

Implementing Dodd Frank Act: An Experiential Learning

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ABSTRACT

There are several organizations, which are working towards adopting Dodd Frank Act to improve their risk management capabilities and regulatory compliances, however due to sheer complexity and far reaching impact of the Act, there have been several challenges in adopting the Act. The purpose of the paper is to briefly explain the challenges and steps that need to be taken towards implementing Dodd- Frank Act in a financial services organization. The paper is in the form of a case study of adoption of the Act in a buy-side firm for its derivative and collateral business. The paper begins with the key provisions of the act; details some of the challenges and dilemma that the organization was faced with while adopting the Act. The paper goes on to illustrate as to how these challenges were resolved. Some lessons learned are given in the end.

Keywords: Collateral, Derivatives, Dodd-Frank Act, Implementation

Introduction

Dodd-Frank Act has been arguably the most significant financial legislation in modern history. The legislation has ushered in a breathtaking amount

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of changes that result in fundamental shifts in the legal, regulatory and policy landscape affecting our markets and our economy in a short period of time. More and more organizations are adopting the Act to improve their risk management capabilities and regulatory compliances.

The purpose of the paper is to briefly explain the challenges and steps that need to be taken towards implementing Dodd- Frank Act in an organization. The author, by virtue of being associated with a team at Syntel Ltd – which provides consulting and technology support services to its clients on implementing Dodd Frank Act and improve risk management capabilities – has gained valuable insight on implementing the Act. He understood the ‘pain’ and has realized what would (or would not) work in an organization towards implementing the Act in an efficient and time bound manner. The details are presented in a form of case study and provide a solution that could potentially work for other organizations too, who have been struggling to implement the Dodd-Frank Act. The paper begins with the key provisions of the act; details some of the challenges and dilemma that organizations are faced with while adopting the Act. The paper goes on to illustrate as to how these challenges were resolved.

The Dodd-Frank Act touches every aspect of our financial markets, from consumer credit to proprietary trading at financial firms, from OTC derivatives markets to securitization markets, and from private fund registration and regulation to corporate governance at public companies.

The core purpose of this act is to avoid a repeat of the shocking realities of the financial crisis in 2008 by promoting “the financial stability of the United States by improving accountability and transparency in the financial system, to end ‘too big to fail’ notion, to protect the American taxpayer by ending bailouts, to protect consumers from abusive financial services practices, and for other purposes.”

Pursuing these objectives, the Dodd Frank act mandates multiple changes in the current industry best practices as regards risk, capital, liquidity, compliance and governance.

Dodd Frank Act

There are abundant literatures available on the Act in the print and digital media. A reader may refer to any of the articles to get a deep

understanding the Act per se. Nevertheless, a few of the key provisions³ of the act are summarized below:

1. Increased Regulatory Supervision for Banks and Financial Institutions – aimed at providing regulators with a macro-perspective of emerging risks, authority to manage threats, regulate potentially dangerous consumer financial products and ensure overall stability of the financial system.
2. New Operating Restrictions – on various risky operational activities such as limits on proprietary trading and OTC derivatives, interchange fee limits and mandatory retention of at least five percent of many securitizations (qualified residential mortgages expected).
3. Improved Firm Governance – Incorporated mandates around risk management requirements such as annual stress testing, rapid liquidation plans for failed financial institutions, increased public disclosures and investor protection measures like shareholders vote of executive compensation.
4. Institutionalize more stringent standards around higher capital levels, definitions of eligible capital, liquidity requirements, leverage limits and capital requirements.
5. Banking and Financial services Institutions would have the greater resilience and stability to withstand future economic crisis due to stronger governance, risk and compliance practices resulting in higher capital and liquidity levels.
6. Reduced exposure to systemic risk for Banking and Financial Services Institutions due to lower cumulative leverage and higher liquidity buffers coupled with stronger and integrated risk management views.
7. Additional Consumer Protection due to greater transparency from misleading products and services.
8. Improved market efficiency due to comprehensive broker-dealer regulations and enhanced accountability on behalf of rating agencies
9. The stability of the macro economy would increase due to the improved resilience of banking and financial institutions thus reducing the breadth of future recessions.

However, beyond these intended impacts, the Dodd Frank Act poses several business challenges for Banking and Financial Services Institutions like:

- *Reduced profitability:* Reduced financial flexibility coupled with additional capital and liquidity requirements will result in increasing pressure on the profitability of Banking and Financial Institutions.
- *Increasing cost of compliance:* The sheer volume of rules and regulations in the Dodd Frank act would increase the compliance overhead and significantly impact the compliance cost at large banks and non-banks alike.
- *Potential shift of capital and business activity:* The Dodd Frank act goes beyond the issues of G20 and, therefore, may put banks under its purview at a competitive disadvantage in internationally competitive lines of business.
- *Moderation of long term growth prospect:* Reduced appetite for risky products and aversion to segments with poor credit performance will result in decreased credit availability for consumers and enterprises. This in turn would reduce the long-term growth prospects of the banking and financial services institutions.
- *Strategic planning:* Many financial services firms are likely to revisit their business strategies. For example, the “Volcker Rule” provision designed to separate banking from proprietary trading at some institutions, has generated strong reactions from all corners and will have far reaching impact on how the business is done

Besides, there are several implementation challenges faced by Banking and Financial Services Institutions like:

- *Overlapping regulatory scope:* There are different agencies and regulators monitoring compliance of various regulations already applicable to a financial institution. The instinct of each regulator is to view their rules in isolation. Given the overlapping and concurring actions, an organization has to consider all the applicable regulations as holistically as possible.
- *Defining a clear strategy and objectives:* There have been numerous delays in publishing regulations, making it hard for some companies

to define a clear strategy and objectives. Further, the changes envisaged in the Act impact several functions in an organization like operations, IT infrastructure, corporate governance, internal control frameworks, risk management, tax planning, regulatory and public disclosures, ethics, legal and compliance.

Incidentally, it may be mentioned that less than half of Dodd-Frank's nearly 400 required rules have been finalized: 235 rulemakings, already generating 41 reports, 71 studies authored by 11 different federal agencies and bureaus. Much work has been already done, 162 new rules have been finalized. But, we still have a long road ahead of us. 170 deadlines have been missed. 110 rules have yet to be proposed.

- *Hiring skilled staff:* Many financial services firms need to re-think their compensation structures and how they attract employees from other firms. Further, numerous rules in the Act and their delays in publishing pose a challenge towards arranging training of employees to use new business processes aligned with Dodd Frank Act and then obtaining commitment from employees in relation to the Act.
- Managing the volume of changes in the process, people and technology due to the Act.
- Communication and collaboration among various groups/ functions are difficult. There are so many moving parts, often involving different agencies and regulators, many companies have to scramble to find the resources necessary to analyze, define and communicate new rules and their implications.

Despite these challenges, several Banking and Financial Services Institutions are working towards adopting Dodd Frank Act, either to improve regulatory compliance or enhance their competitive positioning and thus, increase their market share and profitability.

Adoption of Dodd Frank Act in an Organization: A Case Study

The paper presents a case of adoption of Dodd Frank Act in one of the largest Financial Service Institutions, headquartered in USA. The organization is one of the world's leading providers of financial services,

in the buy-side, to institutional investors including investment servicing, investment management and investment research. With several trillion dollars in assets under custody & administration and management, the organization operates in more than 100 geographic markets worldwide, including US, Canada, Europe, the Middle East and Asia.

Several reasons that helped the senior management of the organization to decide in favor of implementing Dodd Frank Act included:

- It was believed that US stock market would grow, as valuations were still low in 2012, particularly compared to the previous all-time high. Even with a conservative estimate, economy was expected to grow at a two percent to four percent clip, despite fiscal austerity and ineffective stimulus. There was a room for multiple expansions as confidence returned to the markets in a post-recovery environment. The management considered implementing Dodd Frank Act as a tool to expand market share and deepen relationships with new and existing clients.
- While the regulations for Europe – European Market Infrastructure Regulation (EMIR) – were different, and there were different regulations that apply for different countries in APAC, it was believed that there were strong synergies amongst them (Ref: Table 1) and implementing Dodd Frank Act will help jumpstart implementing other regulations in other regions. Considering that 40% of the growth in financial assets was expected to come from emerging markets over the next decade (McKinsey, Sep 12), there was no reason to delay the implementation of the Act.
- There was already an investment committed towards implementing the new technology, which was aimed at capturing the new growth through investment in platforms and solutions, aligned to the long term growth trends. It was prudent that the organizational investment in technology take care of the existing/upcoming regulatory requirements.
- The ever changing investors' requirement for real time data and customized insights to enable them take better-informed decision making required that the organization had a better risk management ability.

- Regulators have been stepping up demands for increased transparency and compliance to various regulations, as and when new (and often complex regulations) emerged. Explicit demands were made to keep pace with the evolving regulatory environment. The organization had to work towards compliance with the new requirements, including: Dodd Frank (e.g. Volcker and Recovery and Resolution), Alternative Investment Fund Managers Directive (AIFMD) and Basel capital and liquidity requirements among others.

Table 1: Global Regulatory View – Key Regions

<i>Dodd Frank (North America)</i>	<i>European Market Infrastructure Regulation (EMIR)</i>	<i>APAC</i>
<ul style="list-style-type: none"> • Risk mitigation mandates for non-cleared derivatives covering: <ul style="list-style-type: none"> • Confirmation • Valuations • Portfolio reconciliation • Dispute resolution • Trade reporting • Clearing • Execution • Collateral and margin requirements for bilateral 	<ul style="list-style-type: none"> • Risk mitigation mandates for non-cleared derivatives covering: <ul style="list-style-type: none"> • Confirmation • Valuations • Portfolio reconciliation • Dispute resolution • Trade compression • Trade reporting • Clearing • Collateral and margin requirements for bilateral MiFID • Trade execution 	<ul style="list-style-type: none"> • Local derivative regulations impacting 8 different countries (Australia, China, Hong Kong, India, Japan, Singapore, South Korea, Taiwan) • Regulatory requirements span across: <ul style="list-style-type: none"> • Trade Execution • Clearing • Margin • Trade reporting

Sometimes around early 2012, the Chairman of the organization conveyed his decision, in a key note address to senior executives in the organization to adopt the Dodd-Frank Act. A task force, comprising of senior executives from business, IT and with project management credentials, was entrusted with the responsibility of implementing the provision of Dodd Frank Act in a time bound manner.

Accordingly, an outlay of over \$ 50 M over the previous year’s level was approved to arrange for:

- Increased compensation and employee benefits (for additional personnel to meet increased work load)
- Changes in IT infrastructure
- Information systems to support new reporting requirements
- Training for new/existing employees to use new business processes aligned with Dodd Frank Act
- Other expenses (professional fee, etc.)

While the new regulations were implemented in different businesses in the organization, the scope of this paper is restricted to the implementation of the Act in Derivatives and Collateral services. The new regulation of swaps and derivatives in Title VII, constitutes arguably the greatest set of changes to a single sector of the financial services industry made by the Dodd-Frank Act. In fact, the combination of the Dodd-Frank Act, the European Markets Infrastructure Regulation (EMIR) and Basel III are bound to result in profound operational changes to how OTC derivatives are settled, collateralized and reported.

The organization provides end-to-end Derivatives and Collateral services, which constitutes over one-third of its total revenue. It has an integrated model to meet the derivative needs of all types of investment managers. They have a very big operations dealing in settlements, payments, servicing, collateral management and reconciliation with a buy-side focus.

Examples of derivatives which are subject to new swap regulation under Title VII include interest rate swaps, credit default swaps, non-deliverable FX forwards (NDFs), swaptions and equity total return swaps.

Some of the initial challenges that the Task Force in the Buy-side form was faced with included:

1. Understanding of the operational implications of the Act for the organization
2. Understanding the current state of their operations and readiness to modify our infrastructure.
3. Understanding of the requirements for various operational areas including central clearing eligibility, trade affirmation, collateral management, margining, reconciliations, etc.

4. Understanding of the changes required in the technology to support the new regulations
5. Making changes in the Transacting and Clearing processes.
6. Finalizing a legal agreement framework to negotiate terms with the executing brokers (EBs), future commission merchants (FCMs), and CCPs (clearinghouses)
7. Preparing a comprehensive communication plan to keep clients informed during the onboarding process

The next part of the paper describes as to how the organization dealt with all these challenges:

Operational Implications of the Act in the Derivatives Services

Regulators such as the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC) have proposed and, in many cases, finalized numerous rulemakings in order to meet G20 objectives aimed at increasing transparency and reducing systemic risk in the derivative markets:

1. Increase transparency by pushing OTC derivative trading to central clearing and via swap execution facilities (SEFs) with trade repositories for the monitoring of all trading activity.
2. Reduce counterparty risk by significantly increasing the amount of collateral held against all OTC derivative transactions, whether centrally cleared or otherwise.

This translated into following actions required by the organization:

- Reporting swap transactions to a swap data repository (SDRs);
- Clearing sufficiently liquid and standardized swaps on central counterparties, or designated clearing organizations (DCOs);
- Where appropriate, trading standardized swaps on SEFs or designated contract markets (DCMs);
- Setting higher capital and minimum margin requirements for un-cleared swaps.

As per Title VII of the Dodd-Frank Act, sufficiently liquid and standardized derivatives transactions are subject to central clearing requirements, and many of these are required to be executed on new electronic trading platforms (known as “Swap Execution Facilities” or SEFs). However, some derivatives still fall into the category of over-the-counter (OTC), which means that their terms are privately negotiated between two parties, and some also remain un-cleared. Risk mitigation mandates for non-Cleared Derivatives covers:

- Confirmation
- Valuations
- Portfolio Reconciliation
- Dispute Resolution

Accordingly, the organization had to make a couple of choices (Table 2).

Table 2: US Regulations

<i>Areas Impacted by Dodd Frank Act</i>	<i>Regulations</i>	<i>Consideration for Implementation</i>
1. Execution	(a) Mandates trading of required to be cleared products through Swap Execution Facilities (SEF) or Designated Contract Markets (DCM) (b) Creates fair access and choice of trading platforms for all market participants (c) Increases price transparency across all included instruments	SEF or DCM selection
2. Clearing	(a) Mandates that all designated, standardized swaps products move to a central clearing environment similar to the current futures industry (b) Requires open and fair access to clearing, allowing more market participants to utilize these services	<ul style="list-style-type: none"> • FCMs (Future commission merchants) Selection • CCPs (clearinghouses) Selection
3. Collateral	(a) All swaps transactions – cleared or un-cleared – require initial margin (b) Initial margin minimums for cleared products established by central counterparties (c) Heightened importance of collateral management supporting all transactions	<ul style="list-style-type: none"> • Identify eligible collateral and sourcing additional needs

<i>Areas Impacted by Dodd Frank Act</i>	<i>Regulations</i>	<i>Consideration for Implementation</i>
4. Reporting and Oversight	(a) Federal regulatory calls for additional transparency will require more robust, timely reporting (b) Creates regulatory oversight of market participants with no prior coverage	<ul style="list-style-type: none"> • Register for LEIs (Legal Entity Identifiers) • onfirm timely, compliant reporting

Understanding the Current State of Operations and Preparing a Road Map

Due to complex and evolving nature of the Dodd Frank Act – which requires a lot of interpretation of the regulation – it is suggested that an organization choses an external consultant, who can objectively assess the true state of readiness to adopt the Act. The organization should insist on the ‘Gap Analysis’ report, which reveals the differences between the ‘As-Is’ state with the ‘To Be’ state in line with requirements of the Act, at granular level as possible. Then, the organization needs to continue focusing on design of their target operating model, execute risk management practices, and develop client onboarding methods to ensure operational excellence.

In this case, the external consultant helped the Buy-side firm to:

- Identify all impacted functions in the organization and develop business requirements for each of the impacted functions (Operations, Compliance, and Finance)
- Develop a front-office methodology to modify the OMSs to meet clearing requirements
- Establish governance and controls at key points to comply with the regulatory requirements
- Identify external middleware vendors and develop integration requirements; identify the changes in its ongoing/future technology (automation) initiatives for data and reporting requirements.

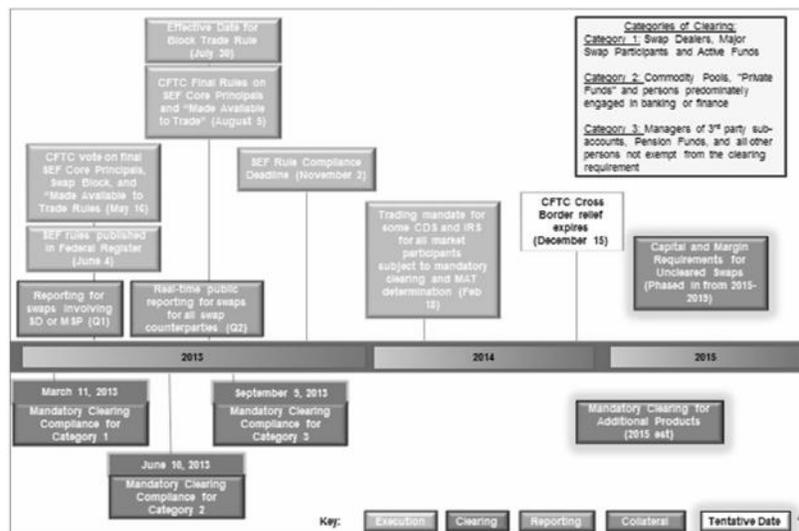
A plan or road map was essential to ensuring timely and effective compliance with Title VII. This effort began with understanding the CFTC regulations under Title VII, the current state of the organization

and how the regulations applied given the volume and type of a company's OTC derivative transactions. This required understanding how the company would use OTC derivatives and whether taking advantage of any exceptions to the clearing requirements would be advantageous. It also required putting into place procedures to comply with the collateral, reporting and record-keeping requirements of Title VII.

As the compliance deadlines were staggered by the OTC derivative asset class, there was not a single pinpointed date to meet all compliance deadlines, however, it was clear that Swap dealer counterparties (i.e., many large banks and other swap dealers) would not be able to trade with end users after May 1, 2013, unless derivative contracts were amended to conform to Title VII's requirements regarding business conduct standards.

Given this, a broad timeline was agreed upon in consultation with all the stakeholders (Table 3).

Table 3: Timeline



Understanding the Requirements for Various Operational Areas

All the required activities were identified and the compliance date for each of them was approved by the Steering Committee (Table 4). A monthly review mechanism was instituted where each Work-Stream Lead, in the Task Force, was required to give an update on:

- Process Migration Update
- Technology infrastructure update
- Resource and Training update
- Communication update: internal and external

Each Work-Stream Lead in the presented the report to the Steering Committee on:

1. Key Accomplishment during the review period
2. Upcoming Activities/Milestones
3. Issues/Risks and their impact on upcoming milestones

Table 4: Dodd Frank Compliance Date

<i>Dodd Frank Requirements</i>	<i>Required Activities</i>	<i>Compliance Date (*)</i>
Timely Confirmations	<ul style="list-style-type: none"> • Swaps Dealers (SDs)/ Major Swap Participants (MSPs) – Must establish, maintain and follow written policies and procedures to ensure that a confirmation is executed for each swap transaction as soon as technologically practicable or by: <ul style="list-style-type: none"> ○ T+1 for contracts with SDs/MSPs or financial entities. ○ T+2 for contracts with any other entity. ○ Phase in with a reduction in timing thru August 2014. • SDs/MSPs – Required to send an acknowledgement to a counterparty not an SD/MSP as soon as technologically practicable or by T+1. 	March, 2013
Portfolio Compression	<ul style="list-style-type: none"> • SDs/MSPs – Must establish, maintain and follow written policies and procedures to facilitate bi-lateral offset and bi-lateral compression of trades when appropriate. • SDs/MSPs with other CPs – Each SD/MSP must establish, maintain and follow written policies and procedures to periodically terminate /engage in portfolio to the extent requested by any such counterparty. 	March, 2013
Portfolio Reconciliation	<ul style="list-style-type: none"> • Each swap dealer/MSP shall engage in portfolio reconciliation for all un-cleared swaps in which it is counterparty on terms that differ based on the regulatory status of the counterparty. • Counterparties shall agree in writing to the terms of the reconciliation. • Frequency based on trade volume/CP type. 	October, 2013

<i>Dodd Frank Requirements</i>	<i>Required Activities</i>	<i>Compliance Date (*)</i>
Dispute Resolution	<ul style="list-style-type: none"> • SDs shall have detailed procedures and processes related to identification, recording and monitoring of disputes (non-cleared derivatives) which should be resolved within 5 business days. • Reporting of disputes to authorities for valuations > 20M, within. <ul style="list-style-type: none"> ○ (3) business days – <i>between SDs/MSPs and SDs/MSPs.</i> ○ (5) business days – <i>between SDs/MSPs and other CPs.</i> 	October, 2013
Margin/ Collateral Segregation	<ul style="list-style-type: none"> • Daily margin will have to be posted on all trades. • Under the LSOC (legally segregated, operationally commingled) model, FCMs must segregate swap client' property from their own property. • CCP prices will be used on a daily basis for margin calculations. 	2014 -2018
Reporting and recordkeeping	<ul style="list-style-type: none"> • All swaps shall be reported to a SDR for real time public dissemination as soon as technologically practicable. Hierarchical reporting based on CP <ol style="list-style-type: none"> 1. Swap facility (SEF, DCM, DCOs), 2. A SD/MSP counterparty, and 3. A non-SD/MSP counterparty. • Non-cleared swaps must be reported to a registered "swap data repository" or, if one does not exist, to the CFTC or SEC, as applicable. • Legal entity identifiers (LEIs) will be required for each internal fund as well as for client accounts for reporting. • For non-cleared trades, swap dealers will have to provide daily mark even if not requested by counterparty. • Reporting dates: <ul style="list-style-type: none"> ○ CDS/IRS – SD real-time and SDR reporting – Dec 31, 2012 ○ FX/Equity/Other Commodity – SD real-time and SDR reporting – Feb 28, 2013 ○ CDS/IRS – SD historical swap reporting – Jan 30, 2013 ○ FX/Equity/Other Commodity - SD historical swap reporting – Mar 30, 2013 	
Clearing	<ul style="list-style-type: none"> • Mandatory clearing for in place for certain IRS and Index CDS swap types. • March 11, June 10 and September 9, 2013. 	3 phases in 2013
Swap Execution	<ul style="list-style-type: none"> • Made Available to Trade (MAT) determination which will result in mandatory Swap Execution Facility trading for some swap types. 	March, 2014

(*): Actual target dates changed to protect identity of the organization.

Required Changes in Technology Infrastructure for Dodd-Frank Compliance

Though the formal announcement to adopt Dodd Frank Act was made in early 2012, the organization has been working since 2011 with clients, industry groups, the clearing-houses, and other industry participants to be prepared for the move to central clearing.

Broadly, there are two pre-requisites of the system for supporting OTC central clearing (Figure 1), to meet Dodd-Frank's requirements:

- (a) *Data Quality*: The system must be capable enough to accurately capture the data points that represent the underlying contract. The ability to capture all the data points reflecting how the instrument is traded (for example the day-count-convention for an Interest Rate Swap) has a significant impact on the accuracy of calculation of risk exposure, profit/loss and reporting.
- (b) *Reporting*: The system must have the ability to report on all data points captured at a contract, trade and positional level.

Technology development effort had already been underway for last a few years in the organization:

- Operating Model changes and technology enhancements in production and ongoing spanning key service areas of transactions, cash, pricing, reconciliations, margins and information delivery.
- Ongoing refinement of model as Clearinghouse, FCMs, SEFs and industry groups continue to address operational nuances coming to light with new mandates and increase in clearing volumes.
- From additional messaging and new data requirements systems enhancements are required throughout the industry.

The organization needed to make suitable modifications in its technology to:

- (a) Enable 360° view of risk and performance (enterprise data management)
- (b) Automate position valuation and generation of variation margin
- (c) Automatically reconcile discrepancies between the organization and the transacting counterparty
- (d) Improve straight-through-processing (STP) workflow for OTC swaps

- (e) Provide transparency in trade transaction flow for full disclosure
- (f) Provide central overview and control over potential and actually used collateral to enable optimal use
- (g) Communicate details of the trade and any collateral, on a real-time basis, to all relevant parties
- (h) Provide broad instrument coverage that includes centrally and bilaterally cleared trades as well as instruments that fall outside the scope of Dodd-Frank
- (i) Support real-time reporting to reflect the most up-to-date view of positions and trades

Besides, there were changes required to ensure Infrastructure connectivity with FCMs and CCPs, which meant:

- Utilizing the affirmation matching platforms for affirmation of the trade terms with the EBs
- Testing connectivity with the FCMs and CCPs
- Testing portability from one FCM to another FCM
- Building system to determine the products eligible for central clearing
- Developing new trade netting/collapsing processes to match the netting/collapsing at CCPs
- Developing a process to capture up-front trade level fees as well as maintenance fees.

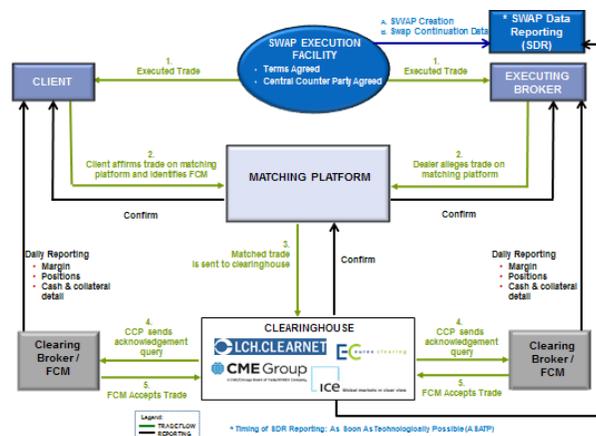


Figure 1: Processing of Transaction and Clearing a Trade

Changes Required in the Trade Process

It was evident post Dodd Frank Act, more than two-thirds to three-quarters of the existing bilateral trade volume would shift and be cleared through central counterparties (CCPs).

- When two SDs and/or MSPs enter into a centrally cleared transaction, both would be required to post initial margin, which would be held by the CCP. Variation margin would be passed through the CCP from one counter party to another.
- In common with current CCP operating practices, variation margin would move on a T+0 basis instead of the prevailing T+1 model used for bilateral transactions.
- While institutions trading bilaterally had long been required to post variation margin to account for daily price fluctuations, requiring initial margin was new and would substantially increase the amount of collateral required. For initial margin, CCPs would accept only highly liquid, high grade collateral, which would put pressure on supply as demand for this limited pool of collateral continues to increase. The influx of cash resulting from mandatory initial and variation margin was likely to prove challenging to the CCPs who had few options for managing that cash.

Key servicing changes that would be required to move from bilateral trades to CCPs are given in Table 5.

Table 5: Bilateral and Central Counterparties Trade

<i>Activities</i>	<i>Bilateral</i>	<i>Central Clearing</i>
1. Transaction Management	<ul style="list-style-type: none"> • Trades received from asset manager and settled • Status and fails managed 	<ul style="list-style-type: none"> • Trades received from asset manager and settled • Affirmation and clearinghouse submission by asset manager on trade date • Settlement processes similar to bilateral • Fails managed, including trade fees, if applicable

<i>Activities</i>	<i>Bilateral</i>	<i>Central Clearing</i>
2. Cash Management	<ul style="list-style-type: none"> • Cash flows calculated and settled • Fails managed 	<ul style="list-style-type: none"> • Additional requirement for initial and variation margin management, which must be performed <i>daily</i> (which bilateral model does not require) • All other processes continue to be performed
3. Valuation and Pricing	<ul style="list-style-type: none"> • Prices acquired from internal or external source (e.g., Markit, SuperD) • Prices validated 	<ul style="list-style-type: none"> • Source of pricing for variation margin calculation received from CCP/FCM; Vendor pricing may continue to be used as validation price or primary for valuation purposes
4. Collateral / Margin Management	<ul style="list-style-type: none"> • Collateral movements settled • Fails managed • Reconciliation and reporting conducted 	<ul style="list-style-type: none"> • Overall process/workflow is similar, with two exceptions: <ul style="list-style-type: none"> ○ Initial margin movements received from investment manager or FCM ○ Variation margin calculated/ validated <i>daily</i> and movements managed accordingly
5. Reconciliation	<ul style="list-style-type: none"> • Reconciliation across record keeping, accounting, custody, collateral, and counterparties • Exceptions/disputes managed as required 	<ul style="list-style-type: none"> • Processes similar, with some differences in counterparties • <i>Daily</i> margin management requires daily reconciliation (not all reconciliation performed daily in bilateral model) • Potential for more breaks as components of variation margin include gain/loss, accrual, PAI, credit event (if applicable)
6. Corporate Events	<ul style="list-style-type: none"> • Corporate events processed 	<ul style="list-style-type: none"> • Similar process
7. Information Delivery	<ul style="list-style-type: none"> • Delivery of data through info delivery tools (e.g., online dashboard) 	<ul style="list-style-type: none"> • Similar process

Finalizing a Legal Agreement Framework

Towards adopting Chapter VII of the Act the organization made several changes in its legal agreements with transacting counterparties, after:

- Negotiating give-up agreements with the EBs
- Negotiating clearing agreements with the FCMs including credit terms, fees, and collateral/margin processing
- Negotiating addendums for each of the CCPs
- Modifying IMAs with the clients wherever required.

Client Communication

A client tool kit and a comprehensive client communication plan were developed to be used with all their existing clients. The client accounts were identified where mandatory cleared swaps were currently being traded, or they could be potentially traded in future. The IMAs were identified that required modification for central clearing

Client readiness activities and outreach program was completed in North America and ongoing in EMEA and APAC to work with the organization's servicing clients as they move to the new environment

Lessons Learned and Next Steps

During the course of adopting Dodd Frank Act successfully for last several years, a few significant lessons were learned.

- While many argue the merits of Dodd-Frank and the potential negative impact on the profitability and global competitiveness of US asset managers, these regulatory reforms do not have to come at the expense of growth and value creation. The best practices mandated by the Act can be used beyond improving the transparency to fuel growth and expansion.
- Implementing the Act is a long journey that requires a significant commitment from all the participants, who are required to make profound operational changes resulting in rigorous demands on their infrastructure, and make operational excellence even more critical to business success and regulatory compliance. As a corollary to it, the organization is required to augment their operational processes, policies, technology and in some cases, their business model itself.

- Some of the organizations may get a surprise that the effort required for the infrastructure upgrade is much bigger than they originally anticipated. Most of the buy-side firms prefer a fully automated solution; however, the degree of automation that will be actually achieved may vary from organization to organization.
- Further, while the scope of this paper is limited to the provisions of Dodd-Frank relating to OTC derivatives, it is important to actively monitor other aspects of the reform as they evolve, including (but not limited to) Dodd-Frank liquidity, credit concentration and overall risk exposures.
- Lastly, a few key steps by an organization always play a crucial role in making the program successful, like:
 - o An un-ambiguous mandate, arranging required resources and regular reviews on the progress of the initiative by the top management are key to success of any new program.
 - o Clear communication and regular interaction with all internal and external stakeholders.

The SEC has issued a policy statement describing the order in which it expects new rules regulating the derivatives market would take effect. The policy statement does not estimate when the rules would be put in place, but describes the sequence in which they would take effect. The phased-in approach is intended to avoid the disruption that could occur if all the new rules took effect simultaneously.

References

- “Derivatives: SEFs – Opening Bell Sounds”, <http://www.pwc.com/us/en/financial-services/regulatory-services/publications/derivatives-sefs-opening-bell-sounds.jhtml>. PwC Financial Services Regulatory Practice, June, 2013.
- “The Commodity Futures Trading Commission Staff Announces Trade Execution Mandate for Certain Interest Rate Swaps”, <http://www.cftc.gov>. The Commodity Futures Trading Commission, January, 2014.
- http://chicagofed.org/digital_assets/publications/understanding_derivatives/understanding_derivatives_chapter_3_over_the_counter_derivatives.pdf
- “The path forward for EU-US derivatives regulation”. Robert J. Dilworth, James E. Schwartz and Marissa N. Golden, *International Financial Law Review*, September 2013 (Euromoney Publications).

“SEC Proposes Rules for Security-Based Swap Execution Facilities”, <http://www.sec.gov/spotlight/dodd-frank/derivatives.shtml>

“SEF Registration Requirements and Core Principle Rulemaking, Interpretation & Guidance”, United States Commodity Futures Trading Commission.

“CFTC Issues Guidance, Exemptions In Advance of SEF Rule Compliance Date”, <http://www.cftc.gov/lawregulation/doddfrankact/index.htm> Peter Y. Malyshev et al., Latham & Watkins LLP Derivatives Practice, October 17, 2013.

“Derivatives: CFTC Shutdown, SEFs Open”, <http://www.pwc.com/us/en/financial-services/regulatory-services/publications/sefs.jhtml>. PwC Financial Services Regulatory Practice, October, 2013.

“Industry Submissions – Trading Organizations – Swap Execution Facilities (SEF)”. CFTC.

Working notes of the author.