Impact of Regulations and Risk Management in Financial Markets in Europe

WHITE PAPER

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Prepared by Infiniti Research exclusively for Trade Tech Consulting

Background and Objectives

In 2011 European Financial markets witnessed an upsurge of regulations such as the Foreign Account Tax Compliance Act, the Basel III Capital Requirements and the Markets in Financial Instruments Directives in the Euro crisis. Infiniti Research Ltd. conducted a study from July to October 2013, which aimed to understand the influence and impact of regulations on various factors such as business operations, technological developments and types of funding.

A survey with a sample size of thirty was conducted in the Banking and Insurance industries in Nordic, Netherlands, the UK and across other European countries. The survey involved in-depth one on one interviews with the senior financial executives. The key job titles interviewed include: Compliance Officers, Chief Financial Officers, Chief Executive Officers, Head of Administration, Chief Risk Officers, Economic Capital Modellers, Heads of Capital Management, Heads of Business Support, Heads of Treasury, Heads of Capital Markets, etc.

Executive Summary

Impact of Regulations on Europe's Financial Markets

- The survey reveals that various regulatory acts such as the Markets in Financial Instruments Directive, the Money Transactions Act and the Ban on Buses for Entities Receiving State-Aid Act did not have a significant impact on the business operations of the financial institutions in Europe
- 71% of the respondents indicated that their business operations were impacted by the implementation of regulations in Europe's financial markets
- 90**%** of the respondents were of the opinion that the regulations implemented in Europe's financial markets had an impact on the cost structure of the business operations
- 97% respondents indicated that the impact of recent regulations inEuropean Financial markets is expected to change the usage of IT in their business operations
- 80% of the respondents indicated their preparedness in handling the upcoming regulations in the European Financial markets
- 80% of the respondents indicated that their companies are undertaking front office training as a key initiative to meet the upcoming regulations in the Europe's financial markets

Capital Markets

- 70% of the respondents indicated that Basel III Capital Requirements and Consumer Protection Agenda are the prime concerns that are expected to have several implications in the European Capital markets
- 80%of the respondents indicated that the regulations currently being implemented in Europe's financial markets are expected to revolutionise the usage of IT in business operations
- 90% respondents in the study were of the opinion that new financial reporting regulatory regimes are expected to be more complex and have a more long-lasting impact on the European economy than earlier reporting standards did
- 70% of respondents indicated that they have adopted several measures to manage the impact of new reporting regulations in the financial markets
- 80%of respondents believed that the ongoing Euro crisis is expected to have a slightly reduced impact on Europe's financial markets in the next five years, as they are implementing measures such as regular front office trainings, increased tax transparency with clients and improved front office controls

Corporate Treasury

- 100% of the respondents indicated that they have adopted formal risk management policies, while 75% of the respondents indicated that risk management has been implemented as a company-wide strategy in their respective organisations
- 73% of the companies indicated that they have appointed risk management boards to ensure compliance with new regulations such as Solvency II compliance and also to formulate risk management policies

- 67% of the respondents indicated their preparedness to manage new regulations, and 80% respondents indicated that they would use IT tool enablers and enhance front-office controls to meet increased regulatory obligations
- 75% of the respondents indicated that net hedging cost is a key treasury management benchmark

Asset Management

- 75% of the respondents indicated their preparedness to manage new regulations that may be introduced in Europe's financial markets
- 100% of the respondents indicated that they would adopt measures to improve operational efficiency, in order to reduce high operational costs
- Outsourcing is expected to gain ground over the next few years, as 87% of the respondents do not intend to discontinue outsourcing IT services
- 100% of the respondents expressed that they would prefer support personnel to be well-versed in local languages
- The survey indicates that88% of the respondents rated 'enhanced client data security and protection' as the leading factor considered while allocating IT budgets

Strengthening the Regulatory Framework of the European Financial System

The Group of Twenty (G20), a premier forum for international economic co-operation and decision-making, has been instrumental in establishingthe core elements of a new globalfinancial regulatory framework to ensure a more resilient financial system.Theseelements include reforms aimed at improving the stabilityof banking systems/financial institutions through improved, prudential regulatory requirements.

As a part of G20, Europe has played a key role in shaping the global response to the ongoing global economic crisis. Moreover, in its pursuit of compliance with commonly accepted international standards, Europe is attempting to integrate its Financial Services sector into a single market system. This has led to the creation of a standard single rule book for all firms and markets that operate within the single market.

In 2011, the European Commission appointed three new European Supervisory Authorities and the European Systemic Risk Board to improve cross-borderco-operation, and consistent enforcement of rules. It now proposesto link the prudential requirements for banks and the regulations in capital markets with G20 commitments. A majority of these proposals are expected to be legally enacted by the end of this year.

Year	Regulation	Sector
Jul 2007	Risk-based prudential and solvency rules for insurers ('Solvency II')	Insurance
Apr2009	Hedge Funds & Private Equity ("AIFMD")	Capital Markets
Aug 2010	Strengthened supervision of financial conglomerates	Banks, Insurance, Capital Markets
Sep2010	European Market Infrastructure Regulation Derivatives	Capital Markets
Jan 2011	New European supervisory framework for insurers ("Omnibus II")	Insurance
Feb 2011	Interconnection of business registers facilitating cross border access to information about EU companies	Single Market
Mar 2011	Responsible lending (mortgage credit)	Investors/ Consumers
Oct 2011	Markets in Financial Instruments Directive	Capital markets
Nov 2011	Enhanced framework for audit sector	Capital Markets
Mar 2012	Central Securities Depositaries	Capital Markets
July 2012	Improved investor information for complex financialproducts	Investors/ Consumers
Feb2013	Strengthened regime on anti-money laundering	Single Market
Mar 2013	Green Paper on the long-term financing of the European Economy	Single Market
Apr 2013	Non-financial reporting for companies	Capital Markets
May2013	Access to basic bank account, transparency of fees, and switching of bank accounts	Investors/ Consumers
Jun 2013	Creation of European long-term investment funds	Investors/ Consumers
Jul 2013	Revised rules for innovative payment servicesvia cards, internet and mobile payments	Single Market
Sep2013	Regulation of Financial Benchmarks (such as LIBOR & EURIBOR)	Capital Markets

plemented regulations
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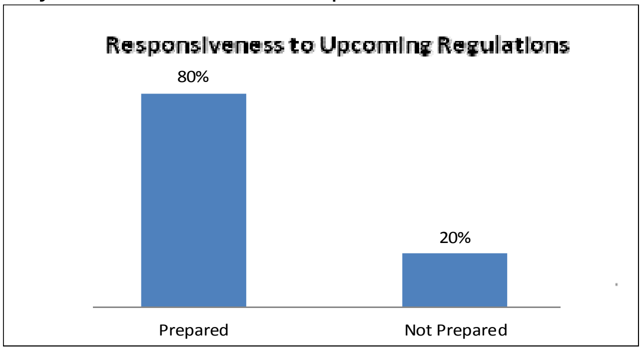
Impact of Regulations on Europe's Financial Markets

In an attempt to strengthen Europe's regulatory framework, the European Commission has been implementing numerous regulations since 2011, to tide over the impact of the ongoing global economic crisis.

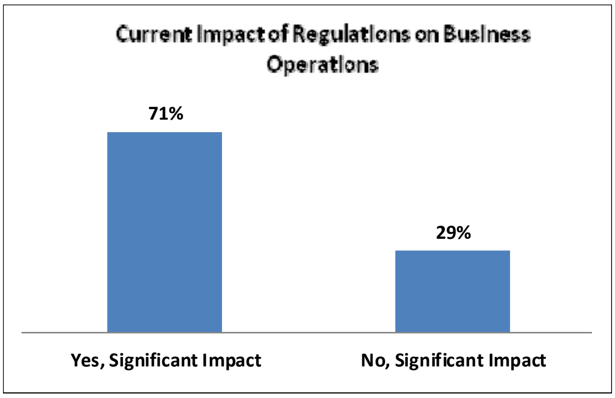


According to the study, 80% of the respondents indicated their preparedness in handling the upcoming regulations in the European Financial markets.

Name of the Regulatory Policy	Very Concerned	Concerned	Not Concerned
Revised prospective directives	7%	**53%**	40%
Consumer protection agenda	3%	**50%**	47%
Data privacy and data protection	13%	**50%**	37%
Training and competence requirements	3%	**53%**	43%
Ban on bonuses for entities receiving state-aid	10%	27%	**63%**
Compliance with new regulators	27%	**60%**	13%
Anticipating and managing increasing regulatory requirements	37%	47%	17%
Basel III capital requirements	27%	37%	37%
Money Transactions Offices Act	17%	23%	**60%**
European Market Infrastructure Regulation (EMIR)	20%	40%	40%
Impact of Dodd Frank Act	10%	40%	**50%**
Straight-through Processing (STP)	27%	30%	43%
The Foreign Account Tax Compliance Act (FATCA)	13%	43%	43%
Markets in Financial Instruments Directive (MiFID II)	13%	27%	**60%**

The survey reveals that various regulatory acts such as the Markets in Financial Instruments Directive, the Money Transactions Act and the Ban on Buses for Entities Receiving State-Aid Act did not have a significant impact on the business operations of the financial institutions in Europe.

This clearly indicates that the respondents had adopted measures such as compliance with new regulators and anticipation and managementof the increasing regulatory requirements, in order to meet the upcoming regulations inEurope's financial markets.



Although companies had implemented the initiatives required to meet the upcoming orenforced regulations, 71% of the respondents indicated that their business operations were impacted by the implementation of regulations in Europe's financial markets. 60% of the respondents anticipated the new financial reporting regulatory regimes to become more complicated than earlier reporting standards. Such a perception is expected to encourage partnership business models.

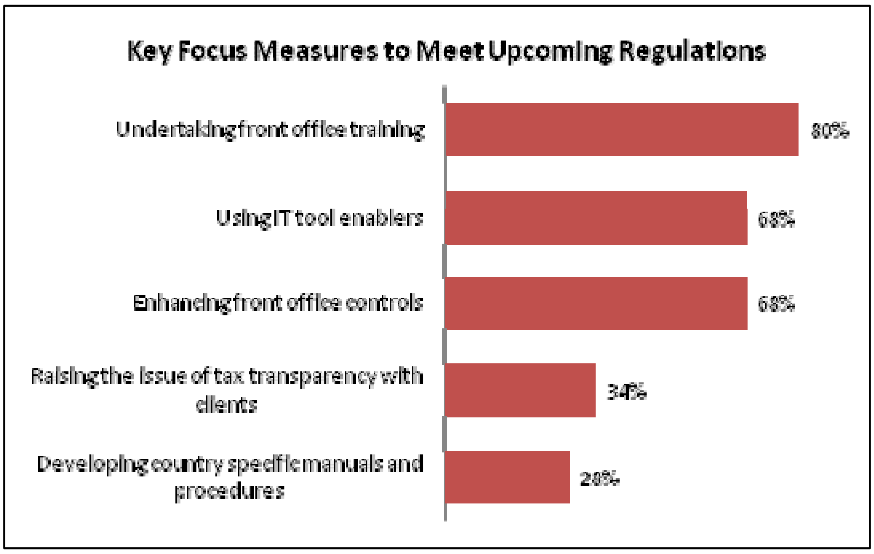
Rating* (N=30) Factor	1	2	3	4	5
Cost of Operations	0%	10%	**48%**	31%	11%
Business Operations	7%	34%	31%	21%	7%
Information Technology	0%	3%	35%	**52%**	10%

**Rating on a Scale of 1 to 5, where 5 = High Impact and 1 = Low Impact*

Regulations had an impact not only on the business processes but also on the internal business operations. 90**%** of the respondents were of the opinion that the regulations implemented in Europe's financial markets had an impact on the cost structure of the business operations.97% respondents indicated that the impact of recent regulations inEuropean Financial markets is expected to change the usage of IT in their business operations.

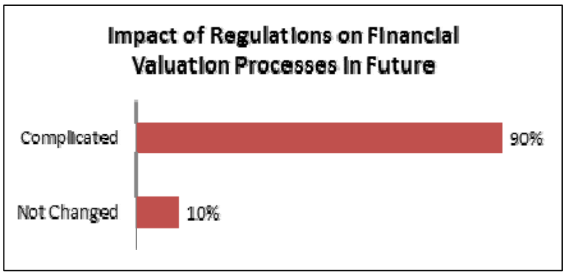
Some of the key initiatives being undertaken by companies to meet the increased regulatory and compliance obligations in Europe's Financial markets are:

- 80% of the respondents indicated that their companies are undertaking front office training
- 68% of the respondents indicated the usage of IT tool enablers and enhancing of front-office controls in their respective companies



Capital Markets

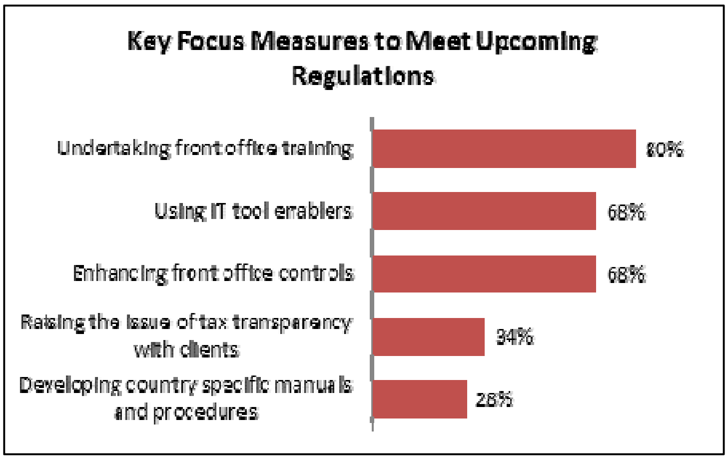
Capital markets in Europe are dynamic in nature, and they play a key role in boosting the region's economy. These markets can be influenced to a large extent by economic variations in nearly any part of the world, depending on the magnitude of the variation and the geographical significance of the region(s) involved. For instance, the Euro crisis and the US subprime crisis in 2011 paved the way for the implementation of various regulatory reforms in both these regions. These reforms are expected to influence the operations and fund movement in Europe's capital markets for the next few years. Among the numerous regulations being implemented in Europe at present, it has been observed that the Revised Prospective Directives, the Money Transactions Offices Act and the Ban on Bonuses for Entities Receiving State-aid regulations have a major impact on the functioning of business organisations in the continent. Moreover, 90% respondents in our study were of the opinion that new financial reporting regulatory regimes are expected to be more complex and have a more long-lasting impact on the European economy than earlier reporting standards did.



The study also shows that 80%of the respondents indicated that the regulations being currently implemented in Europe's financial markets are expected to revolutionisethe usage of IT in business operations. At the same time, little or no impact is expected on the operational cost of business entities. This is because the respondents believed that they were barely affected by issues such as lack of liquidity, fear of government intervention and the unpredictability of the regulatory environment, which usually have a major impact on the Initial Public Offering market.

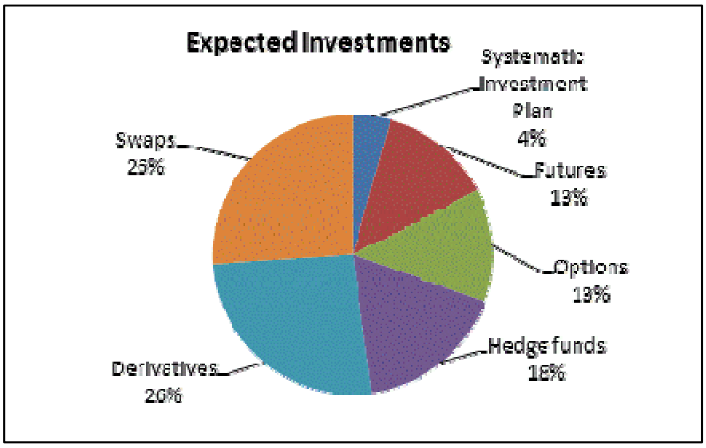
70% of respondentsindicated that they have adopted several measures to manage the impact of new reporting regulations in the financial markets.Moreover, anticipation of complicated reporting standards has led to organisations restructuring their business models to facilitate the deployment of efficient, customised IT systems.

The fact that operational costs are expected to suffer little or no impact, as a result of these regulations, is a clear indicator that companies have already integrated IT systems into their business operations. Additionally, any updates/ changes required to comply with any new regulations would involve minimal expenditure.



Other measures that could help tide over the potential impact of new regulations are regular front office trainings, increased tax transparency with clients and improved front office controls.

80% indicated that with such measures in place, the ongoing Euro crisis is expected to have a slightly reduced impact on Europe's financial markets in the next five years, in fact, these markets are expected to witness increased financial investments in the form of swaps, derivatives and hedge funds.



Conclusion:

Various regulatory policies such as Basel III Capital Requirements and Consumer Protection Agenda are expected to drive the demand of the IT usage in the Financial Institutions.

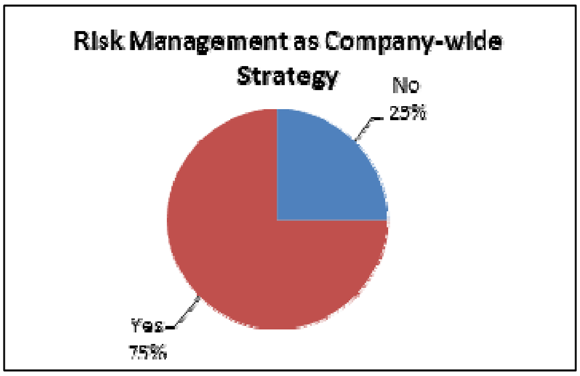
Corporate Treasury

2013 is proving to be yet another challenging year for treasurers as, not only they continue to face regulatory changes (many of which are anticipated to influence business processes and systems), but they are also struggling to overcome economic challenges such as volatile global markets and a lacklustre economic outlook. Our survey reveals that corporate treasuries are rapidly gaining importance, as they are increasingly being expected to play the role of internal advisors and contribute to the process of strategic planning.

Based on insights from the survey, we have identified four key factors that indicate the growth in scope and influence of corporate treasuries.

1. IncreasingAdoptionof Formal Risk Management Polices

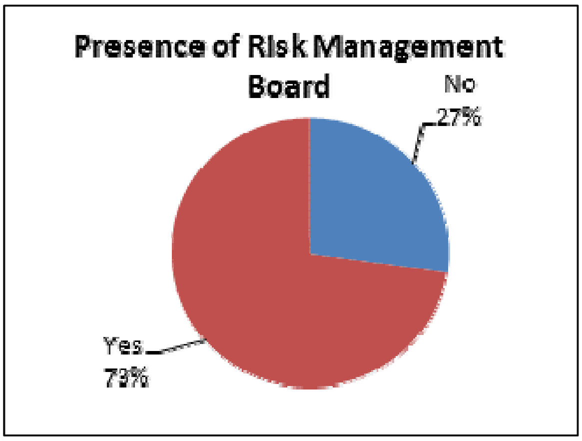
100% of the respondents indicated that they have adopted formal risk management policies. These policies involve risk assessment with the help of three key risk measuring metrics—capital ratios, capital buffers and concentration limits.



75% of the respondents indicated that risk management has been implemented as a company-wide strategy in their respective organisations by regularly sharing internal risk management reports and findings with employees.

2. CreationofRisk Management Boards

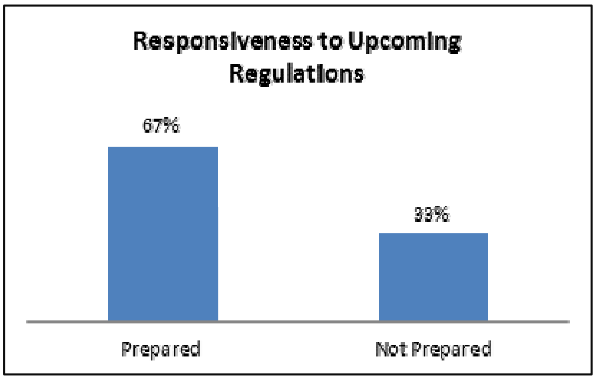
According to the survey, excessive regulation is expected to have a considerably high impact on the business operations of companies.



73% of the companies indicated that they have appointed risk management boards to ensure compliance with new regulations such as Solvency II compliance and also to formulate risk management policies. Moreover, 58% of the respondents were of the opinion that new financial valuation processes are expected to be more complicated than the current valuation processes and therefore, risk management boards are expected to ensure strict compliance to these processes as well. As a result of the formation of such regulatory boards, policies such as FATCA, MIFID II, the Money Transactions Act, the Dodd Frank Act and the

DataPrivacy and Data Protection Act have not had a significant impact on financial markets in Europe.

3. Increasing Integration of Risk Management Functions into Business Operations



67% of the respondents indicated their preparedness to manage new regulations, and 80% respondents indicated that they would use IT tool enablers and enhance front-office controls to meet increased regulatory obligations.

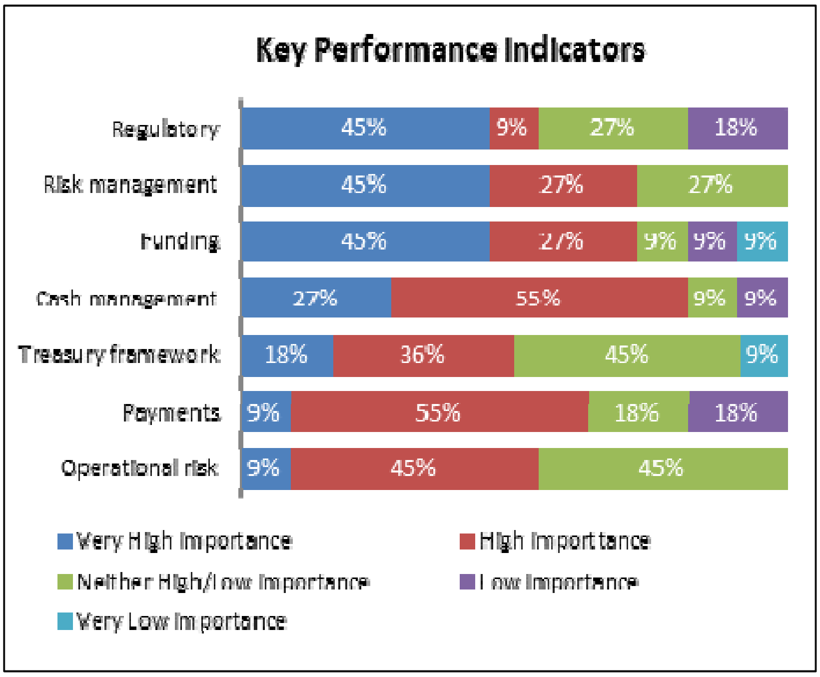
Respondents have also indicated that changing regulations in Europe's financial markets have had a low impact on business operations. This is a clear indicator of the increasing role of the risk management function in corporate strategies.

4. IncreasingUsage of Treasury Management Benchmarks to Evaluate Performance

In Case of Cash Management: Several companies are making use of treasury management benchmarks and key performance indicators (KPIs) to evaluate the key drivers of cash management. 75% of the respondents indicated that net hedging cost is a key treasury management benchmark, while 67% of the respondents indicated that net funding cost and return on investment are being used as the key treasury management benchmarks.

The top four KPIs mentioned by the respondents were:

- Regulatory compliance
- Risk management
- Funding
- Cash management



Respondents listed the following factors as key drivers of cash management:

- Bank/insurance limitations was rated as 'Very High Importance'
- Cost and debt servicing drivers was rated as 'High Importance'

Rating* (N=11) Driver	1	2	3	4	5
Bank/Insurance Limitations	0%	0%	36%	46%	**18%**
Technology	9%	18%	55%	9%	9%
Debt Servicing	9%	9%	27%	**55%**	0%
Tax	9%	36%	45%	9%	0%
Regulations	0%	18%	45%	36%	0%
Cost	0%	9%	36%	**55%**	0%

**Rating on a Scale of 1 to 5, where 5 = Very High Importance and 1 = Very Low Importance*

In Case of Foreign Exchange Risk Management:64% of the respondent companies mentioned that they use strategies that involve management of transaction risks, and 55%indicated that they use rolling models that involve protection of budget rates to hedge foreign exchange risk.

Conclusion:

Various regulatory reforms such as Foreign Account Tax Compliance Act (FATCA), Markets in Financial Instruments Directive (MiFID II), Money Transactions Act and Dodd Frank Act did not have a significant impact on the corporate treasuries, as the adoption of Risk Management Boards and usage of Treasury Management benchmarks ensured compliance with the new regulations.

Asset Management

In terms of geography, Europe is the second largest segment in the Global Asset Management market, having accounted for a share of 31% in 2011.[1] According to the European Fund and Asset Management Association (EFAMA), 'European Asset Managers held 21% of the debt securities issued by Euro area sectors and 31% of Euro area companies' overall equity by the end of 2011. These figures highlight the role played by Asset Managers in financing Europe's economy'.[1]

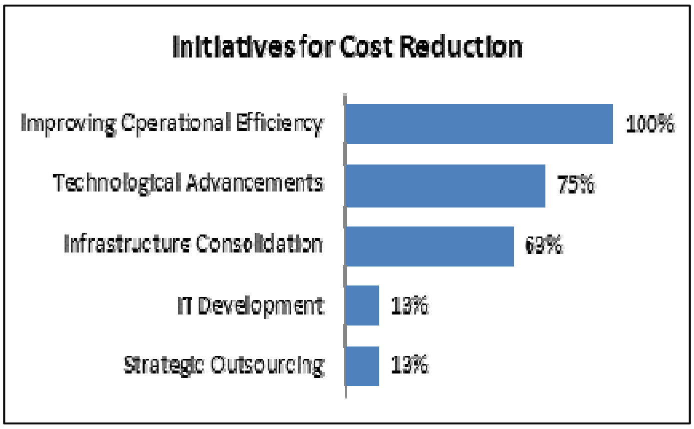
Our survey indicates that none of the respondents are concerned about recently introduced regulations such as MiFID II, FATCA, data privacy and data protection acts and the Money Transactions Offices Act. This clearly indicates efficient asset management; in fact, 75% of the respondents indicated their preparedness to manage new regulations that may be introduced in Europe's financial markets.

Although the impact of regulations on overall business operations was said to be low, the respondentsforesaw a significant impact in two key areas:

- Cost of operations
- Information Technology

Cost of Operations: High operational costs constitute a major challenge in Europe's financial markets. Therefore, to reduce operational costs:

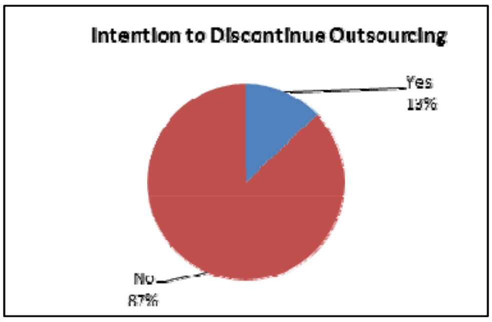
- 100% of the respondents indicated that they would adopt measures to improve operational efficiency
- 75% of the respondents indicated that they would encourage technological advancements
- 63% of the respondents indicated they would opt for infrastructure consolidation



Information Technology: The study reveals that information technology is gaining significance as a tool for effective and efficient asset management. 50% of the respondents indicated that both internal and external teams manage their IT services, and merely 12% of the respondents managed their IT services solely with the help of internal teams.

[1] http://www.efama.org/Pages/EFAMA-Published-its-6th-Annual-Review---Asset-Management-in-Europe---Facts-and-Figures.aspx

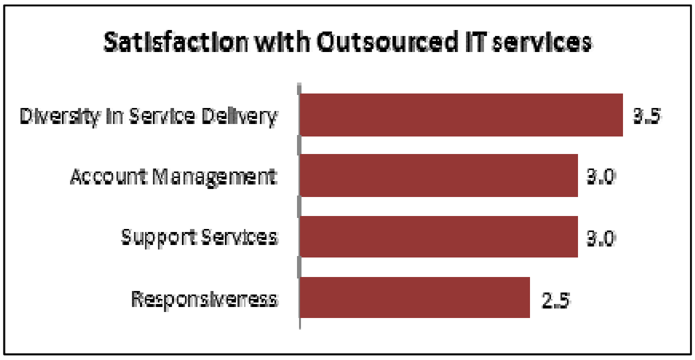
Outsourcing is expected to gain ground over the next few years, as 87% of the respondents do not intend to discontinue outsourcing IT services. 63% of the respondents reported that they currently outsource a part of their IT services. The key IT services that are being outsourced are core banking systems support services, banking software maintenance services, server support services and backup and network services.



Initiative	Successful	Partially Successful	Unsuccessful
Undertaking shared service arrangements	14%	43%	43%
Establishing architectural standards	37%	63%	0%
Core banking/insurance systems replacement	57%	43%	0%
Outsourcing	50%	50%	0%
Exploring cloud computing	29%	14%	57%
Setting up new operations/branches	0%	67%	33%

Establishing architectural standards, replacing core outdated banking/insurance systems and outsourcing proved to be the most successful IT initiatives undertaken to improve business operations.

100% of the respondents indicated that they were highly satisfied with the services of their IT vendors. They rated 'diversity in service delivery of the IT vendors' factor as 3.5 on a scale of 5, while account management and support services received a rating of 3 on a scale of 5. However, 100% of the respondents expressed that they would prefer support personnel to be well-versed in local languages.



The survey indicates that88% of the respondents rated 'enhanced client data security and protection' as the leading factor considered while allocating IT budgets.

Conclusion:

Regulatory policies such as The Foreign Account Tax Compliance Act (FATCA) and Straight-through Processing (STP) are not expected to have significant impact on the European Financial markets in the next two to three years. This clearly indicates that companies have processes in place to comply with the upcoming regulations.

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