

Appendix 1

POST-CRISIS GLOBAL FINANCIAL REGULATORY CHANGES - NORTH AMERICA AND EUROPE				
Legislation	Regulation	Governing Body	Date	Description
Dodd-Frank Act, Section 165 & 171		FDIC, FRS, OCC	1-Jan-18	U.S. bank holding companies which have at least \$700 billion in total consolidated assets or more than \$10 trillion in assets under custody must maintain a minimum enhanced supplementary leverage ratio (eSLR) of 5 percent. Furthermore, each U.S. bank holding companies insured deposit institution subsidiary must maintain an eSLR of 6 percent. The eSLR is intended to measure the amount of leverage on a bank's balance sheet and act as a signal to banking authorities of increasing leverage on a financial institutions balance sheet.
Directive 2014/17/EU		European Commission	21-Mar-16	The aim of the Mortgage Credit Directive (MCD) is to ensure that mortgage lenders across Europe exercise extreme due diligence when extending mortgage loans by ensuring that lenders consider the financial capacity of the borrower to service their debt obligations in addition to their credit history. Increased due diligence will ensure that consumers receive products that best meet their needs thereby reducing the risk of default. Furthermore, the MCD aims to eliminate predatory lending by ensuring that lenders commissions are not directly linked to certain characteristics of the mortgage loan.
Directive 2009/138/EC		European Commission	1-Jan-16	The "Solvency II" directive establishes heightened capital requirements for insurers. Insurers are now required to hold adequate amounts of capital to protect against market risk, credit risk, and operational risks. The increased capital measures will protect insurers against falling into a position of insolvency in periods of economic stress. In addition to the new capital requirements, insurers are also required to develop a risk management framework which will allow them to identify emerging risks and implement policies to mitigate such risks.
Dodd-Frank Act, Section 716		CFTC	16-Jul-15	Insured deposit institutions that are engaged in swap activity are required to "push out" various components of their swap activity to a separate entity that is not subject to Federal assistance. Specifically, all structured finance swaps, that is swaps that are based on asset-backed securities (ABS) must be pushed out to a separate entity unless the swaps are being used to hedge or mitigate risk, or if the ABS adhere to a specific credit quality. The "Swaps Push-out Rule" is designed to reduce specific swap transactions which pose the greatest amount of systematic risk to the U.S. financial system.
Dodd-Frank Act, Section 165 & 1027		SEC	14-Jul-15	A number of changes to money market mutual funds (MMMF) have been implemented including the introduction of a floating NAV for prime MMMF's in addition to liquidity fees and redemption gates for all MMMF's. The new rules governing MMMF's will increase awareness about their risks and make them less vulnerable to declines in the value of their holdings.
Dodd-Frank Act, Section 763 & 766	Regulation SBSR	SEC	18-May-15	All security-based swap information is required to be reported to either a registered security-based swap data repository (SDR) or the U.S. Securities and Exchange Commission (SEC) should a SDR not be available. Increased access to security-based swap data will enable regulating bodies to conduct a thorough analysis of swap markets and identify emerging risks which could pose instability on the U.S. financial system. Furthermore, security-based swap data as it pertains to pricing and volumes must be made publically available by the SDR in order to increase clarity with respect to swap market transactions. In addition to the reporting requirements, SDR are also required to register with the SEC.
Proposed National Instrument 94-101		CSA	12-Feb-15	The Canadian Securities Administrators (CSA) have proposed a number of rules surrounding over-the-counter (OTC) derivatives in order to increase transparency with respect to OTC derivative products and to dampen or eliminate potential risks to the stability of the Canadian financial system which could be fostered by risky trading activities. The proposed rules would require selective derivatives to be cleared through a regulated clearing agency. In order to determine which derivatives will be required to be cleared, clearing agencies must submit detailed records to regulators of all the derivatives that they have cleared. The determination of derivative products which will require mandatory clearing will be based on a number of metrics including the risk characteristics of a derivative and the structure of the market in which it trades.

Dodd-Frank Act, Section 171 & 193		FDIC, FRS, OCC	1-Jan-15	This rule amends the supplementary leverage ratio (SLR) so that it aligns with that proposed in the Basel III framework. Specifically, the definition of total leverage exposure has been amended to include credit derivatives and similar financial instruments through which a financial institution provides credit protection. The final rule also improves clarity with respect to certain components of the SLR by imposing mandatory public disclosure requirements.
	Liquidity Adequacy Requirements	OSFI	1-Jan-15	The Office of the Superintendent of Financial Institutions (OSFI) in accordance with Basel III requirements has developed and implemented Liquidity Adequacy Requirements (LAR). LAR require financial institutions to adhere to a minimum liquidity coverage ratio (LCR) of 100 percent. The LCR will ensure that financial institutions have an appropriate amount of liquid assets to withstand net outflows of cash and other liquid assets over the course of a 30-day economic downturn.
Dodd-Frank Act, Section 113 & 165	Regulation WW	FDIC, FRS, OCC	1-Jan-15	Regulation WW establishes a LCR that aligns with Basel III requirements. The LCR will apply to internationally active banks that have more than \$250 billion in total consolidated assets or more than \$10 billion in on-balance sheet foreign exposures. The rule also applies to these banking organizations subsidiary deposit institutions that have assets of \$10 billion or more. The LCR will ensure that financial institutions have a sufficient amount of liquid assets to meet net liquidity outflows in times of adverse economic and financial conditions.
Regulation (EU) No 1024/2013		European Commission	4-Nov-14	The Single Supervisory Mechanism (SSM) will be tasked with supervising all (6000) banks in the Euro Area. The SSM will designate powers to the European Central Bank (ECB) to monitor banks that have more than 30 billion Euro in consolidated assets or constituting at least 20 percent of their home country's GDP or have received financial assistance from the European Financial Stability Facility (EFSF) or the European Stability Mechanism (ESM). The introduction of the SSM will ensure that a single body is responsible for identifying and maintaining systematic risks from one country which could pose significant risks to the financial systems of other Euro Area countries.
Rule 91-507	Trade Repositories and Derivatives Data Reporting	AMF, MSC, OSC	31-Oct-14	OTC derivative transactions including interest rate swaps, foreign exchange contracts and commodity contracts in Ontario, Manitoba and Quebec must be reported to a designated trade repository. Reporting data to a designated trade repository will increase transparency in derivative markets and provide regulators with material information which will allow them to identify risks which could pose instability on the Canadian financial system.
Dodd-Frank Act, Section 941		SEC	22-Oct-14	Securizers of ABS are now required to retain a minimum of 5 percent of the credit risk of the assets collateralizing ABS. The risk retention requirements take strides in ensuring that the assets underlying the ABS are of high quality.
		CMHC	30-May-14	In an attempt to reduce the amount of leverage among households in the Canadian economy, Canada Mortgage and Housing Corporation (CMHC) will no longer provide individuals with mortgage insurance on a second home. Furthermore, CMHC will require self-employed individuals to provide third-party income verification (e.g. Notice of Assessment) in order to qualify for mortgage insurance.
Dodd-Frank Act, Section 939A		FHFA	7-May-14	Federal Home Loan Banks (FHLB) are required to remove references to Nationally Recognized Statistical Reporting Organizations (NRSRO) when determining the creditworthiness of an investment. Furthermore, FHLB are required to develop internal methodologies, subject to FHFA approval, to determine the creditworthiness of potential investments. The removal of references to NRSRO credit ratings will attempt to strengthen bank balance sheets and improve the overall quality of capital.
Dodd-Frank Act, Section 1411 & 1412	Regulation Z	CFPB	10-Jan-14	The Consumer Financial Protection Bureau (CFPB) has established the Ability-to-Repay and Qualified Mortgage Rule which states that lenders must ensure that borrowers have the financial capacity to service their mortgage obligations by looking at a number of financial indicators including a borrower's credit history, employment income(s) and status, and their current debt obligations. The extension of a qualified mortgage would ensure that creditors have done their due diligence in determining the borrower's ability to meet their debt obligations.

Dodd-Frank Act, Section 1401, 1402, 1403 & 1414	Regulation Z	CFPB	10-Jan-14	Increased regulation of mortgage originators after the financial crisis has resulted in regulations ensuring that commissions earned by mortgage originators are independent of certain features of the mortgage. In addition to heightened restrictions on commissions, the new rules ensure that employees of financial institutions that are directly involved in extending mortgages are licensed under the Secure and Fair Enforcement for Mortgage Licensing Act of 2008. The new regulations will attempt to eliminate predatory lending within the financial services sector.
Dodd-Frank Act, Section 171 & 939A	Regulations H, Q and Y	FRS, OCC	1-Jan-14	In accordance with Basel III, the Federal Reserve and the Office of the Comptroller of the Currency (OCC) have implemented final rules that will govern capital requirements for financial institutions. The final rules adopt a total capital ratio of 8 percent, a capital conservation buffer of 2.5 percent, a countercyclical buffer that will be determined based on economic conditions, and a U.S. leverage ratio of 4 percent. Advanced approaches firms are also subject to a Basel III leverage ratio of 3 percent. The capital requirements will improve the overall quality of bank capital, thereby protecting banks from loan losses that may result due to adverse economic conditions.
Directive 2013/36/EU	CRD IV	European Commission	1-Jan-14	The Capital Requirements Directive IV (CRD IV) implements the Basel III framework in addition to a number of other policies. Specifically, the Basel III framework is applied to all banks in the EU, and not just "internationally active banks". Furthermore, CRD IV aims to reduce excessive risk taking by financial institutions by imposing stringent restrictions on the financial compensation received by company executives who are involved in the strategic decisions of the firm. Lastly, CRD IV attempts to clearly outline and define the origins of internationally active banks profits.
		European Commission	1-Jan-14	The European Commission has proposed regulations that would require banks who are engaged in risky trading activities including OTC derivatives to conduct those activities in an entity that is not involved in the day-to-day operations of the bank should these activities pose heightened risks to the bank. The separation of risky trading activities will mitigate the risk that a bank could fall into a position of insolvency and reduce the need for banking authorities to extend financial assistance to banks involved in risky trading activities. This rule has been proposed, but has not yet been accepted.
Dodd-Frank Act, Section 165		FHFA	28-Oct-13	Fannie Mae and Freddie Mac in addition to the 12 FHLB with total consolidated assets over \$10 billion are required to conduct annual stress tests to ensure that each institution has a sufficient amount of capital to absorb any losses that may occur as a result of financial and economic stress.
		European Commission	1-Sep-13	The European Commission has proposed a number of new rules to govern MMMF's. First, MMMF's that choose to maintain a constant NAV must maintain a capital buffer of 3 percent of total assets under management in order to meet redemptions should the value of a MMMF's investments decline. Secondly, MMMF's must have 10 percent of their portfolio invested in assets that will mature within a day and 20 percent of their portfolio invested in assets that will mature within a week to meet high volumes of redemptions that may occur in times of financial stress. Lastly, short term MMMF's cannot have more than 5 percent of their portfolio invested in one issuer while a standard MMMF cannot have more than 10 percent of their portfolio invested in a single issuer in order to mitigate the risk of default of one of the fund's holdings. This rule has been proposed, but has not yet been accepted.
Dodd-Frank Act, Section 723 & 733		CFTC	5-Aug-13	In order to increase transparency in swap markets, the Dodd-Frank Act requires any agent that operates a platform to facilitate swap transactions must register with the U.S. Commodity Futures Trading Commission (CFTC) as a swap execution facility (SEF). The registration of a SEF will enable swap market participants to have access to pertinent information including swap prices which will promote well functioning swap markets. In addition to registration, a SEF must adhere to a number of core principles aimed at improving transparency in swap markets.
Directive 2011/61/EU	AIFMD	European Commission	22-Jul-13	The Directive on Alternative Investment Fund Managers (AIFMD) aims to establish stringent guidelines to manage alternative investment funds including hedge funds, private equity funds, and real estate funds. The heightened management of alternative investment fund managers is imperative as these individuals manage large quantities of risky assets that have the ability to impose significant risks on the financial system.

Dodd-Frank Act, Section 610		OCC	25-Jun-13	The OCC has redefined the lending limits applicable to banks to include credit exposures that are the result of derivative transactions, repurchase or reverse repurchase agreements, and any securities lending or borrowing transactions. The OCC has also identified methods for which banks can choose to measure exposure from derivative transactions.
Regulation (EU) No 462/2013		European Commission	20-Jun-13	Financial institutions and investment firms are now required to reduce their reliance on external credit ratings when determining the creditworthiness of an investment. Furthermore, financial institutions and investment firms should develop their own internal methodologies in order to determine the creditworthiness of an investment. The reduced reliance on external credit ratings will attempt to improve the overall quality of a financial institution or investment firms balance sheet.
Dodd-Frank Act, Section 723		CFTC	11-Feb-13	Swaps and security-based swap transactions are now required to be cleared through either a derivatives clearing organization (DCO) or a clearing agency. The DCO and the clearing agency are then required to submit swaps to either the SEC or CFTC to be approved for clearing. There does exist however, certain classes of interest rate swaps and credit default swaps that are required to be cleared. The four classes of interest rate swaps that are required to be cleared are fixed-to-floating swaps, floating-to-floating swaps, forward rate agreements, and overnight index swaps. The requirements for clearing these four classes of swaps is due to the fact that they account for a significant amount of total interest rate swaps being cleared, even over the course of financial and economic stress. In addition to interest rate swaps, two classes of credit default swaps are also required to be cleared. The first class is based on untranched indices covering North American corporate credits, the CDX.NA.IG, and the CDX.NA.HY. The second class is based on the untranched indices covering European corporate credits, the iTraxx Europe, the iTraxx Europe Crossover and the iTraxx Europe High Volatility. These classes of credit default swaps represent a large portion of trading volumes in credit default swap markets.
Dodd-Frank Act, Section 763 & 805		SEC	2-Jan-13	Registered central counterparties (CCP) are required to develop methodologies that would allow them to monitor credit exposure to their participants on a daily basis and implement risk management practices that would mitigate potential risks.
Dodd-Frank Act, Section 763 & 805		SEC	2-Jan-13	CCP's in a swap transaction are required to set margin requirements in order to isolate themselves from default risk in a swap transaction. CCP's are required to use statistical models to determine the appropriate levels of margin, and review the models on a monthly basis to ensure that they are capturing the most prominent risks in the market.
Dodd-Frank Act, Section 763 & 805		SEC	2-Jan-13	CCP's are required to maintain an adequate amount of financial assets to ensure that it can remain solvent in the event that the counterparty which it has the largest exposure to, cannot meet their financial obligations. Furthermore, CCP's that facilitate security-based swap transactions are required to maintain enough financial assets to protect against a default of its two largest counterparties. This is known as the "cover two" standard.
	Capital Adequacy Requirements	OSFI	1-Jan-13	Pursuant with Basel III framework, OSFI has introduced minimum capital requirements for financial institutions. Financial institutions are required to maintain a Tier 1 capital ratio of 6 percent and a total capital ratio of 8 percent. In addition to traditional capital requirements, financial institutions will be required to maintain a capital conservation buffer of 2.5 percent of risk-weighted assets which will gradually be implemented between 2016 and 2019. Domestic Systemically Important Banks will also be required to adhere to a Common Equity Tier 1 surcharge equal to 1 percent of its risk-weighted assets. The aim of the heightened capital requirements is to improve the overall quality of bank capital making them less susceptible to loan losses that may arise due to economic stress.
	Guideline B-20: Residential Mortgage Underwriting Practices and Procedures	OSFI	31-Dec-12	Guideline B-20 provides financial institutions with core principles that they must adhere to when facilitating mortgage credit. Specifically, when extending mortgage credit, financial institutions must ensure that the borrower has the financial capacity to service their debt obligations by examining a number of financial metrics including the borrower's income and employment status, their current debt obligations, and their credit history. In addition to assessing the borrower's financial strength, financial institutions must exercise caution when extending mortgage credit with unique features, namely home equity lines of credit (HELOC). Because of a HELOC's revolving features, financial institutions are required to impose a maximum loan-to-value ratio of 65 percent. Furthermore, financial institutions must establish a robust framework for appraising the value of collateral that will secure mortgage credit. A robust appraisal framework will reduce loan losses should the borrower be unable to service their debt obligations. Lastly, financial institutions are required to establish a sound risk management framework to ensure that their mortgage portfolio does not present undue risk to the firm. This entails having a model validation process which ensures that models used in the underwriting process are updated frequently in order to capture changing market trends and risks. In addition to model validation, financial institutions should conduct stress tests to examine the impact that adverse economic and financial conditions would have on their mortgage portfolio.

National Instrument 81-102	Investment Funds	CSA	30-Oct-12	Canadian MMMF's are required to maintain a minimum of 5 percent of their holdings in cash or assets that can be converted to a pre-determined amount of cash within a day and 15 percent of its holdings in cash or assets that can be converted to a pre-determined amount of cash within a week. The liquidity requirements will ensure that money market funds have the capacity to meet redemption demands should the value of the fund's holdings decline. In addition to the new liquidity requirements, MMMF's must establish a maximum dollar-weighted average term to maturity of 180 days which will be calculated using all the fund's holdings. The dollar-weighted average term to maturity will make MMMF's less vulnerable to changes in the value of their holdings.
Dodd-Frank Act, Section 165		OCC	9-Oct-12	National banks and federal savings associations with total consolidated assets greater than \$10 billion are required to conduct and report annual stress tests to the OCC. Financial institutions are divided into two categories for stress testing purposes: (1) those that have total consolidated assets between \$10 and \$50 billion and (2) those that have total consolidated assets greater than \$50 billion. Stress tests will ensure that financial institutions have appropriate levels of capital to withstand loan losses that may occur due to adverse economic and financial conditions.
Dodd-Frank Act, Section 701		CFTC	1-Oct-12	Clearing members of DCO that are swap dealers, major swap participants or futures commission merchants are required to conduct stress tests to ensure that clearing members have the financial capacity to absorb losses should adverse financial and economic conditions arise. However, the CFTC will not set specific scenarios for stress tests as they believe that clearing members should design their own stress scenarios that are unique to both the market and clients it serves.
Regulation (EU) No 648/2012	EMIR	European Commission	16-Aug-12	Individuals that are engaged in trading OTC derivatives are required to clear them through a CCP in order to mitigate both counterparty risk and risks to the overall financial system. In addition to the clearing requirements, individuals are required to report detailed information regarding derivatives transactions to a trade repository to ensure that the appropriate authorities have sufficient information to monitor OTC derivatives and identify any risks that could pose instability on the financial systems of Euro Area countries.
Dodd-Frank Act, Section 723, 728 & 729		CFTC	13-Aug-12	Parties involved in swap transactions before or on April 25, 2011 are required to maintain records of their swap transactions. Specifically, for swap transactions which expired prior to April 25, 2011, both parties are required to maintain any records of the transactions that were in their possession on or after October 14, 2010, the date of the Interim Final Rule for Pre-Enactment Swaps. For any swap that was entered into on or after April 25, 2011, the parties are required to maintain detailed records of the transactions containing primary economic terms using pre-determined swap transaction forms. In addition to maintaining the relevant transaction records, all swaps entered into before or after April 25, 2011 must be reported to a SDR. The extensive recordkeeping will enable the proper authorities to identify both swap dealers and major swap participants.
Dodd-Frank Act, Section 939A		OCC	21-Jul-12	National banks and Federal savings associations are required to remove references to NRSRO credit ratings and use internal methodologies when determining whether a security is "investment grade"; however, NRSRO credit ratings can be used to supplement internal methodologies. The removal of references to NRSRO credit ratings will attempt to strengthen bank balance sheets and improve the overall quality of capital.
		Department of Finance	9-Jul-12	In order to dampen the growth of household credit in the Canadian economy and slow home price acceleration, the Department of Finance has introduced their fourth round of amendments to mortgage lending rules. Most notably, the maximum amortization on a mortgage has been reduced from 30 to 25 years and the maximum loan-to-value ratio has been reduced from 85 to 80 percent. Furthermore, the maximum gross debt service ratio and total debt service ratios have been reduced to 39 and 44 percent, respectively. Lastly, homes valued at more than \$1 million will no longer be eligible for mortgage insurance implying that homeowners must have a minimum 20 percent down payment.

National Instrument 25-101	Designated Rating Organizations	CSA	20-Apr-12	Credit rating agencies in Canada are mandated to become registered as a Designated Rating Organizations (DRO) in order for their credit ratings to be permissible under Canadian securities laws. DRO's are required to comply with numerous principles to ensure that they have under taken extreme due diligence in determining the credit quality of financial instruments. The framework set out by the CSA parallels that utilized by the European Union and U.S. securities laws thereby enabling DRO's credit ratings to be used on a global scale.
Dodd-Frank Act, Section 627	Regulation Q	FRS	21-Jul-11	The introduction of regulation Q prohibited the payment of interest on demand deposits by banks that are members of the Federal Reserve System. With the inception of the Dodd-Frank Act, regulation Q has been repealed.
Dodd-Frank Act, Title 4	Private Fund Investment Advisers Registration Act (PFIARA)	SEC	21-Jul-11	The PFIARA amends the registration requirements for hedge funds and private equity funds. Under the Investment Advisers Act, hedge funds with less than 15 clients and who did not act as an advisor to any company registered under the Investment Companies Act could avoid registration with the SEC. The PFIARA has eliminated this exemption. The PFIARA has also increased the threshold for registration with the SEC from \$25 million to \$100 million in assets under management. Finally, the PFIARA also provides exemptions from registration for small advisors with less than \$150 million in assets under management. The new registration requirements will enable the SEC to monitor the activities of firms that are thought to have the ability to contribute significant amounts of risk to the financial system.
Dodd-Frank Act, Title 10		CFPB	21-Jul-11	The CFPB has been established to monitor financial institutions to ensure that consumers receive fair treatment with respect to financial products and services. Notably, the CFPB is responsible for the establishment of the Ability-to-Repay and Qualified Mortgage Rule.
		Department of Finance	18-Mar-11	The Department of Finance further amends mortgage lending rules by reducing the maximum loan-to-value ratio from 90 to 85 percent and reducing the maximum amortization on a mortgage from 35 to 30 years. The motivation behind the third round of changes to mortgage lending rules is to slow credit growth in the Canadian economy.
Dodd-Frank Act, Section 945		SEC	20-Jan-11	In response to the large volume of poor quality assets which underlied ABS prior to the financial crisis, issuers of ABS are required to conduct a thorough review of the underlying assets in order to determine their credit quality. The review is required to be recorded as a transaction registered under the Securities Act.
		European Commission	1-Jan-11	Two new European authorities have been established for the supervision of the financial services sector. The European Systemic Risk Board (ESRB) will be responsible for identifying emerging financial and macroeconomic risks which could impose systematic risk on the financial system. The European Supervisory Authorities (ESA) will be responsible for monitoring the practices of financial institutions thereby protecting the rights of financial consumers. Within the ESA will be the European Banking Authority (EBA), the European Insurance and Occupational Pensions Authority (EIOPA), and the European Securities and Markets Authority (ESMA).
Dodd-Frank Act, Section 939G	Rule 436 (g)	SEC	22-Jul-10	NRSRO have traditionally been exempt from providing written consent for their ratings to be used in either a prospectus or a registration statement under Rule 436(g). This exemption has isolated them from the liability of providing inaccurate information. The repeal of Rule 436(g) means that NRSRO must provide written consent for their credit ratings to be used publicly and are therefore legally responsible for ensuring that the information they provide is accurate.
Dodd-Frank Act, Title 1			21-Jul-10	The Financial Stability Oversight Council has been established and given the responsibility of identifying both market risks that could threaten the stability of the U.S. financial system and "systemically important" non-bank financial companies that should be regulated by the Federal Reserve. As a result, the Federal Reserve will be responsible for establishing capital, leverage, liquidity and risk management requirements for these institutions. The heightened requirements will aim to ensure that these institutions have the capacity to absorb loan losses that may result in periods of economic uncertainty.

		Department of Finance	19-Apr-10	The maximum amount that an individual can borrow when refinancing their home has been reduced from 95 to 90 percent of the appraised value of the home. Furthermore, the minimum down payment on a home that is not owner occupied has been increased from 5 to 20 percent. The new mortgage lending rules have been implemented in order to keep household borrowing in Canada in check.
		Department of Finance	15-Oct-08	In response to the sub-prime financial crisis in the United States, the Department of Finance begins its cycle of altering mortgage lending rules for insured mortgages by increasing the minimum down payment on a mortgage to 5 percent and reducing the maximum amortization on a mortgage from 40 to 35 years.

Source: Canada Mortgage and Housing Corporation, Canadian Securities Administrators, Consumer Financial Protection Bureau, Department of Finance, European Commission, Federal Register, Federal Reserve Bank of St. Louis, Office of the Comptroller of the Currency, Office of the Superintendent of Financial Institutions, Ontario Securities Commission, U.S. Commodity Futures Trading Commission, U.S. Securities and Exchange Commission.