BMO Financial Group

BMO Financial Group
BMO HARRIS BANK N.A.

IDI Resolution Plan

1.0 BMO Harris Bank N.A. Public Section

1.1 IDI Resolution Plan Overview

This Public Section provides an overview of the overall resolution strategy for BMO Harris Bank (BHB), a national bank headquartered in Chicago, Illinois. BHB is a wholly-owned, indirect subsidiary of Bank of Montreal (BMO).

The Federal Deposit Insurance Corporation (FDIC) adopted the Insured Depository Institution (IDI) Rule in January 2012 requiring IDIs with $50B or more in total assets to periodically submit to the FDIC a contingency plan for the resolution of that institution in the event of its failure. The IDI Rule requires a covered insured depository institution (CIDI) to submit an IDI Resolution Plan (RP) that should enable the FDIC, as receiver, to resolve the institution under Sections 11 and 13 of the Federal Deposit Insurance Act (the FDIA), 12 U.S.C. 1821 and 1823, in a manner that ensures that depositors receive access to their insured deposits within one business day of the institution's failure (two business days if the failure occurs on a day other than Friday), maximizes the net present value return from the sale or disposition of its assets, and minimizes the amount of any loss to be realized by the institution's creditors. The IDI RP should also describe how the strategies for the separation of the CIDI and its subsidiaries from its parent company's organization and the sale or disposition of its deposit franchise, core business lines, and major assets can be demonstrated to be the least costly to the Deposit Insurance Fund (DIF) of all possible methods for resolving the CIDI. The IDI RP submitted by each CIDI is intended to help the FDIC evaluate potential loss severity and to enable the FDIC to perform its resolution functions most efficiently. Each IDI RP is intended to provide the FDIC with a comprehensive understanding of the structure, operations, business practices, financial responsibilities, and risk exposures of the CIDI.

Additionally, in its letter dated June 13, 2017, the FDIC provided BHB with information about the next IDI Plan submission, Findings regarding BHB's 2015 IDI Plan submission, and Additional 2018 Plan Focus Areas. Collectively, incorporation of the details underlying these topics represents the bulk of the changes since the 2018 IDI Plan submission. Other changes generally reflect updates and enhancements to the previously submitted 2015 IDI Plan content.

1.1.1 Organization

BMO is a foreign bank, a bank holding company, and a financial holding company under the Bank Holding Company Act of 1956, as amended. BMO uses a unified branding approach that links the organization's member companies under the brand "BMO Financial Group" (BMOFG). BMO's head office is in Montreal, Canada, with executive offices in Toronto, Canada, and it has U.S. branch offices in New York, New York and Chicago, Illinois, as well as an agency office in Houston, Texas.

BMO Financial Corp. (BFC), a Delaware corporation, bank holding company, and financial holding company, is a wholly-owned subsidiary of BMO and is the top-tier U.S. holding company for most of BMO's U.S. subsidiaries, including two insured depository institutions (IDIs), BMO Harris Bank N.A. (BMO Harris Bank or BHB) and BMO Harris Central N.A. (BMO Harris Central), each a national bank.

As a CIDI, BMO Harris Bank is submitting a resolution plan pursuant to the FDIC's rule requiring the preparation and submission of a resolution plan for IDIs with $50B or more in total assets, 12 C.F.R. Part 360.10 (the IDI Rule). The FDIC has, by rule and through the supervisory process, prescribed the assumptions, required approach, and scope for the IDI RP, and has required that certain information be included in a Public Section. BMO, on behalf of itself and its subsidiaries, submits this Public Section in compliance with the IDI Rule and related guidance.

This IDI RP contemplates a resolution strategy in which BMO's U.S. banking subsidiaries, BMO Harris Bank and BMO Harris Central, under a hypothetical resolution scenario, would be placed into FDIC receiverships. Certain assets and liabilities would be transferred to a bridge bank that would, subject to various assumptions, be sold to a third party. BMO's other material U.S. entities would be wound down in an orderly manner, subject to certain assumptions. In addition, this RP includes strategies designed to ensure continuity of certain businesses during the hypothetical resolution process. The strategies take into account the importance of continued access to services including, but not limited to, technology, employees, facilities, intellectual property, and supplier relationships.

The IDI RP would enable the FDIC, as receiver, to resolve BMO Harris Bank in a manner that would ensure that depositors receive access to their insured deposits within one business day if BMO Harris Bank were to fail, and would maximize the net present value return from the sale or disposition of its assets, and minimize the amount of any loss realized by BMO Harris Bank's creditors.

Overview of BMOFG

Established in 1817, BMOFG is a highly diversified financial services provider based in North America. With total assets of $728B (Canadian) as of January 31, 2018, and more than 45,000 employees, BMOFG provides a broad range of retail banking, wealth management and investment banking products and services to its Canadian customers through its Canadian retail arm, BMO Bank of Montreal, and to retail, small business and commercial customers in the U.S. through BMO Harris Bank. BMOFG also serves customers through its wealth management businesses: BMO Nesbitt Burns, BMO InvestorLine, BMO Private Bank, BMO Global Asset Management and BMO Insurance. BMO Capital Markets, its investment and corporate banking division, provides a full suite of financial products and services to North American and international clients.

BMOFG's vision is *to be the bank that defines great customer experience*. BMO is structured to support that vision by providing customers integrated access to services across the organization through three operating groups: Personal and Commercial Banking (P&C), comprised of Canadian P&C and U.S. P&C; Wealth Management (WM) including Insurance; and BMO

Capital Markets (BMO CM). In addition, the Corporate Services group, which includes Technology and Operations, provides risk management, information technology and other corporate services to the three operating groups.

Canadian P&C operates across Canada, offering banking, financing, and investing solutions as well as card and payment services. Customers are served through more than 900 branches and approximately 3,300 ATMs. Operating predominantly in the U.S. Midwest under the BMO Harris Bank brand, U.S. P&C provides personal and commercial clients with banking, lending, and treasury management services. BMO Harris Bank customers are served through approximately 600 branches, contact centers, online and mobile banking platforms and approximately 1,400 ATMs across eight states, including the contiguous states of Illinois, Wisconsin, Indiana, Minnesota, Missouri and Kansas.

WM, BMO's wealth management business, serves a full range of client segments from mainstream to ultra-high net worth and institutional, with a broad offering of wealth management products and solutions, including insurance products. WM operates in both Canada and the U.S., as well as in Asia and Europe. In the U.S., our wealth management businesses compete primarily in the private banking and asset management sectors, drawing on our strategic presence in the Chicago and Milwaukee areas, and in select high-growth wealth management markets across the U.S.

BMO CM provides capital raising, investing, advisory, treasury and research services to corporate, institutional, and government clients in Canada, the U.S., South America, Europe, Asia and Australia. Through Investment & Corporate Banking (I&CB), BMO Capital Markets offers advisory and execution services with concentrated efforts in selected industry sectors. Clients are primarily large Canadian and mid-market U.S. companies, as well as government agencies, that need to raise capital through equity, debt and/or loans. I&CB also provides advisory and execution services to clients engaging in M&A transactions, and treasury and trade services to help clients manage their working capital effectively. The U.S. segment of BMO Capital Markets Trading Products business, U.S. Trading Products (USTP), offers capital raising, advisory, treasury, research and execution services in the exchange traded and over-the-counter marketplaces. USTP is comprised of the Sales and Trading function that is typically a hybrid activity comprised of customer facilitation and market making activities, organized by product line. Clients are issuers and investors who need to access capital markets and manage risk associated with foreign exchange rates, interest rates, equity and commodity prices.

Overview of BHB

BMO Harris Bank N.A (BHB) is a wholly-owned subsidiary of BMO Financial Corp. (BFC), a Delaware corporation, which is a wholly-owned U.S. subsidiary of BMO. Established in 1882 as Harris Bank, and owned by BMOFG since 1984. The Bank conducts business through two primary operating groups: U.S. Personal Banking and Commercial Banking, and U.S. Wealth Management serving personal, commercial and affluent customers. Additionally certain Capital

Markets (CM) activities are booked into BHB from the two CM related core business lines (CBLs): Trading Products (TP) and Investment and Corporate Banking (I&CB). The Bank provides a variety of banking and financial services to commercial and industrial companies, financial institutions, governmental units, not-for-profit organizations and individuals throughout the U.S., primarily the Midwest. Services rendered and products sold to customers include demand and time deposit accounts including certificates of deposit; various types of loans; sales and purchases of foreign currencies; interest rate management products; cash management services; investment banking services; underwriting of municipal bonds; financial consulting; and personal trust and trust related services.

1.1.2 Material Entities

The IDI Rule defines *Material Entity* (ME) as “a company that is significant to the activities of a critical service or core business line (CBL)". For example, the legal entity utilized by the CIDI as the contracting entity for a CBL would be a ME. Also, a subsidiary of the CIDI that provides a critical service would be a ME.

The IDI RP identifies certain BMO Harris Bank affiliates as MEs for the purpose of resolution planning. The MEs in the IDI RP are the following legal entities:

BMO Financial Corp.

BMO Financial Corp. (BFC), a Delaware corporation, is a wholly-owned U.S. subsidiary of BMO. BFC is a holding company that provides commercial banking, investment banking, trust and other services domestically and internationally through two direct bank subsidiaries, BMO Harris Bank N.A. (BHB) and BMO Harris Central N.A. (BHCNA) and many direct and indirect non-bank subsidiaries.

BMO Harris Central N.A.

BMO Harris Central N.A. (BHCNA) is a direct, wholly-owned bank subsidiary of BFC, and operates as a national bank under a charter issued by the Office of the Comptroller of the Currency. Its headquarters is located in Roselle, Illinois. BHCNA is a special purpose bank whose sole business purpose and activity is to act as a disbursing bank in the delivery of controlled disbursement account services for corporate and commercial customers of BHB. It has no subsidiaries and does not generate any loan activity.

The primary purpose for establishing a separate bank/legal entity for the controlled disbursement service is to allow the corporate customers to issue checks drawn on a smaller bank which, because of its size and location and separate routing number, receives limited check presentments from the Federal Reserve.

BMO Capital Markets Corp.

BMO CMC is a wholly-owned subsidiary of BFC that is incorporated under the laws of the State of Delaware. It has no subsidiaries.

BMO CMC operates as a self-clearing, institutional broker-dealer that mainly consists of RVP/DVP business and does not custody client assets. BMO CMC focuses on mid and large-sized institutional clients, large financial sponsors (>$500MM AUM), and mid-cap and growth companies (enterprise value $200MM-$5B) while leveraging the strength and size of the Canadian parent bank.

BMO CMC is registered with the U.S. Securities and Exchange Commission (SEC) as a U.S. securities broker-dealer and investment advisor, is a member of the Financial Industry Regulatory Authority (FINRA) and is a designated Primary Dealer with the Federal Reserve Bank of New York. .BMO CMC is registered to do business in all 50 states. BMO CMC is a member of a number of fixed-income, equities and derivatives exchanges, and clearing organizations and is supervised and subject to examination by FINRA, its primary regulator, various exchanges, the Federal Reserve Banks of Chicago and New York, and the SEC.

Bank of Montreal Chicago Branch

BMO Chicago Branch is an Illinois state-licensed branch (foreign banking office) of BMO. The key purposes of the BMO Chicago Branch are access to enterprise capital, as an alternate booking location for large Corporate, Leveraged Lending and U.S. based subsidiaries or divisions of Canadian companies, U.S. dollar intercompany funding, and liquidity support.

BMO Harris Financing Inc.

BHFI is a direct wholly-owned non-bank subsidiary of BFC. It was established in 2001 to serve as a booking location for certain U.S. originated loans. BHFI books Commercial Banking and I&CB corporate loans. BHFI initially included only Corporate Banking loans originated in the BMO Capital Markets Operating Group (within I&CB). Following the transfer of a significant portion of the Corporate Banking loan portfolio to Commercial Banking in April 2010, BHFI has since had exposure to loans from both BMO Capital Markets and U.S. P&C operating groups.

1.1.3 Core Business Lines

The IDI Rule defines *Core Business Lines* as “those business lines of the CIDI, including associated operations, services, functions and support, that, in the view of the CIDI, upon failure would result in a material loss of revenue, profit, or franchise value.”

BMO has identified three CBLs based on the criteria of the IDI Rule that fall within two operating groups.

U.S. P&C. is a multi-channel operating group that offers a full range of client banking solutions. Two of the CBLs reside within U.S. P&C.

- U.S. Personal Banking serves retail banking customers with a full suite of deposit, lending, and credit card products delivered through over 500 branches, customer contact centers, online and mobile banking platforms and over 1,300 ATMs across eight states. U.S Personal Banking, with approximately $19.7B in loans and approximately $37B in deposits, serves approximately 2.2MM retail customers and approximately 119,000 small and mid-sized businesses. U.S. Personal Banking also has cross-referral synergies with BMO Private Bank, and to a lesser extent U.S. Commercial Banking and Canadian Banking businesses.

- U.S. Commercial Banking operates primarily within BHB, and is headquartered in Chicago, IL. BHB provides a broad range of personal banking products and solutions through over 600 branches and approximately 1,300 ATMs in Illinois, Wisconsin, Indiana, Kansas, Missouri, Minnesota, Arizona and Florida. These include solutions for everyday banking, financing, investing, as well as a full suite of integrated commercial and financial advisory services. BHB U.S. Commercial Banking services clients through a combination of sector expertise, local knowledge and mid-market focus throughout the U.S. Generally, U.S. Commercial Banking serves clients with annual revenues of $20MM or more. Commercial Banking also partners closely with BMO Private Bank to serve a full range of client segments, from mainstream to ultra-high net worth, with a broad offering of wealth management products and solutions offered through offices across the United States.

WM is an operating group that serves a full range of client segments, from mainstream to ultra-high net worth and institutional, with a broad offering of wealth management products and solutions. One of the CBLs resides within WM.

- In the U.S., BMO Private Bank is a brand name used by BHB and includes the activities conducted under BHB (Personal Trust Administration, Personal Investment Management, and Private Banking). The activities conducted by non-bank legal entities that provide advisory services to the High Net Worth and Ultra-High Net worth clients support and are often associated with activities conducted through BHB. Accordingly, although these non-bank entities are not part of the BHB legal entity, they are included under the BMO Private Bank umbrella of product and service offerings.

All but one of the Franchise Components included within this IDI RP fall within one of the three CBLs noted above. The Corporate Banking Franchise Component belongs to another distinct business, I&CB. Given this relationship, a brief description of I&CB is included below.

U.S. Investment and Corporate Banking (U.S. I&CB) is the U.S. division of the Global I&CB business of BMO Capital Markets. U.S. I&CB is comprised of two complementary businesses:

- Investment Banking (IB) which provides advisory and capital raising (private placement, loan origination and syndicated, and equity and debt underwriting services) to Corporate and Financial Sponsor clients through a combination of its Sector Coverage teams and its Product Groups.

- Corporate Banking (CB) which offers corporate lending and cash management services through the Corporate Banking group and Treasury and Payment Solutions (T&PS), respectively.

BMO's I&CB business is organized into global Product Groups and Sector Coverage Groups working together to originate and execute transactions.

1.1.4 Franchise Components

The FDIC has defined *Franchise Components* as "major asset categories, core business lines, or other key components of franchise value". Based on this criteria, BMO identified 11 Franchise Components. Cumulatively, they represent a substantial portion of BHB. The 11 Franchise Components identified by management represent approximately 73.1% of December 31, 2017 BHB total assets, approximately 94.7% of 2017 BHB total revenue, approximately 100% of 2017 BHB total net income, and approximately 91.8% of December 31, 2017 BHB total deposits. The Franchise Components in this IDI Resolution Plan are: Core Personal (which includes retail deposit taking, mortgage and home equity lending, and business banking), Indirect Auto, Personal Credit Cards, Core Commercial Lending, Transportation Finance, Dealer Finance, Financial Institutions, Corporate Finance, Equipment Finance, Large Corporate Lending, and BMO Private Bank. Each of the Franchise Components is discussed in more detail with the non-public section of the 2018 BHB IDI Resolution Plan.

1.1.5 Summary Financial Information

1.1.5.1 Balance Sheet

Figure 1.1.5.1-1 BHB Balance Sheet

BMO Harris Bank N.A. (Parent Co. Only)
Statement of Condition
December 31, 2017
(In thousands except share data)

Assets			
Cash and demand balances due from banks		$	1,597,748
Interest-bearing deposits at banks ($6.6 billion held at the Federal Reserve at December 31, 2017)			8,469,510
Federal funds sold and securities purchased under agreement to resell			302,120
Total cash and cash equivalents		$	10,369,378
Securities available-for-sale, at fair value			13,223,389
Securities held-to-maturity, at amortized cost			3,790,205
Trading account assets			1,397
Loans and leases, net of unearned income			70,019,722
Allowance for loan and lease losses			(651,299)
Net loans and leases		$	69,368,423
Loans held for sale			47,589
Premises and equipment, net			839,075
Equipment held for lease, net			647,116
Bank-owned life insurance			3,017,315
Goodwill and other intangible assets, net			3,300,340
Deferred tax asset, net			984,581
Other assets			6,551,433
Total Assets		$	112,140,241
Liabilities			
Deposits:	Noninterest-bearing	$	30,326,604
	Interest-bearing		53,631,507
Total deposits		$	83,958,111
Federal funds purchased and securities sold under agreement to repurchase			292,348
Trading account liabilities and derivative instruments			55,724
Short-term borrowings			433,744
Short-term senior notes			4,000,000
Accrued expenses and Other liabilities			1,094,589

Figure 1.1.5.1-1 BHB Balance Sheet

BMO Harris Bank N.A. (Parent Co. Only)
Statement of Condition
December 31, 2017
(In thousands except share data)

Long-term notes		6,919,636
Total Liabilities	$	96,698,428
Equity		
Common stock ($10 par value); authorized 60,430,512 shares; issued and outstanding 51,018,512 at December 31, 2017	$	510,185
Surplus		11,519,914
Retained earnings		3,550,744
Accumulated other comprehensive loss		(139,030)
Total Equity	$	15,441,813
Total Liabilities and Equity	$	112,140,241

Source: BMO Harris Bank N.A. December 31, 2017 audited financial statements

1.1.5.2 Major Funding Sources

BMO Harris Bank N.A. (BHB) is managed under the BMO U.S. Operations Liquidity and Funding Management Policy. The policy and objectives are aligned with the Canadian parent, BMO. The objective of the policy is to ensure that sufficient liquid assets and funding capacity are available to meet financial obligations including liabilities to depositors and suppliers, and lending, investment, and pledging commitments, even in times of stress.

BHB is guided by a robust liquidity and funding risk management framework, supported by limits that adhere to the risk appetite framework of the U.S. parent BFC, and BMO. Board and senior management committees approve the management framework including related policies and regularly review liquidity and funding positions. The BMO U.S. Asset Liability Committee, which is chaired by the BMO U.S. Chief Financial Officer, monitors BHBs liquidity limits and liquid asset reserves. The U.S. Treasury group actively analyzes and monitors liquidity risk to maintain excess liquidity and access diverse sources of funding.

One of the key limits designated by the Liquidity and Funding Policy is the maintenance of liquid assets to meet various stress testing scenarios. The stress testing program is designed to ensure liquidity and funding needs can be met under stress with liquid assets serving as a means of liquidity risk mitigation. The Policy requires that liquidity stress tests are performed at least monthly, based on market factors and/or idiosyncratic factors. Stress tests are a key part of the contingency funding plan which is a comprehensive document designed to facilitate effective management through a crisis is also in place.

The liquid assets required by the stress testing framework are held in the form of cash and unencumbered, high-quality, liquid securities. Excess cash is held on deposit with the Federal Reserve Bank. High-quality (liquid) securities are comprised of Treasuries, U.S. agency debt, Agency Mortgage Backed Securities, and other available for sale securities that can be sold in the market or used as collateral in secured borrowings. Net unencumbered liquid assets, including cash at the Federal Reserve Bank of Chicago, totaled $20.5B as of December 31, 2017.

BHB's largest source of funding is its customer deposit base which includes retail and commercial deposits. Along with a strong capital base, customer deposits provide BHB with a significant source of relatively stable, low-cost funding. BHB's total customer deposits were $77.8B and total capital was $15.8B as of December 31, 2017, on a consolidated basis. Other major sources of funding include FHLB advances, long-term borrowings, and brokered certificates of deposit (CDs) that were $6.0B, $5.0, and $3.4B respectively as of that same date. FHLB advances are fully collateralized obligations drawn from the Federal Home Loan Bank Chicago, a member owned and capitalized institution. Long-term borrowings are greater than one year, in the form of senior and subordinated loans from affiliates. Brokered CDs are deposits sold through third-party agents where the bank does not maintain a relationship with the investor. Additionally, BHB maintains a de minimis short-term wholesale funding program which is primarily composed of Institutional CDs. Together funding sources discussed above represent 99% of the total liabilities and equity of BHB. Remaining liabilities include trading account liabilities, accrued expenses and other liabilities. In line with BMO's funding philosophy, long-term funding is utilized to support loans and less liquid assets to better match the duration of these assets.

1.1.5.3 Capital

BMO Harris Bank's objective is to hold adequate capital to support its risk-taking activities and financial and corporate strategies, as well as to protect the viability of the company in the event of financial loss resulting from the material risks to which it is exposed. To achieve this objective, BMO Harris Bank has implemented capital management processes that:

- Continue to lend and profitably grow business without interruption, consistent with its business strategies;
- Maintain regulator (OCC and FDIC) confidence;
- Maintain customer and counterparty confidence;
- Raise new Capital from investors;
- Attract funding at a reasonable cost;

- Provide a risk-adjusted return to its shareholder(s) that is equal to or greater than the cost of Capital and commensurate with the return available on investment alternatives; and

- Ensure the ability to realize its medium and long term growth objectives.

BHB has been subject to the U.S. Basel III standardized approach risk-based capital requirements (i.e., non-advanced approaches) from January 1, 2015. As a result it is required to maintain minimum Capital levels with respect to Common Equity Tier 1 Capital ratio, Tier 1 Capital ratio, Total Capital ratio and Tier 1 Leverage ratio as mandated by Title 12 Parts 3 & 6 in the Code of Federal Regulations.

Figure 1.1.5.3-1 BMO Harris Bank's Capital Ratios

	Adequately Capitalized Levels	Well Capitalized Levels	December 31, 2017
Common Equity Tier 1	4.50%	6.50%	12.75%
Tier 1 Capital Ratio	6.00%	8.00%	12.75%
Total Capital Ratio	8.00%	10.00%	13.98%
Tier 1 Leverage Ratio	4.00%	5.00%	11.45%

BHB has been subject to the requirements of the Capital Conservation Buffer since January 1, 2016. Capital distributions and discretionary bonus payments are based on BHB's ability to meet certain minimum transitional Capital ratios. BHB continues to be well capitalized and expects to have no issues in meeting the Capital Conservation Buffer requirements.

1.1.6 Derivative and Hedging Activities

Derivative instruments are financial contracts that derive their value from underlying changes in interest rates, foreign exchange rates, or other financial or commodity prices or indices. Derivative instruments are either regulated exchange-traded contracts or negotiated over-the-counter contracts. BMO Harris Bank uses various derivative financial instruments, primarily interest rate and foreign exchange derivative contracts, as part of its trading activities or in the management of its risk strategy. All derivative instruments are designated either as hedging or trading.

BMO Harris Bank enters into derivative contracts with BMO to facilitate more efficient use of combined resources and to better serve customers.

<u>Types of derivatives</u>

Swaps

Swaps are contractual agreements between two parties to exchange a series of cash flows. The various swap agreements that the BMO Harris Bank may enter into are as follows:

- Interest rate swaps – counterparties generally exchange fixed and floating rate interest payments based on a notional value in a single currency.
- Cross-currency swaps - fixed rate interest payments and principal amounts are exchanged in different currencies.
- Cross-currency interest rate swaps - fixed and floating rate interest payments and principal amounts are exchanged in different currencies.
- Commodity swaps - counterparties generally exchange fixed and floating rate payments based on a notional value of a single commodity.
- Equity swaps - counterparties exchange the return on an equity security or a group of equity securities for the return based on a fixed or floating interest rate or the return on another equity security or a group of equity securities.
- Total return swaps - one counterparty agrees to pay or receive from the other cash amounts based on changes in the value of a reference asset or group of assets, including any returns such as interest earned on these assets, in exchange for amounts that are based on prevailing market funding rates.

The main risks associated with these instruments are related to exposure to movements in interest rates, foreign exchange rates, credit quality, securities values or commodities prices, as applicable, and the possible inability of counterparties to meet the terms of the contracts.

Forwards and futures

Forwards and futures are contractual agreements to either buy or sell a specified amount of a currency, commodity, interest-rate-sensitive financial instrument or security at a specific price and at a specific future date. Forwards are customized contracts transacted in the over-the-counter market. Futures are transacted in standardized amounts on regulated exchanges and are subject to daily cash margining.

The main risks associated with these instruments arise from the possible inability of over-the-counter counterparties to meet the terms of the contracts and from movements in commodities prices, securities values, interest rates and foreign exchange rates, as applicable.

Options

Options are contractual agreements that convey to the buyer the right but not the obligation to either buy or sell a specified amount of a currency, commodity, interest-rate-sensitive financial instrument or security at a fixed future date or within a fixed future period. As a writer of options, BMO Harris Bank receives a premium from the purchaser for accepting market risk. As a purchaser of options, BMO Harris Bank pays a premium for the right to exercise the option. Since BMO Harris Bank has no obligation to exercise the option, its primary exposure to risk is the potential credit risk if the writer of an over-the-counter contract fails to meet the terms of the contract.

Caps, collars and floors are specialized types of written and purchased options. They are contractual agreements where the writer agrees to pay the purchaser, based on a specified notional amount, the difference between the market rate and the prescribed rate of the cap, collar or floor. The writer receives a premium for selling this instrument.

Derivative-related risks

Over-the-counter derivative instruments are subject to credit risk arising from the possibility that counterparties may default on their obligations. The credit risk associated with derivatives is normally a small fraction of the notional amount of the derivative instrument. Derivative contracts generally expose BMO Harris Bank to potential credit loss if changes in market rates affect a counterparty's position unfavorably and the counterparty defaults on payment. Credit risk is represented by the positive fair value of the derivative instrument. Replacement risk, the primary component of credit risk, is the risk of loss should a counterparty default following unfavorable market movements and represents BMO Harris Bank's cost of replacing contracts that have a positive fair value using current market rates. BMO Harris Bank strives to limit credit risk by dealing with counterparties that are considered to be creditworthy, and by managing credit risk for derivatives using the same credit risk process that is applied to loans. Netting agreements provide for netting of contractual receivables and payables and apply to situations where BMO Harris Bank is engaged in more than one outstanding derivative transaction with the same counterparty and also has a legally enforceable master netting agreement with that counterparty. Netting agreements also provide for the application of cash collateral received or paid against derivative assets or liabilities. BMO Harris Bank's derivative contracts with BMO are transacted under the terms of a master netting agreement. Exchange-traded derivatives have no potential for credit exposure as they are settled net with each exchange.

Derivative instruments are subject to market risk. Market risk arises from the potential for loss resulting from adverse changes in the value of derivative instruments as a result of changes in certain market variables. These variables include interest rates, foreign exchange rates, equity and commodity prices and their implied volatilities, as well as credit spreads, credit migration and default. BMO Harris Bank strives to limit market risk by employing comprehensive governance and management processes for all market risk-taking activities.

Uses of derivatives

Trading derivatives

Trading derivatives include derivatives entered into with customers to accommodate their risk management needs, derivatives transacted to generate trading income from the Bank's trading positions, and derivatives used in the management of BMO Harris Bank's risk strategy that do not qualify as hedges for accounting purposes (economic hedges).

BMO Harris Bank and BMO perform their U.S. foreign exchange activities jointly. Under this arrangement, foreign exchange net profit is shared by BMO Harris Bank and BMO.

Certain customers enter into lending transactions and derivative transactions with BMO Harris Bank, and BMO Harris Bank enters into offsetting transactions with BMO. As the counterparty, BMO bears the risk of loss associated with the derivative obligations of those customers in the event of default.

BMO Harris Bank has issued certain financial instruments containing embedded derivatives. Embedded derivatives in certain of BMO Harris Bank equity linked certificates of deposit are accounted for separately from the host instruments.

The following derivatives are used as economic hedges:

BMO Harris Bank has qualifying mortgage loan commitments that are intended to be sold in the secondary market. These loan commitments are derivatives and are recorded at fair value. BMO Harris Bank enters into forward sales of mortgage-backed securities to minimize its exposure to interest rate volatility. These forward sales of mortgage-backed securities are also derivatives.

BMO Harris Bank uses total return swaps to minimize exposure to currency exchange rate and equity price fluctuations associated with certain obligations under the mid-term incentive plan, which is a stock-based compensation plan.

BMO Harris Bank issues certificates of deposit that have structured interest rate, equity-linked, foreign currency-linked, debt-linked and commodity-linked features and are accounted for under the fair value option. BMO Harris Bank enters into interest rate, equity and foreign exchange derivatives to manage exposure to changes in the fair value of such structured certificates of deposit.

Hedging derivatives

In accordance with its risk management strategy, BMO Harris Bank enters into various derivative contracts to hedge its interest rate exposures.

BMO Harris Bank uses interest rate contracts, primarily swaps, to reduce the level of financial risk inherent in mismatches between the interest rate sensitivities of certain assets and liabilities. The risk management strategy incorporates the use of derivative instruments to minimize significant unplanned fluctuations in earnings that may be caused by interest rate volatility. BMO Harris Bank manages interest rate sensitivity by modifying the re-pricing or maturity characteristics of certain assets and liabilities so that net interest margin is not adversely affected, on a material basis, by movements in interest rates. As a result of interest rate fluctuations, fixed rate assets will appreciate or depreciate in market value. The effect of the unrealized appreciation or depreciation will generally be offset by the gains or losses on the derivative instruments.

Hedge accounting

Cash flow hedges

BMO Harris Bank's cash flow hedges are hedges of floating rate loans..

Fair value hedges

BMO Harris Bank's fair value hedges include hedges of fixed rate available-for-sale securities and brokered certificates of deposit.

1.1.7 Memberships in Material Payment, Clearing and Settlement Systems

BMO Harris Bank uses a wide array of memberships in payment, clearing, and settlement systems (PCSS), including payment systems, clearinghouses, securities depositories, and central counterparties. The figure below lists material PCSS in which BHB has direct memberships:

Figure 1.1.7-1 Material Payment, Clearing and Settlement Systems

Payment/ Clearing/ Settlement System	Description
The Depository Trust Company (DTC)	Clearing and settlement and depository services for securities and derivatives
Federal Reserve Wire Network (Fedwire Funds / Fedline Advantage) / FedACH	Wire transfer and electronic payment processing, and cash and securities settlement services
Society of Worldwide Interbank Financial Telecommunications (SWIFT)	Interbank financial telecommunications and messaging between financial institutions, FMUs and businesses

1.1.8 Foreign Operations

Historically, BMO Harris Bank has maintained a virtual foreign branch in Nassau, Bahamas. This branch's material activity has been limited to the booking of foreign currency loans, primarily for Commercial Banking customers. The Bahamas Central Bank accepted BHB's license for surrender on February 14, 2018. At the time of this Resolution Plan's submission, BHB does not have foreign operations.

1.1.9 Material Supervisory Authorities

Figure 1.1.9-1 Material Supervisory Authorities

Name	Regulatory Agency
BMO Financial Corp.	Federal Reserve Bank of Chicago
BMO Harris Bank N.A.	Office of the Comptroller of the Currency Federal Deposit Insurance Corp. Consumer Financial Protection Bureau
BMO Harris Central N.A.	Office of the Comptroller of the Currency Federal Deposit Insurance Corp.
BMO Capital Markets Corp.	Securities and Exchange Commission Financial Industry Regulatory Authority Commodity Futures Trading Commission
BMO Chicago Branch	Illinois Department of Financial and Professional Regulation Federal Reserve Bank of Chicago
BMO Harris Financing, Inc.	Federal Reserve Bank of Chicago (as regulator of holding company and non-bank subsidiaries)

1.1.10 Principal Officers

The table below identifies BMO Harris Bank's Principal Officers, all of which are Executive Officers:

Figure 1.1.10-1 BMO Harris Banks Principal Officers

BMO Harris Bank Executive Officers

Name	Role/Title
David R. Casper	President and Chief Executive Officer & Executive Vice-President, Commercial Banking Division
Carolyn Booth	Executive Vice-President, Head, U.S. Business Banking
Ken Librot	U.S. Chief Technology & Operations Officer
Erminia Johannson	Executive Vice President, Group Head, U.S. Personal & Business Banking
Andrew Karp	Executive Vice President, U.S. General Counsel and Assistant Secretary
Craig T. Ingram	Senior Vice-President, Business Continuity Planning
Darrel Hackett	Executive Vice-President and Head, U.S. Private Banking
Tim Cox	Vice President and U.S. Chief Regulatory Officer
Dan Byrne	U.S. Treasurer
Dawn Feenstra	Chief Operating Officer, North American Commercial Banking
Phil Enochs	Managing Director, Head, Global Asset Management U.S.
James B. Kelsey	Vice-Chair, BMO North American Commercial Banking
Peter B. McNitt	Vice Chair, BMO Harris Bank N.A.
Herbert Mazariegos	Senior Vice-President, U.S. Chief BSA/AML Officer and Designated BSA Compliance Officer
Patrick Murphy	Managing Director, U.S. Taxation
George Walz	Senior Vice-President and U.S. Chief Compliance Officer
Ann Marie Wright	Senior Vice-President and Chief Auditor, U.S.
Pamela C. Piarowski	Senior Vice-President, U.S. Controller and Chief Accountant
Larissa Chaikowsky	Senior Vice-President, U.S. Chief Human Resources Officer
Stephen Taylor	Executive Vice-President and U.S. Chief Financial Officer
Sharon Haward-Laird	Executive Vice-President and Head, North American Treasury and Payment Solutions
Michael R. Lofgren	Senior Vice-President and Head, Enterprise Supplier Governance & Sourcing, Payables, Supplier Governance & Productivity
Daniel J. Marszalak	Executive Vice-President and Head, U.S. Corporate Finance
Cecily Mistarz	Executive Vice President, U.S. Chief Risk Officer
Cynthia Mufarreh	Managing Director, Community Reinvestment Act Officer
Raymond C. Whitacre	Executive Vice-President and Head, U.S. Diversified Industries

1.1.11 Corporate Governance Structure and Processes Related to Resolution Planning

Governance Structure

Within the U.S., BMO has a robust corporate governance structure to direct its legal entities, lines of business, critical operation, and corporate support areas. As BMO's U.S. operations have grown, representing approximately one third of the Bank of Montreal's group of companies' (BMOFG) total revenue, BMO's U.S. governance structure has continued to mature. At BMO, U.S. Governance is the management of rights, authorities, and control through defined checks and balances. The governance structure provides oversight, in which leadership ensures clear accountability, establishes transparency, streamlines decisions, and promotes and maintains a disciplined and unified culture.

BMO U.S. further aligned and integrated its U.S. recovery and resolution efforts with the formal (BAU) U.S. governance model by establishing and approving the Financial Crisis Management, U.S. (FCM US) committee as a sub-committee of the U.S. Risk Management Committee.

The purpose of the U.S. Risk Management Committee (U.S. RMC) is to review, discuss, monitor, challenge, and where appropriate, approve or recommend approval of significant risk issues and action plans addressing current and emerging risks that arise in the course of executing BHB's business strategy. The U.S. RMC provides the independent oversight and governance to ensure that all risk-taking activities are within the Risk Appetite and limits the Board has granted to the overall business and operations of Bank of Montreal (BMO or Enterprise) in the U.S.

The purpose of the Financial Crisis Management, U.S. Committee ("FCM U.S. Committee") is to ensure that management is positioned (resources, processes and execution) to meet expectations for recovery and resolution planning. The FCM U.S. Committee effectively supports new and amended guidance from U.S. regulators and their impacts to U.S. recovery and resolution planning. Additionally, the FCM U.S. Committee ensures that impediments and/or obstacles identified during recovery and resolution planning are efficiently and effectively addressed. Its membership includes senior leaders from the material entities (MEs), core business lines (CBLs) and corporate support areas (CSAs).

FCM U.S. leverages the existing BMO U.S. governance framework and oversees the entire process of Recovery and Resolution Plan analysis, content development, review, approval and submission (for the resolution plans), pursuant to Section 165(d) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the 165(d) Plan), the 12 C.F.R. §360.10 (the IDI Plan). As documented in the 12 CFR Part 30 - Appendix E from the Office of the Comptroller of the Currency, the Recovery Plan is made available to the OCC.

The FCM U.S. Committee is established by the Managing Director; Financial Crisis Management (MD FCM) through authorities delegated by the U.S. Risk Management Committee (U.S. RMC). In addition, BMO U.S. designated the following senior officers as primary executives for U.S. Recovery and Resolution Plans:

- BMO U.S. Chief Financial Officer (main point of contact for the Recovery, IDI and 165(d) Resolution Plans); and
- U.S. Treasurer, BMO Financial Corp. (BFC).

Both are accountable executives for Financial Crisis Management (in the U.S.) and all U.S. deliverables. They are responsible for overseeing the Recovery plan and Resolution Plans, which include: ensuring that BMO U.S. complies with the regulatory rules governing resolution plans and their required annual filings; as well as ensuring that BMO U.S. also complies with the regulatory rules governing the preparation of the IDI Resolution Plan.

The Managing Director of Financial Crisis Management (MD FCM) leads the Financial Crisis Management, U.S. (FCM U.S.) and Enterprise (i.e. FCMO Enterprise) teams. The MD FCM works with his/her Financial Crisis Management teams to coordinate (to the degree necessary) the collaboration / sharing of various productional data and analysis to ensure consistency across jurisdictions. The MD FCM dually reports to the Treasurer of BMO Financial Group and the U.S. Treasurer, BMO Financial Corp. (BFC).

During the initial creation of the BMO U.S. resolution plans, the BMO U.S. Resolution Planning Design Sub-Committee was created to provide guidance on the resolution plan strategies. The Design Sub-Committee also provided interim decision making and issue escalations needing to occur outside of monthly FCM U.S. Committee meetings. The sub-committee comprised executives from finance, risk, legal and BMOFG's Financial Crisis Management Office (FCMO). This team met as needed. As the resolution plans have matured in their development, the Design Sub-Committee has not needed to be activated.

The Financial Crisis Management U.S. Core team (FCM U.S. Core Team or FCM U.S. team), is responsible for coordinating the analysis, planning, content development, reporting, quality assurance/validation, sign-offs/approvals and file submissions for the 165(d) and IDI resolution plans. It is also responsible for making the BHB Recovery Plan available to the OCC.

Processes and Support Structures for Resolution Planning - Day-to-Day

Day-to-day recovery and resolution plan activities and deliverables are managed by the FCM U.S. Core team. The FCM U.S. Core team leads the day-to-day governance, analysis, data elicitation and content development representing: foundational elements' BMO U.S. business overviews' operational and financial interconnections' strategic analysis and funding and liquidity, enterprise-wide functions, and supervisory and regulatory contact information. In addition, the FCM U.S. Core team manages regulatory interaction concerning recovery and resolution planning.

Given the broad nature of scope for BHB Recovery and U.S. Resolution Planning; the FCM US meets frequently with a diverse group of stakeholders to develop Recovery and Resolution Plans. These meetings include discussing materials that are informative and necessitate decision-making. Meeting presentations contain guidance updates on Recovery and Resolution Plan rules (when available), Plan progress, governance updates, and applicable dashboards.

The scheduled meetings are as follows:

- Quarterly: Board of Directors BHB and BFC;
- Quarterly: U.S. Risk Management Committee;
- Monthly: Financial Crisis Management, U.S. Committee;
- As needed: BMO U.S. Resolution Plan - Design Sub-Committee;

- Bi-weekly: Functional Lead and SME program updates;

Additionally:

- Weekly FCM U.S. Core Team;
- Bi-weekly (or as needed): Touch-points with the Accountable Executives

  Weekly (or as needed): One-on-one Senior Management and SME working group meetings, and as needed meetings with respective FCM U.S. Core Team members;
- Periodically: BMO CFO updates

Processes and Support Structures for Resolution Planning - Reviews and Approvals

The U.S. RMC and the Board of Directors of BMO Harris Bank oversee the IDI Resolution Plan through regular updates via the Sr. Leadership of Financial Crisis Management, U.S. The Boards of Directors of BFC and BMO Harris Bank review the final IDI Resolution Plan document, while the BHB Board of Directors approves the IDI Resolution Plan. The approval of the IDI Resolution Plan is based on a robust review, certification and approval process of stakeholders representing the in scope MEs, CBLs, and CSAs (to ensure consistency and accuracy of information contained within the Resolution Plan).

These reviews include analysis and content development when resolution strategies are required to be updated by the FDIC. Otherwise, the resolution strategies are by reference only as deemed appropriate by the FDIC (the regulatory authority for the IDI Resolution Plan). Additionally, the comprehensive reviews include Sr. Leaders / members of the FCM US Management Committee and the FCM US Core Team.

At the conclusion of these review cycles, the IDI Resolution Plan is subject to review and recommendation by:

- The Board of Directors of BFC (for review only);
- The Board of Directors of BHB (for approval);
- The U.S. RMC; (for recommendation to the Boards and approval)
- The FCM U.S. Committee;
- The Accountable Executives; and
- The executives of each of the relevant MEs, CBLs, and CSA groups.

1.1.12 Material Management Information Systems

Access to relevant data at the appropriate frequency is important to being able to successfully resolve or restructure in the event of failure. Within BMO U.S., this data typically resides on MIS that are collectively designed to pull information from source systems, feed into analytical systems and produce specified outputs.

BHB's MIS Management Reporting enable users to aggregate data at the level of product or operational process, business line or function, or legal entity. The majority of the key MIS applications are vendor provided solutions with hosting either in-house or outsourced to the vendor. They are highly automated and used for risk management, accounting / financial, regulatory and management reporting.

In a time of crisis, knowledge about MIS will help in assuring that necessary technical and operational infrastructure are immediately identified and made available so that analytical and reporting processes may provide management with adequate information for decision-making. This would allow, for example, the identification of staff to be put on alert as a crisis evolves and the need for ad-hoc updated information becomes critical.

Reports identified that are manually created by a business or support area are expected to have regularly reviewed and updated procedures to ensure availability of reporting. Automated reports are generated via system applications that may be managed by technology, business or serviced by 3rd party relationships.

Capabilities

Approximately 38% of all the key systems are vendor-provided solutions with hosting either in-house or outsourced to the vendor. In general, software ownership / licensee rights are held by one legal entity that serves as the main relationship manager for that contract. The standard used when negotiating material software license agreements with software suppliers is to establish an enterprise-wide agreement with BMO or BHB as signatory, and participation agreements for subsidiaries or other jurisdictions. This standard entitles all business lines and legal entities to share the software without the need to negotiate a new agreement. When enterprise agreements are negotiated with these software suppliers, transfer rights are included in the discussion. The discussion traditionally has focused on the ability of the contract signatories to transfer the contract to another entity or buyer in case of a sale.

Governance

The objective of the Information Risk and Technology Risk Management Corporate Standard is to establish the framework for managing and safeguarding Information and Technology Assets throughout their Life-Cycles within the Enterprise Information Risk Appetite and Technology Risk Appetite. This Standard is aligned with the Operational Risk Management Framework and defines the principles, framework, and roles and responsibilities for identifying, measuring, managing, monitoring and reporting Information Management Risks, Information Security Risks and Technology Risks across the Enterprise, including at suppliers.

The Policy sets expectations that information is a corporate asset and must be identified, classified, protected, used and managed consistently throughout its Life-Cycle, commensurate to its value and risk, and at a minimum, to support compliance with applicable legal, regulatory, industry, association and standards requirements, including meeting required levels of Information Quality.

1.1.13 Resolution Strategy

The sale of BMO Harris Bank as a whole is the resolution strategy most likely to be effected by the FDIC. Whole bank resolution will likely provide the “least cost resolution” of BMO Harris Bank for the FDIC, allow BMO Harris Bank to continue daily business operations during the transition period, and provide time for prospective BMO Harris Bank purchasers to evaluate and submit informed bids.

Selling BMO Harris Bank as a whole should preserve franchise value and minimize disruption to the local communities, as BMO Harris Bank would be able to provide uninterrupted service to its customers, *e.g.*, continuing to accept deposits and make loans to its regular customers. During a transition period, BMO Harris Bank would anticipate undertaking efforts to restructure nonperforming assets to increase their value and monitor performing assets to maintain their value. In addition, BMO Harris Bank management would strive to retain key employees, although employee retention in an uncertain resolution environment will likely present a challenge.

While BMO's analysis shows that a whole bank purchase and assumption (P&A) transaction would be the least costly to the FDIC, we have presented other options to the Federal Reserve and the FDIC. These options include selling various portfolios and businesses in order to reduce the size of BHB. This downsizing could then be followed by either an Initial Public Offering or a P&A transaction. Additionally, we have included an analysis in which BHB is not sold, but rather its operations are shut down and its assets are liquidated.

1.1.14 Franchise Components Analysis

Franchise Component Pre-Requisite Actions

Each of the Franchise Components has its own set of pre-requisite actions that need to be addressed for a divestiture transaction. While many of the identified actions are common to all Franchise Components, there are others that are specific to each Franchise Component.

The most obvious benefit of generating a list of actions is that they can be incorporated into an in-crisis work plan quicker than otherwise during a period when resources and time may be constrained. More broadly, conducting this "pre-work" accelerates information gathering and decision-making. Acknowledging that a list of activities may only be entirely accurate or relevant at the point in time it is published, starting with something that has been thoughtfully prepared is still a superior option than waiting to consider required actions until after a financial crisis begins. Perhaps just as beneficial to an organization, however, is the utility that a list of activities has prior to a financial crisis in establishing the proper level of preparedness/readiness. An organization can compare the activities that would be required against current capabilities and address any gaps that exist. This can be done multiple ways including, but not limited to, the inclusion of certain elements into the resolution planning testing program.

Divestiture transactions can be structured many ways, have varying degrees of complexity, can include a wide range of assets and liabilities, etc. The specific details associated with a particular divestiture transaction will ultimately dictate the actions that are required.

Franchise Component Separability

In assessing the separability of BHB's Franchise Components, we first focused primarily on the operational interconnection categories (such as personnel and systems), but also acknowledged that non-operational connections categories (such as legal or regulatory matters) could be possible.

For each of the operational interconnections and other topics, we then determined what was most likely to be included within a stand-alone divestiture transaction and noted any corresponding observations about what would be included or excluded. Finally, we reviewed those observations and subjectively assessed whether they would be limiting from a separability perspective.

Each Franchise Component is separable and no separability obstacles/impediments currently exist. While a number of the Franchise Components would have operational challenges that need to be addressed in a divestiture transaction, none of the challenges are deemed significant enough to warrant designation as an obstacle/impediment to separability.

Franchise Component Value Maximization

The highest value creating combination is Core Personal + Core Commercial + BMO Private Bank + Corporate Banking. This combination captures the synergies that exist between these Franchise Components from shared services, funding, and cross-selling perspectives, especially Core Personal and Core Commercial together. It also avoids the potentially significant challenges and value erosion associated with timing a stand-alone divestiture of Core Commercial and/or BMO Private Bank after a divestiture of Core Personal and the possibility of an assets only loan sale by Corporate Banking. Finally, it is the largest transaction in terms of scale, which may be desirable to both an acquirer and an in-resolution BHB.

Creditor Stack Impacts on Franchise Components

BHB's 2018 Plan presents the order of priority for claims payment following its failure (Creditor Stack) as follows:

- The Creditor Stack is presented on an unconsolidated basis (BHB only, without subsidiaries) as of December 31, 2017;
- The Creditor Stack includes the exposure to each of the similarly situated creditor classes outlined below, and any significant subcomponents within each creditor class are separately

identified (e.g., the "depositor liabilities" class identifies separately the amounts of insured and uninsured deposits, and the "other general or senior liabilities" class identifies the amounts of any secured and unsecured debt); and the Creditor Stack (i) follows the Federal Deposit Insurance Act (FDI Act) order of priority for claims payment from amounts realized from the resolution of an insured depository institutions, set forth below, and (ii) treats similarly situated creditors consistently.

The Plan includes two illustrations (Failure Illustrations) reflecting the Bank's failure that describe the classes and significant subcomponents of the Creditor Stack.

The Plan also describes, under each Failure Illustration, how such losses would be expected to impact the value of the Bank's Franchise Components: (i) the key drivers of value; (ii) the likely effect of the losses on the key drivers; and (iii) the potential impact on franchise value of third party reactions to such losses. The second failure illustration is more severe and widespread. It is expected to have the most impact on the Core Personal, Core Commercial, and Financial Institution Franchise Components (FCs). These FCs have greater exposure to the losses due to their large deposit balances and strong reliance on customer relationships.