.

Exhibit 2: International Government Debt and Investment Grade Corporate Debt, Market Volume (\$ billion) and Number of Deals, 2008–2011



Source: Capgemini Analysis, 2012; Market Data Q2 2012, International Capital Markets Association

Commodities funds continued to see growth in 2011, driven by new investors interested in this asset class as a portfolio diversification tool. Unrest in the Middle East and demand from emerging markets made energy the most preferred commodity bet for commodity-based investment funds. On the other hand, fears of sovereign debt contagion helped gold continue its run with a huge demand for funds tracking gold as a commodity. Fears of a double-dip recession and an overall slowdown in the European economy halted the growth for funds invested in base metals. Several base metal commodities such as copper and lead corrected significantly on the London Metal Exchange due to subdued physical demand.

# 3. Emerging Trends in Global Capital Markets: Sell-Side

Slowing economic activity, especially during the second half of 2011, led to a relatively lower brokerage and investment banking fee income for sell-side firms in 2011. The top ten global investment banks collectively earned around \$80.4 billion in 2011, down from \$81.5 billion in 2010.

Merger and acquisition (M&A) business was relatively stable in 2011 despite a sharp slowdown during the second half of the year. Overall M&A in value terms stood at \$2.11 trillion<sup>2</sup> in 2011, up 9% from \$1.93 trillion in 2010. While the first half of 2011 reported a massive 34% growth in M&A deals (measured by value), the second half remained lackluster with a 29% decline in deal value. Increased economic uncertainty in the wake of worsening of the Eurozone debt crisis was the primary reason for this slowdown in the second half of 2011.

Rising concerns over the ability of troubled Eurozone nations such as Greece to honor their debt commitments led to the slowing down of deal making activity in the second half of the year and remained weak during the first half of 2012. Continuing economic uncertainty has resulted in declining growth in M&A activity and lowered investors' risk appetite. Sell-side firms adjusted to the reality of a subdued economy with changes to their business model. Some of the key emerging trends witnessed in the sell-side industry included<sup>3</sup>:

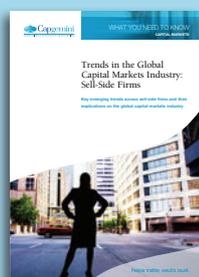
- Modernization of post-trade operations is becoming increasingly important.
- Complex event processing solutions are gradually gaining prominence.

Note that several trends covered in the 2011 *Trends in Global Capital Markets* series are still relevant and not shown again. These include:

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



Trends in the Global Capital Markets Industry 2011: Financial Intermediary Firms



Trends in the Global Capital Markets Industry 2011: Sell-Side Firms



Trends in the Global Capital Markets Industry 2011: Buy-Side Firms

<sup>2</sup> 2012 M&A Outlook, Bloomberg

<sup>3</sup> Trends shown are not necessarily comprehensive, but have been highlighted due to their relevance and potential impact on the industry

# 4. Trend 1: The Modernization of Post-Trade Operations is Becoming Increasingly Important

Recent regulations are changing the way all trading transactions are being settled and reported by capital markets firms.

## 4.1. Background and Key Drivers

In 2010, the financial services industry witnessed sweeping regulations in the form of the Dodd-Frank Wall Street Reform and Consumer Protection Act in the U.S. and Markets in Financial Instruments Directive (MiFID) II in Europe. Such regulations aimed at increasing the transparency in the financial system, in combination with capital adequacy requirement mandates such as the Third Basel Accord, are gradually changing the way all trading transactions are being settled and reported by capital market firms.

Historically, smaller investment banks and brokerage firms mostly used manual systems and followed overnight batch processing to record their post-trade transactions. However, increased trade reporting requirements imposed in the aftermath of the global financial crisis around central clearing of over-the-counter derivatives and liquidity risk management have made it mandatory for these firms to modernize their mid- and back-office functions.

On the other hand, even midsized and large sell-side firms which had modernized their mid- and back-office functions to improve efficiency have typically had such modernization efforts limited to only a product line or two. Thus, these firms too are expected to expand the scope of their modernization efforts in order to comply with the higher trade reporting burden imposed by evolving regulations.

The key drivers for increasing modernization of post-trade operations by firms are:

- A mismatch between the front-office and the mid-office/back-office technology sophistication that requires a large amount of catching-up by the mid- and back-office setups in many firms.
- Regulatory mandates around liquidity risk management and over-the-counter derivative price transparency, which have made mandatory reporting of post-trade operations a priority for firms.
- Proliferation of multi-asset and multi-geography trading, which has increased the complexity of trading operations.

A modernized post-trade setup can enable firms to handle large data volumes, multiple identifiers, and have multiple clearing and reporting relations.

## 4.2. Analysis

Firms have often heavily invested in upgrading their front-office trade operations in the past but are saddled with mid- and back-office functions that are partly or largely manual. They thus need to take urgent measures to upgrade these systems. Technological investments directed toward modernizing post-trade operations in mid- and back-office operations can not only bring these systems at par with front-office systems, but can also ensure greater compliance with regulatory obligations by facilitating better risk and order flow management which are aligned with regulatory mandates.

The need for modernization of post-trade operations is also being driven by certain international regulations, such as the Third Basel Accord, which have made the efficient management of liquidity risk a central pillar of survival for sell-side firms. Modernized back-office functions can help these firms in meeting their compliance goals by providing a timely and accurate snapshot of the organization's assets and liabilities on an as needed basis (even on an intra-day basis if required).

Finally, the proliferation of multi-asset and multi-geography trading and the rise of complex trading strategies have widened the purview of post-trade operations (and by extension created the need for their modernization) as firms now have to account for a new set of asset classes in addition to the regularly supported identifiers in the form of cash equities.

## 4.3. Implications

Due to the counter party risks associated with working with a single prime broker, most buy-side firms are increasingly opting for a multiple-broker strategy. In such a scenario sell-side firms can differentiate themselves by having an optimal post-trade setup, which will enable them to not just perform regular functions but also enable them to process post-trade functions of their buy-side clients.

The presence of a modernized post-trade setup can enable firms to handle large data volumes, multiple identifiers, and have multiple clearing and reporting relations. All these aforementioned abilities are essential for successfully executing complex trading strategies spanning multiple asset classes and multiple geographies. Thus, by having a modernized post-trade set-up, firms can broaden their trading strategies and thereby diversify their revenues.

Modernized post-trade operations will also facilitate enhanced liquidity risk management. This in turn will enable firms to have a real-time view of their liquidity position on an as needed basis, and will thus help them to optimize their exposure to different securities. Hence, modernized post-trade operations can improve the firms' revenue potential by enabling them to lend (to other market participants) securities that they hold over and above the regulatory requirements.

# 5. Trend 2: Complex Event Processing Solutions are Gradually Gaining Prominence

## 5.1. Background and Key Drivers

Event processing solutions have been used by businesses for more than a decade in order to analyze data and drive insights. Complex event processing (CEP) has raised the sophistication in this process due to its ability to combine data from multiple sources on real-time or near real-time intelligence. Its ability to create an effective situational knowledge from numerous unrelated databases and sources has made it one of the most resorted to technologies in retail, manufacturing, and financial services.

With the gradual evolution of CEP database technology, it has been steadily gaining prominence in the investment trading space. As a result, increasing automation of trading activities has led to a strong rise in the amount of data volumes that capital market firms have to deal with in their regular business operations. Sell-side firms, in particular, have thus been challenged to enhance their IT infrastructure setup with advance analytics solutions such as CEP for mining the ever increasing data volumes.

The key drivers for increasing CEP technology implementation by sell-side firms are:

- Surge in automated trade execution, which has led to an explosion of data volumes.
- Increasing usage of high frequency trading by sell-side firms for which CEP helps in carrying out various activities, such as development, back testing, and order routing.
- Growing focus on enterprise risk management by firms.

## 5.2. Analysis

CEP detects potential fraud through a rule-based system; for instance, the reporting of two different transactions from the same account from two different geographic locations. Increasing importance of risk management practices, such as compliance to fraud management and anti-money laundering regulations in the investment banking and commercial banking arena, are expected to drive greater adoption of CEP technology by firms.

Firms using CEP solutions for data analysis and insight generation have proven to possess an edge over their competitors due to the ability to handle real-time data. As a result, adoption of CEP technology is expected to gather further momentum as the sell-side industry continues to shift toward analyzing real-time data against static data to gain a competitive edge.

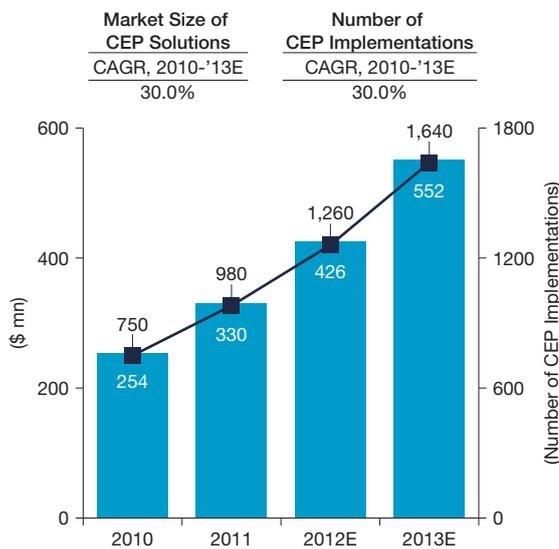
According to industry estimates<sup>4</sup>, CEP implementation currently has a market penetration of about 15–20% of pre- and post-trade execution infrastructure. While these implementations are uniformly split between pre- and post-trade applications, an estimated 75% of these deployments are expected to be made by sell-side firms.

Adoption of CEP technology is expected to gather further momentum as the sell-side industry continues to shift toward analyzing real-time data against static data to gain a competitive edge.

<sup>4</sup> Celent: "Complex Event Processing, Looking Beyond Algorithmic Trading," Muralidhar Dasar, 16 April 2012

The growth in CEP technology implementation within the financial services industry, in particular, can be attributed to a growing demand for better risk management systems and the need for banks and brokerage firms to conduct a higher number of regular risk checks. The global CEP solutions market, which was valued at \$330 million in 2011, is expected to reach \$552 million by 2013 representing a compound annual growth rate of 29.3% for 2011–2013.

Exhibit 3: Expected Market Size for CEP Solutions (\$ million) and Number of CEP Implementations, 2010–2013E



Source: Complex Event Processing, Looking Beyond Algorithmic Trading, Celent, April 2012

CEP is one of the top three IT infrastructure areas where CIOs find the highest return on their investment.

Further, there are rule-based requirements that vary widely among firms based on the trades they enter into, the markets they operate, as well as the underlying securities that they deal with. As a result, sell-side firms planning to implement CEP solutions have an option to buy a packaged application which offers them additional features of customizing the rules, managing the query functions, or changing the user interface as per their requirements. On the other hand, firms that have in-house capabilities to build these functions internally can build the required platform architecture themselves rather than buying it from external service providers.

From a professional services perspective, the rising popularity of CEP may attract bigger players into this marketplace resulting in increased competition in the CEP vendor market.

Firms are increasingly using CEP based technology to build strategies and develop event driven applications, as well as customized solutions for algorithmic trading, forex trading, and monitor markets.

The real-time nature of CEP technology, which enables it to capture and detect large data sets in a high-speed environment, has made it the preferred choice for firms that are looking to deal with big data challenges. Moreover, CEP is one of the top three IT infrastructure areas where CIOs find the highest return on their investments<sup>5</sup>.

### 5.3. Implications

An event processing engine acts as a base for firms looking to deploy CEP solutions. Firms have to build customized platform architecture over this core processing engine in order to capture pre-defined events that happen within or outside the firm in order to draw insights from real-time data.

5 Bloomberg Survey, 2012

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