REGTECH:
Exploring Solutions for Regulatory Challenges

INSTITUTE OF INTERNATIONAL FINANCE

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CHALLENGES OF THE NEW FINANCIAL SECTOR REGULATORY FRAMEWORK

The financial crisis of 2008-09 sparked an unprecedented regulatory response across the globe. International and national regulators have introduced a wide variety of new regulations focusing on virtually all aspects of the financial sector: markets, infrastructure and individual institutions, prudential and conduct supervision, and both micro and systemic risks.

The new reforms have dramatically increased challenges and costs for the financial sector related to compliance, reporting and supervisory requests.

COMPLIANCE COSTS IN THE FINANCIAL SECTOR

The following numbers and figures serve to exemplify the extent of the compliance challenge:

- In a 2014 letter to shareholders, JPMorgan Chase said that it added 13,000 employees from 2012-14 to support regulatory, compliance and control efforts, at a cost of $2 billion. In the same years, it spent a combined $600 million on regulatory and control technology.
- Deutsche Bank spent an additional €1.3 billion on new regulatory requirements in 2014.
- UBS spent $946 million on regulatory demands in 2014, almost half of which was permanent cost.
- Deloitte estimates the European insurance industry spent between $5.7 and $6.6 billion in 2012 to comply with new regulations. Solvency II-related costs amounted to 58% of this spending.

The figures above, while anecdotal, illustrate the significance of the challenge. Due to their size, the costs of meeting new requirements can impede banks' ability to meet the financing needs of the real economy.

Unfortunately, traditional compliance solutions for financial institutions do not always cope well with the fast-changing regulatory environment and expectations: legacy IT-infrastructures of large institutions, for example, are often difficult and expensive to adapt to new environments.

REGTECH: A PROMISING SOLUTION

This increase in regulatory burden coincides with the rise of software innovations that are radically changing the financial sector. Financial technology, or fintech, has allowed for the rise of new types of financial services actors and platforms including lenders, advisors, payments systems, funding platforms and digital currencies. Fintech has been particularly impactful with respect to payments systems and loans and financing.

Applied to regulatory and compliance demands, software innovation could significantly impact the burden on financial institutions by automating processes and driving down costs, while increasing the effectiveness of compliance functions. Financial institutions, facing a steep upward trajectory in costs, are prepared to invest in new technology solutions designed to address regulatory and compliance challenges, so-called "regtech". Regtech can encompass tools for audit, finance, risk management, and other areas related to compliance. It stands out from other software solutions by linking advanced models and algorithms, machine learning and advanced analytics, and real-time capabilities.

While the industry has seen an explosion in activity around fintech generally, the regtech market has not kept pace with the demand.

There may be several reasons for the slower pace of regtech growth compared to the larger fintech market. First, there may be a large culture and knowledge gap between fintech entrepreneurs and regulatory experts, both of which are necessary to the development of regtech. Second, investors have not yet turned their attention to the regtech market. And finally, uncertainty about the views of regulators on new solutions may have stymied innovation in this area.

IIF WORK ON REGTECH

The impact of new technologies in regulation could be dramatic if the industry, investors, entrepreneurs, and regulators focus more effort on transformative solutions, and particularly on open-source, common industry platforms. The IIF has launched a regtech work stream to foster dialogue between the financial services industry and technology and regulatory communities. The IIF will work to analyze the most pressing needs of financial services firms and, together with regtech companies, facilitate potential technology-driven solutions. The IIF will also provide a forum for firms to discuss best practices with respect to implementation of regtech solutions and to promote active dialogue with regulators on the role of new technologies in regulatory compliance.

> "A network of companies, focused on developing common technological solutions to regulatory processes (RegTech) promises to make the financial system both more accessible and more secure."
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> – Christophe Chazot, Group Head of Innovation, HSBC

EXAMPLES OF REGTECH SOLUTIONS

Regtech solutions have emerged in a number of different areas, demonstrating the potential of new technology.

Some examples include:

Capital and capital assessment procedures like Basel III, CRD IV, Dodd-Frank and Solvency II all require more detailed reporting from financial institutions. In addition, financial supervisors have increasingly resorted to stress-testing and capital assessment procedures in the wake of the financial crisis. Prominent examples are the Fed's CCAR (Comprehensive Capital Analysis and Review), which evaluates a bank's capital adequacy, capital management and planned capital distributions on a consolidated, or bank holding company level, and the ECB's 2014 AQR (Asset Quality Review).

A number of firms have developed innovative solutions to automate (parts of the) capital assessment and reporting work. One new data firm and a leading global bank work together to carry out the CCAR exercise, evaluating how approximately 2,600 economic variables would impact the bank. Another good example is **Suade**, whose regulation-as-a-service platform offers banks continuous compliance with prudential regulations. The BCBS-239 compliant platform also offers flexible management of information tools for both internal and external reporting requirements.

Know-your-customer, anti-money laundering and anti-terrorist financing solutions: Entrepreneurs are evaluating creating an industry utility for AML/ATF compliance solutions. New entrants develop enrollment and identity solutions to improve compliance with the KYC end of the AML/ATF chain.

Trading and trading book risk management rules like 15c3-5 in the US, and MiFID and EMIR in the EU, have significantly altered the character of trading. Trading has increasingly moved to multilateral trading facilities and requires the use of central counterparties and detailed reporting. Structural measures like the Volcker Rule also impact the character of trading. A good example of trading compliance software is **Open GAMMA**, an open-source risk architecture allowing traders to choose a CCP for an OTC derivatives transaction by understanding its margin requirements. It also manages the market risk of the trader's portfolio.

Fundapps automates shareholding disclosures for major shareholding, short-selling and takeover panel regulations. It also offers tools for complying with trade regulations such as UCITS, AIFMD and 40 Act, monitoring issuer, counterparty, leverage and other investment restrictions.

Sybenetix offers granular behavioral profiling algorithms to automatically analyze trading activity for unusual behavior indicating potential misconduct.

Risk culture: New ventures like **Starling** are exploring the application of advanced analytics to organizational trust dynamics. Starling works in the "people analytics" space and uses network analytics, big data, and behavioral science to map out company culture and employee engagement with a focus on behavioral driven risks.