A Closer Look

The Dodd-Frank Wall Street Reform and Consumer Protection Act

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Impact On

Information Technology and Data

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On July 21, 2010, President Obama signed into law the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank or the Act). The Act significantly reshapes financial regulation in the United States by creating new regulators, regulating new markets, bringing new firms into the regulatory arena, and providing new rulemaking and enforcement powers to regulators. Given the scale and scope of the Act, it will significantly impact the information technology and data environments across all affected firms. These impacts start with required changes to business operating models—new and updated business processes and the organizational structures required to execute them—and extend to the underlying business applications and data structures that support them. Drivers of information technology (IT) and data change will include requirements set by the newly created Financial Stability Oversight Council (FSOC) around systemic risk regulation, impacts on proprietary trading activities, changes to the trade execution and clearance structure, imposition of a fiduciary standard on broker-dealers, and registration requirements for hedge fund and private equity fund managers. This *A Closer Look* provides an initial perspective on the impact some of these considerations may have on financial services firms and IT service providers to the Financial Services industry and how they will need to address these IT and data changes.

While there is still much to be done by regulatory agencies regarding Dodd-Frank mandated rulemaking, it is clear that there will be an impact on information technology platforms and the associated data architecture. Given the length of time it has historically taken to implement IT and data changes, it is critical that a governance model be established to align resources and begin the required communications and technology impact strategic analyses.

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The key provisions of Dodd-Frank will impact a wide range of financial services companies

The table below demonstrates how Dodd-Frank's key provisions apply to various types of financial services companies.

Key Provisions / Financial Institutions	Systemic Oversight	Volcker Rule	Derivatives Regulations	Capital Requirements	Consumer Protection	Investor Protection (public companies)	Compensation & Governance (public companies)
Large Banking Organizations	✓	✓	✓	✓	✓	✓	✓
Credit Cards & Consumer Banks	✓		✓	✓	✓	✓	✓
Insurance Companies	✓	✓ *	✓	✓		✓	✓
Thrifts/Thrift Holding Companies	✓	✓	✓	✓	✓	✓	✓
Hedge Funds & Private Equity	✓		✓				
Large Asset Managers	✓	✓*	✓			✓	✓
Broker-Dealers	✓	✓ *	✓			✓	✓

* If within a bank holding company or a savings and loan holding company.

No financial institution will escape the impact of Dodd-Frank's numerous requirements. Large banking organizations stand to be subject to the broadest impact across their business model. To be compliant with new regulatory environment, firms will need to evaluate business models, operating models, supporting technology, and data environments to determine what changes and enhancements will need to be effected.

Financial Stability Oversight Council (FSOC) will be charged with systemic risk mitigation

The mandate of the multi-agency FSOC, which held its first meeting on October 1, is to serve as an early-warning system for problems in the financial services marketplace. The FSOC's job will be to identify, measure, and attempt to mitigate risks to the financial stability of the United States that may be caused by large, interconnected financial firms and nonbanking financial market participants and by Financial Market Utilities and providers of designated payment, clearance and settlement activities.

Except for Bank Holding Companies (BHCs) with consolidated assets of $50 billion or greater, which are treated as systemically important financial institutions under the Act, the FSOC will determine which nonbank financial institutions are to be deemed "systemically important." The FSOC, supported by a new Office of Financial Research (OFR), will mandate reporting requirements for both large BHCs and systemically important nonbank financial institutions.

In order to execute its mandate, the FSOC will require data to be presented consistently across all institutions deemed systemically important. The FSOC will also need to review and analyze information from systemic institutions regularly to determine compliance with data reporting requirements. To assist with its analyses, the FSOC can provide direction to, and request data and analyses from, the newly created OFR within the Treasury Department.

Enhanced prudential standards. Among its duties, the FSOC is charged with making recommendations to the Board of Governors of the Federal Reserve System concerning the establishment of heightened prudential standards for nonbank financial companies and large, interconnected bank holding companies. The resultant increased reporting standards on credit exposure, concentration limits, leverage, and liquidity positions will significantly increase demands on data integration. Client and counterparty data management will become critical, and will likely need to support aggregation of data at the legal entity level. All of these enhanced requirements will increase the need for improved application integration to produce this information on a regular basis and in the formats required.

The Office of Financial Research. The OFR will support the FSOC by obtaining any data and information that the FSOC may request so that it may monitor potential risks to the financial services marketplace. The OFR will have the power to adopt regulations regarding the scope and format of data collected on behalf of the FSOC by its own operations and by other regulatory agencies. The OFR will also have independent authority to collect reports, data, and information. Although the type, frequency, and extent of the information that can be collected by the OFR are currently not specified, all are likely to be incremental to and aligned with current regulatory reporting requirements.

In order to meet data management and reporting demands as the Act is implemented, firms will need to ensure they have exceptionally strong and flexible information management and communication systems that offer a high degree of data integrity. These systems will need to be easily searchable and scalable to meet changing needs as the type and volume of data required from regulators increases. In addition, more regular and robust IT audits will be needed to ensure data security and integrity.

The Volker Rule prohibits any "banking entity" from engaging in proprietary trading

How the Volcker Rule, which in addition to the ban on "proprietary trading" also restricts the ability of banking entities to invest in hedge and private equity funds, will impact financial institutions will be largely dependent on how key terms in the Act are interpreted and implemented. The determination of whether an activity is prohibited "proprietary trading" or permissible market making will likely be dependent on how transaction data is characterized, captured and reported. While anticipated rulemaking may provide some clarity, firms will likely need to be able to demonstrate:

- That their percent ownership of hedge funds and private equity funds does not exceed 3% of their Tier 1 capital. This will require that an auditable comparison of a fund's net asset value versus its Tier 1 capital be produced on a periodic basis, a task best supported in an automated environment.
- Access to real-time, on-demand data to demonstrate to regulators that what may be deemed proprietary trading is appropriately segregated from client-facilitated trading activity. It also may be necessary to demonstrate how what appears to be proprietary trading is truly market making or agency-based dealing.

Information and data will need to be your friend throughout this process: easily accessible, in the correct format, and available on demand. More specifically, firms will need to be able to quickly access and perform real-time monitoring of data to ensure they are meeting their obligations under the Volcker Rule. Firms will not only want to know if specific cut-offs are triggered (such as exceeding 3% ownership in a hedge fund or private equity fund), but will also need to be able to identify activity "below threshold" to better protect against limits being breached. Further, firms will need to have data readily available that demonstrates specific trading activity is on behalf of clients, when it may appear to be proprietary.

Derivatives and centralized clearing

New regulatory framework for over-the-counter derivatives. The new framework is designed to bring transparency and additional risk management to derivatives traditionally traded in over-the-counter (OTC) markets. This includes: (i) requiring financial services firms to centrally clear or trade eligible OTC derivatives on exchanges; (ii) the "push-out" of certain derivatives activities (e.g., commodities, equities, certain credit swaps) from insured deposit-taking institutions and other firms receiving federal support; (iii) the designation of qualifying firms as swaps entities (e.g., swaps dealers, major swaps participants); and (iv) enhanced prudential standards and transparency for swap entities and, as applicable, clearing houses, including margin, capital, and reporting requirements.

Exchange execution and centralized clearing. The creation of exchange execution and centralized clearing requirements for buy-side firms has IT implications around connectivity, straight-through processing, end-user service and support, and record-keeping.

The client clearing of OTC derivatives is part of a complex environment involving multiple participants. Connectivity is required between:

- Clients
- Clearing houses
- Order management systems
- Executing brokers
- Affirmation platforms
- Clearing brokers

In order to support connectivity requirements, strategic decisions need to be made regarding which clearing houses and platforms should be supported, followed by the development of a technology strategy that enables connectivity and transaction activity monitoring. Since the central counterparties generally do not provide end-user service and support, visibility into the transaction process will be critical to supporting client service requirements and could prove to be a competitive advantage for firms that do it well. Systems that provide margin and collateral management functionality will need to be reviewed and potentially enhanced as specific assets that are acceptable to cover margin requirements are identified and updated.

Finally, record-keeping requirements may change. In certain cases, the Commodity Futures Trading Commission can impose additional record-keeping requirements on non-US entities, particularly those executing transactions with non-US counterparties. This would require changes to policies and development of record-retention procedures to meet policy requirements (e.g., records to retain, specified record format, record retrieval requirements, and record-retention period).

The current operational and technology environments for eligible interest rate and credit default swaps will need to change substantially. The current approach to bilateral trading and position-keeping has processes that were automated in recent years to support volume increases, as well as manual processes specifically designed to support bilateral trading. Adding a central counterparty will force changes to these environments, requiring increased flexibility to support client choices and preferences, enhanced connectivity, automation for straight-through processing, and possibly cross-divisional coordination as infrastructures that support trading of listed derivatives are leveraged.

A new fiduciary standard for retail brokers?

Will broker-dealers be subject to a fiduciary standard? This is a significant question for retail broker-dealers, and one which has numerous business and IT implications. The Act defines the fiduciary standard as acting "in the best interest of the customer without regard to the financial or other interest of the broker, dealer, or investment advisor providing the advice. . . . [A]ny material conflicts of interest shall be disclosed and may be consented to by the customer." The current suitability standard requires broker-dealers to recommend products that are suitable for the customer in light of the customer's investment objectives, risk tolerance, and other factors. The Act directs the Securities and Exchange Commission (SEC) to conduct a study within six months (by January 21, 2011) to evaluate existing legal and regulatory standards of care for brokers, dealers, and investment advisers (and their associated persons) when providing personalized investment advice and recommendations about securities to retail customers (defined as an individual person who uses such advice primarily for personal, family, or household purposes). A similar standard of care is expected to be established between investment advisers and broker-dealers.

Following the study, the SEC is authorized (but not directed) to commence rulemaking to require broker-dealers to adhere to the same standard of conduct applicable to an investment adviser under the Investment Advisers Act of 1940 when providing personalized investment advice about securities to retail customers.

Fiduciary standard provision: significant IT and data implications. Prior to engaging in principal transactions, broker-dealers may be required to obtain client consent, which would result in new operational processes and system enhancements to support the requirement.

Broker-dealers with a large number of registered representatives will need to enhance or develop business applications to enforce this standard of care. This could involve a direct linkage between the setting of investment objectives and risk tolerances, the risk of specific financial products in a customer's portfolio, and the impact of a specific trade on the risk profile. System-enforced restrictions (akin to pre-trade compliance checks for asset managers) may be required to help registered representatives manage their fiduciary responsibilities. Additionally, post-trade review will need to be enhanced to ensure the appropriate supervisory oversight is being performed.

Required adherence to fiduciary standards could result in increased costs to the organization due to additional operational, compliance, and regulatory activities. Additionally, there will be one-time costs to establish a compliance regime to support these new standards.

A fiduciary standard moves the burden of proof from the client (proving the broker acted improperly) to the broker-dealer (proving that the broker acted in the client's best interest). Having the right data available so registered representatives can quickly assess accurate and up-to-date information about customers and products will be essential to ensure compliance with fiduciary standards. More robust procedures around periodically updating customer investment objectives and risk tolerances will also be required. More robust technology for detecting, tracking, and reporting conflicts will be necessary to comply with this standard. Regardless of the specifics around fiduciary responsibilities, it is clear that regulators will likely demand a greater degree of care towards retail investors, and will likely use their powers of examination and enforcement to implement this requirement.

Common information technology and data implications

When reviewing the provisions of the Act outlined above (and others not explored in this paper), some common themes around IT and data emerge:

Increased transparency requirements. There will clearly be a need for increased transparency, whether responding to ad-hoc requests from regulators or collecting and reporting data to support trading activity on a periodic basis. In light of these requirements, the following should be considered:

- Establishment or refinement of a master data schema to house client and counterparty data, transaction data, and other relevant reference data
- Efficient data-management practices to establish data ownership and accountability, contain costs, and efficiently and expediently respond to requests for data

Business intelligence and decision support. As rules are written and enacted, the establishment of a business intelligence and decision-support infrastructure will be a key component of the IT and data environment. Companies should:

- Collect and analyze transaction data to determine required business model changes and compliance with rules and regulations

- Implement business processes around data collection to ensure the appropriate information is available to provide adequate reporting to senior management (e.g., management information system reporting)

Enhancement of business applications to automate processes critical for compliance. Existing business applications will require enhancements to incorporate rules, edit checks, and other changes that support provisions of the Act. Possible needs would include:

- Automatic tracking of investments in hedge funds and private equity funds (when "below threshold" limits are breached—i.e., just below the 3% limit—investments can be flagged or prohibited)
- Generation and maintenance of daily trading records for swap transactions
- Public reporting of swap transactions data by swap dealers
- Central system to monitor counterparty risk based on new creditworthiness standards
- Governance and systems to monitor regulatory capital and margin requirements
- Automated enforcement of fiduciary standard, however it is defined, for retail broker-dealers

The development of a governance infrastructure for the Act

Coordination and impact assessment. Implementation of Dodd-Frank's requirements will require unprecedented coordination within organizations, both cross-business (e.g., across different business lines) and cross-function (e.g., operations and information technology). To address this need for enterprise-wide coordination and impact assessment, many organizations are establishing executive steering committees and business-specific working groups to assess the specific impacts to:

- Operating models
- Service delivery models
- Organizational structures
- Technology architecture
- Application architecture
- Data governance, ownership, and architecture

Many institutions have grown through acquisitions. As such, their technology infrastructure is often made up of disparate systems that do not interact naturally. Given the new requirements for reporting and data, firms will need to identify basic yet potentially costly infrastructure changes in order to swiftly and effectively address these issues. Inability to address these needs early on will create challenges in meeting the requirements of new rules and regulations.

An enterprise-wide, program-based approach that creates a governance structure to assess current systems, operational practices, and processes against the legislative requirements and mandates will be required to identify potential gaps and enhancement requirements. If organized and managed properly, compliance with requirements of the Act can be turned into a strategic opportunity to streamline operations and limit negative cost impacts. Key decisions will need to be taken around the balance between "quick win" improvements to achieve basic compliance versus the execution of a more strategic approach. To ensure that all aspects of the Act's requirements are being addressed, companies would do well to appoint a steering committee comprised of individuals with business, IT, operational, and compliance experience. Appropriate ownership and accountability will be crucial for success and, ultimately, compliance.

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While Dodd-Frank will have significant impact on the information technology and data environments across all affected firms, many implementation issues are currently unclear and are subject to the agencies' rule-making processes and various statutorily directed studies. PwC will continue to monitor those developments and provide you with updates, which will all be available at www.pwcregulatory.com.

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