FINANCIAL PIPELINE

BANKING STRUCTURES

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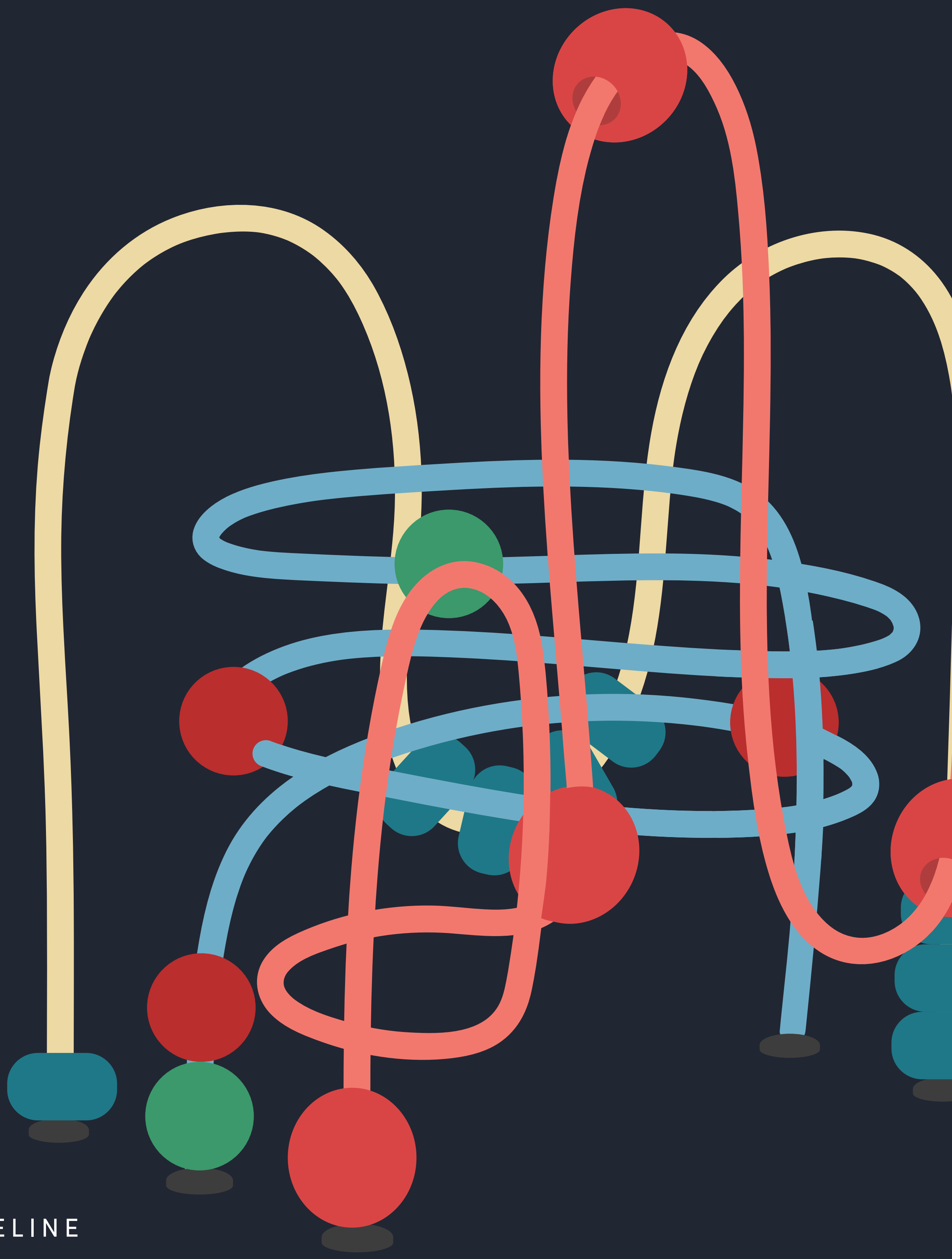
Banking Basics



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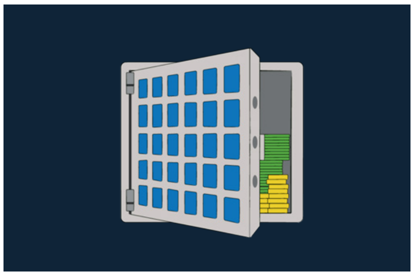
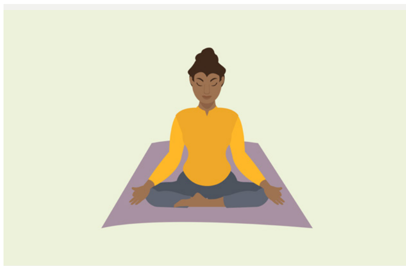
Banking Basics

In this section of the workbook we'll cover a bunch of key topics regarding banks and how they work, including their lending practices, which is how banks make a good portion of their revenue. Deposit insurance is getting a lot of attention in the wake of 2023's bank runs and failures. We'll also touch on private banking and the intersection of monetary policy with deposit-taking and lending activities, since policy decisions influence the interest rates that apply to savers and borrowers.

READING MATERIALS



Deposit Taking Institutions



Breaking Down Bank Balance Sheets

What's the federal funds rate?

What is a bank run?

Loan Loss Provisions

What is Monetary Policy?

Understanding Interest Rates

What is Private Banking?

Deposit insurance in Canada and the U.S.

Q&A

1. What is the role of deposit-taking institutions in the Canadian economy?

2. What is the role of corporate treasury in banks and how do they manage the risk of changing interest rates?

4. What is the federal funds rate and how does it impact the economy?

5. What is a loan loss provision and why is this required of banks?

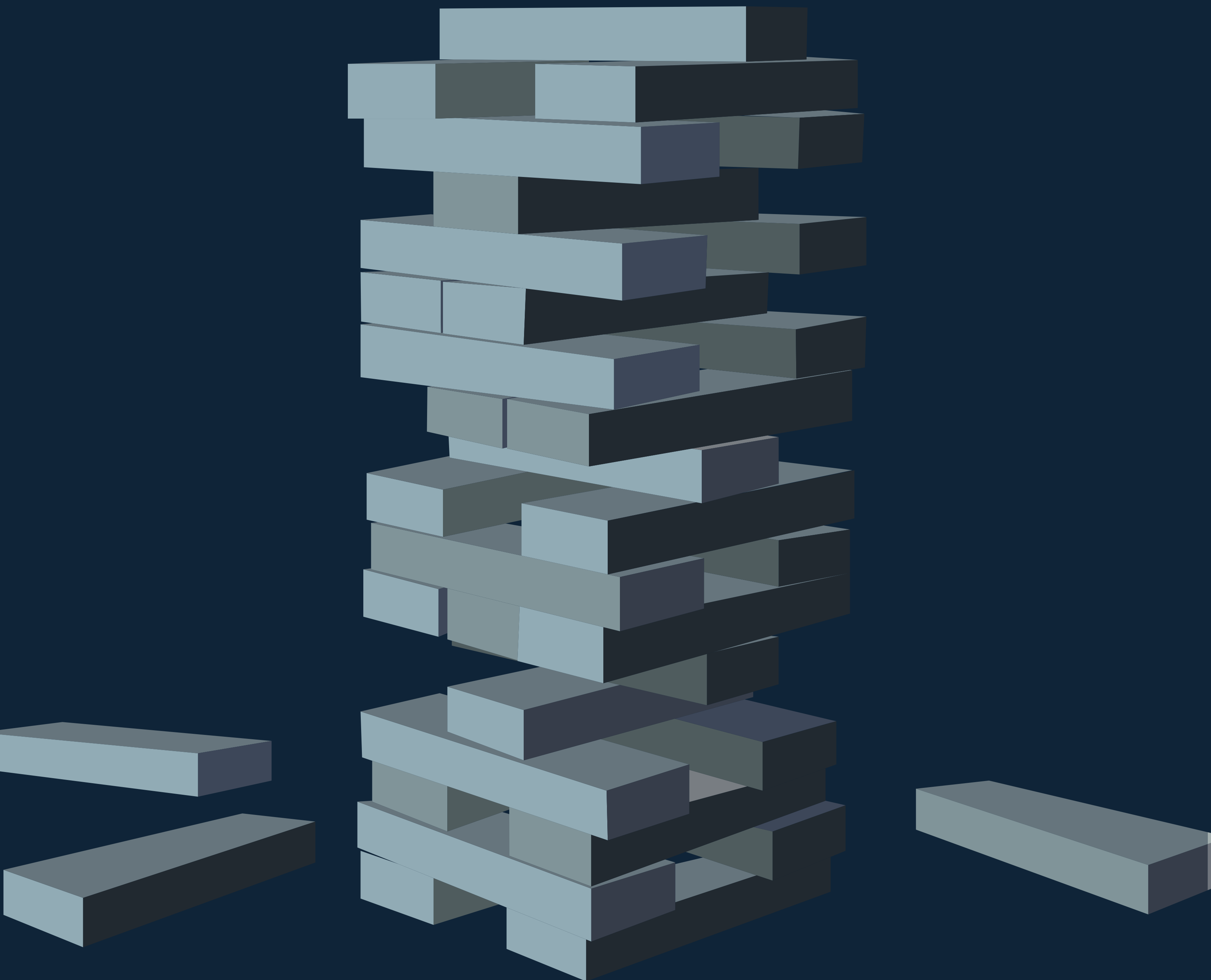
6. What is a bank run and how can technology contribute to it?

7. What is monetary policy and what does it achieve?

8. What are the three components that make up an interest rate?

9. What is private banking and who can join?

Capital Structure



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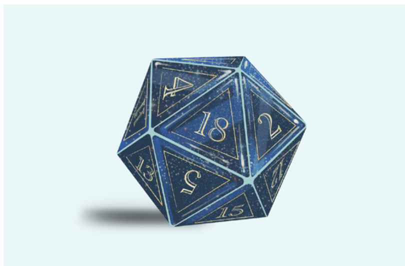
Capital Structure

In this second section, we'll go into more depth on banking regulations and capital structure requirements for both domestic and global financial institutions. We'll also look at some non-traditional bonds known as AT1s in many nations or LRCNs here in Canada. This category of bond was wiped out completely with the acquisition of Credit Suisse by UBS. And while you've likely heard the term bailout, what is a "bail in" and how does it work?

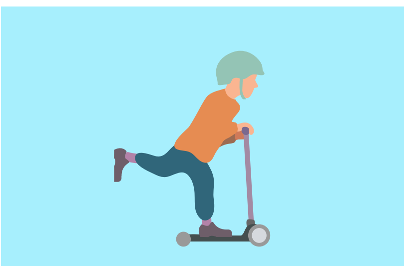
READING MATERIALS

New Basel III Rules



What's an LRCN AT1 bond?

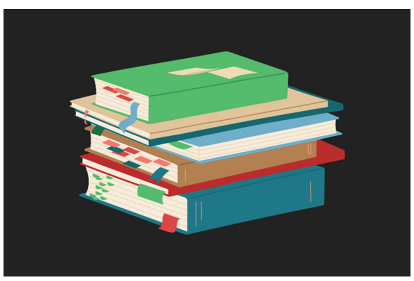
What Are The Types of Capital Securities Issued by Banks?



Bail-in 101

What is a Covered Bond?

What is a Derivative?



Structured Notes: Managing a Risk Profile

Q&A

1. What are the Basel III regulations and why were they created?

2. What are capital securities issued by banks and how are they used to test a bank's ability to endure financial distress?

3. What are LRCN AT1 bonds and how are they different from regular bonds?

4. What is the bail-in regime and how does it impact investors?

5. What are covered bonds and why have they become popular in Canada?

6. What are structured notes and how can they be used in investment portfolios?

7. What is a derivative and how is it used?

Further Reading

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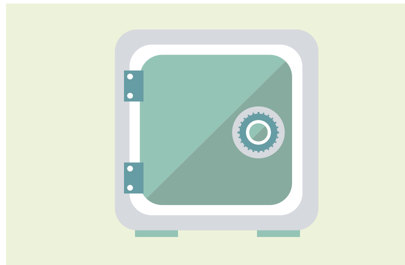
Further Reading

In the final section of the workbook we'll take the content to a more sophisticated level with articles on liquidity, quantitative easing, mortgage-backed securities, asset-backed securities, and preferred shares. And, while not necessarily expert level in comparison to the aforementioned, we'll also provide information about credit unions and GICs to round out this banking workbook. And lastly we offer coverage of the failure of Lehman Brothers and what led to the fall of this once venerable institution.

READING MATERIALS

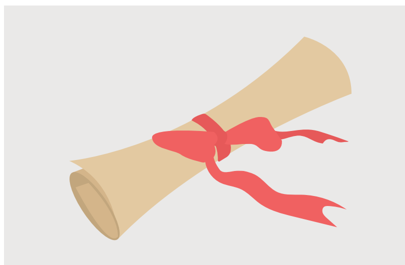
Game of Liquidity: Why the Flow of Money Matters

What is a Credit Union?



What are Asset Backed Securities?

Mortgage Backed Securities



Types of preferred shares

What Is a GIC?

Financial Scams – Lehman Brothers

Lehman Brothers: Leverage and oversight gone wild

Quantitative Easing: An economic SOS

Four Ways Interest Rate Changes Affect You

Q&A

1. What is liquidity and why is it important?

2. What is a credit union?

3. What are asset-backed securities and why are they attractive to risk-averse investors?

4. What are mortgage-backed securities and what are their risks?

5. What are the different types of preferred shares?

6. What are guaranteed investment certificates (GICs) and what are some of their advantages and disadvantages?

7. What was the cause of Lehman Brothers' bankruptcy and its impact on the world of global finance?

8. What are two key factors that led to the 2008 financial crisis?

9. What is quantitative easing?

10. What are some implications of a rate hike?

Answer Sheet

01 BANKING BASICS

02 CAPITAL STRUCTURE

03 FURTHER READING

Answer Sheet

1. Deposit-taking institutions are of great importance to the Canadian economy as they manage the deposits of millions of Canadians and offer credit to companies big and small. These institutions include banks, trust companies, credit unions and mortgage loan companies. They put deposits to work by turning them into loans for consumers and businesses and invest in stocks, bonds and private equity ventures.

2. Corporate treasury is like the central bank of a bank, involved in myriad functions from overseeing the balance sheet to making commercial and private loan determinations and addressing risks, most notably interest rate risk. The balance sheet analysts and managers in the Asset/Liability Management (ALM) group determine the net imbalance between assets and liabilities, and the corporate treasury team hedges the remaining interest rate risk in the bond or derivatives markets to lock in interest margins.

3. The federal funds rate is the overnight interest rate that banks pay to borrow from each other and is set by the U.S. Federal Reserve. It affects several important facets of the broader economy, such as employment, growth and inflation, as well as consumer interest rates and the value of the U.S. dollar.

4. A loan loss provision is money set aside by a bank to cover potential losses from bad loans, which are loans that aren't fully repaid or provide less interest income. Banks need loan loss provisions to protect their cash flow, to ensure they can provide services to other borrowers and depositors, and to give investors an accurate picture of their financial health. Loan loss provisions can also serve as indicators of both a bank's health and that of the overall economy.

5. A bank run occurs when many customers withdraw their money simultaneously, causing a liquidity crisis for the bank. Technology makes remote withdrawals easier and can exacerbate a bank run.

6. Monetary policy is a tool used by national agencies to influence the economy by controlling the supply and availability of money through the central bank. This is done to achieve macroeconomic stability with a goal of achieving full employment, low inflation, economic growth and a balance of external payments.

7. Risk-free rate, inflation premium and risk premium.

8. Private banking is a financial service that offers personalized financial products and services to high-net-worth individuals (HNWIs), such as portfolio and wealth management, investment banking and tax strategy. To join a private bank, you typically need at least $250,000 in investable assets, but this can vary depending on the institution.

Answer Sheet

1. Basel III is a set of international banking regulations developed by the Bank for International Settlements to address weaknesses in the global banking system exposed by the 2008 financial crisis. The regulations mandate a higher level of quality for the capital that banks must keep on their books to provide liquidity and ensure that the people taking the first loss in the event of a crisis are investors and the bank itself.

2. Capital securities issued by banks include Common Equity Tier 1 capital (CET1), Tier 1 capital (T1), Alternative Tier 1 (AT1), Tier 2 capital (T2) and Total capital. These securities are used by bank regulators to measure a bank's "capital adequacy ratios," which assess whether a bank has sufficient capital to endure financial distress. These securities are riskier than senior debt but offer higher returns to investors.

3. LRCN AT1 bonds are a type of unsecured, long-dated bond that banks use to enhance their core capital base to satisfy Basel III criteria. They have several unique features in the fine print, which make them very different from regular bonds. They sit below a bank's subordinated debt and alongside preferred shares in the capital stack, offer higher yields, are convertible into common stock, and are the riskiest type of bank debt. They were authorized by the Office of the Superintendent of Financial Institutions (OSFI) in Canada in July 2020 and are targeted to institutional investors.

4. The bail-in regime is a government power to convert certain bank liabilities into equity for recapitalization when a bank is likely to become non-viable, with the burden being borne by investors instead of taxpayers. Not all securities are subject to bail-in, and the impact on investors varies depending on the type of security held.

5. Covered bonds are bonds backed by pools of residential mortgages, providing a relatively inexpensive source of mortgage funds. They have become increasingly popular in Canada due to their high level of safety and credit ratings, backed by the cash flows of the underlying instruments.

Answer Sheet

6. Structured notes are financial products that combine fixed income instruments with embedded options and may not reflect the risk of the issuing credit. They can be used by investors for increased yield and principal protection or to expose their portfolios to asset classes or markets outside their general scope of business, but it's important to understand the risks and costs associated with these products before investing.

7. A derivative is a contract that allows investors to hedge or speculate on risks in financial markets. Examples of derivatives include futures contracts, forward contracts, options and swaps. They can be used to manage risk exposure and tailor investment strategies.

Answer Sheet

1. Liquidity refers to the ease with which an asset can be sold for cash and the amount of money that flows through the financial system. It is important because it ensures the availability of money and credit for investors, companies and individuals, keeping the financial system stable and preventing crises.

2. A credit union is a financial institution that offers a range of financial services, just like a bank, but it is owned by the customers rather than by shareholders.

3. Asset-backed securities are bonds created from or linked to a pool of illiquid and private assets such as mortgages or credit card receivables. They are attractive to risk-averse investors as they help manage risk and offer exposure to a diversified product.

4. Mortgage-backed securities (MBSs) are created from a pool of underlying mortgages that are usually guaranteed by a government agency for payment of principal and a guarantee of timely payment. MBSs are not without risk; the direction of interest rates and pre-payment risks are hugely important when deciding whether to invest in MBS. Pre-payment is a major risk inherent in the cash flows and can be a source of concern for investors.

5. Preferred shares come in many varieties, but they can be classified by their term or maturity, payment provisions, dividend priority, and cumulative or non-cumulative nature. Types of preferred shares include straight/perpetual, retractable/term, soft-retractable, fixed-rate, floating-rate, Dutch auction, cumulative, non-cumulative, convertible, callable, participating, and adjustable rate.

6. GICs are investments that offer a guaranteed rate of return over a fixed period and are useful for investors seeking a low-risk option. The biggest advantage of GICs is their safety, as the principal is protected and would be at risk only if the bank or trust company where they were purchased defaulted. However, the return on GICs is generally less than other investments, and investors could face penalties if funds are withdrawn early.

Answer Sheet

7. Lehman Brothers' bankruptcy was caused by its heavy involvement in highly leveraged and risky collateral debt obligations and mortgage-backed securities, which became problematic as the U.S. Federal Reserve raised interest rates and American homeowners defaulted on mortgages they couldn't afford. The bankruptcy triggered a credit crunch and sent financial markets into turmoil, ultimately leading to the global financial crisis of 2008.

8. Leverage and a lack of oversight were two key factors that led to the 2008 financial crisis. U.S. banks were giving mortgages to anyone who wanted to buy a house, much of which was supported by mortgage-backed securities, while investment firms were lending money to each other through various financial products such as mortgage-backed securities and collateralized debt obligations, all of which contributed to the implosion.

9. Quantitative easing is a monetary policy tool used by central banks to stimulate the economy during times of crisis by buying government bonds and other assets. It increases the amount of money in circulation, provides liquidity to banks, and helps stabilize financial markets.

10. An interest rate hike can affect mortgages, lines of credit, savings and investments. Those who hold variable-rate mortgages or lines of credit could see an increase in their monthly payments. Savers and investors may also see changes, with opportunities for reinvesting and potential market fluctuations.