FINS2618

Financial Institutions, Instruments and Markets

Comprehensive Course Notes

Viney and Phillips (9th Edition)

Course Structure

Part 1 (Chs 1-3): Financial Institutions - overview of the financial system, commercial banks, non-bank institutions.
Part 2 (Chs 4-7): Equity Markets - share market, issuing equity, investors, share price forecasting.
Part 3 (Chs 8-11): Corporate Debt Market - mathematics of finance, short-term debt, medium/long-term debt, international debt.
Part 4 (Chs 12-14): Government Debt, Monetary Policy, Payments System, Interest Rate Determination and Risk.
Part 5 (Chs 15-17): Foreign Exchange Market - structure, factors affecting rates, risk management.
Part 6 (Chs 18-21): Derivative Markets - introduction to risk/derivatives, futures, options, swaps.

CHAPTER 1: A MODERN FINANCIAL SYSTEM - AN OVERVIEW

1.1 Theory and Facts in Finance

Finance theory and financial facts are inseparable. The institutions, instruments, and markets that exist today have been shaped by ideas developed in modern finance and economics. Karl Popper's observation that all facts are theory-laden applies directly: the financial system cannot be understood without reference to the theoretical frameworks of risk, reward, supply and demand, time value of money, and arbitrage.

The foundational concepts underpinning all financial activity include: the risk-return relationship (higher expected returns compensate for higher risk); supply and demand as the mechanism determining prices in financial markets; arbitrage (simultaneous buying and selling to exploit price discrepancies, which drives prices toward equilibrium); and the time value of money (a dollar received today is worth more than a dollar received in the future because of its earning potential).

Three Risk Preference Categories
Risk Averse: will not accept a fair gamble; requires a higher expected return to accept greater risk. The majority of investors are risk averse. This underpins the entire risk-return framework. Risk Neutral: indifferent to a fair gamble; accepts a constant expected return regardless of risk level. Risk Seeking: desires risk for its own sake; accepts lower expected returns at higher risk levels.

1.2 The Financial System and Financial Institutions

The financial system comprises financial institutions, financial instruments, and financial markets. Its core function is to facilitate the flow of funds from surplus units (savers) to deficit units (borrowers). Without an efficient financial system, savings would remain idle and productive investment could not be financed.

Institution Category	Examples and Role
Depository Institutions	Commercial banks, building societies, credit unions. Accept deposits and make loans. Authorised Deposit-Taking Institutions (ADIs) regulated by APRA.
Investment Banks	Arrange corporate finance, mergers and acquisitions, underwriting. Do not take retail deposits. Examples: Macquarie, Goldman Sachs.
Contractual Savings Institutions	Life insurance companies and superannuation funds. Collect regular premiums/contributions; invest long-term to meet future liabilities.
Finance Companies	Provide personal and business loans; fund themselves by issuing securities into money markets. Examples: GE Capital, Toyota Finance.
Unit Trusts / Managed Funds	Pool investor funds and invest in diversified portfolios. Investors hold units; returns are distributed proportionally.
Investment Vehicles	Real estate investment trusts (REITs), exchange-traded funds (ETFs), hedge funds.

1.3 Financial Instruments

Financial instruments are legal contracts that specify a claim or obligation. They fall into three broad categories.

- **Equity:** Represents ownership in a company. Shareholders are entitled to residual profits after all other obligations are met. Equity has no maturity date; value is realised by selling shares or receiving dividends. Shareholders face the highest risk of all capital providers but also have the greatest potential return.
- **Debt:** A contractual obligation to repay a loan, specifying the timing and amounts of cash flows (interest payments and principal repayment). Debt ranks ahead of equity in a liquidation and therefore carries lower risk. Debt instruments range from short-term money market instruments to long-term bonds.
- **Derivatives:** Financial contracts whose value derives from the value of an underlying asset (shares, currencies, interest rates, commodities). Derivatives include futures, forwards, options, and swaps. They are primarily used for risk management (hedging), not to raise funds.

1.4 Financial Markets

Financial markets bring together suppliers of funds (investors) and users of funds (borrowers). They can be categorised along several dimensions.

Primary and Secondary Markets

- **Primary Market:** Where new securities are issued for the first time. Proceeds go to the issuer (e.g., a company conducting an IPO, or the government issuing Treasury bonds). Investment banks underwrite and distribute primary market securities.
- **Secondary Market:** Where already-issued securities are bought and sold between investors. The issuer does not receive proceeds. Secondary markets provide liquidity, enabling investors to convert holdings to cash, which in turn makes primary market investment attractive. Examples: ASX share trading, bond markets.

Direct Finance and Intermediated Finance

- **Direct Finance:** Borrowers raise funds directly from lenders via financial markets without using a financial intermediary. Examples: companies issuing bonds or shares directly to investors. The lender (investor) holds the financial instrument and bears the default risk directly.
- **Intermediated Finance:** A financial intermediary (typically a bank) stands between borrower and lender, accepting deposits from savers and on-lending to borrowers. The bank transforms the maturity, liquidity, and risk characteristics of the claims. Savers hold deposit claims on the bank; the bank holds loan claims on borrowers.

Why Does Financial Intermediation Exist?
1. Maturity transformation: banks accept short-term deposits and fund long-term loans, matching different maturity preferences. 2. Risk transformation: banks diversify across many borrowers, reducing the risk borne by any individual depositor. 3. Economies of scale in information: banks develop expertise in credit assessment that individual savers cannot replicate.

4. Liquidity provision: deposits can be withdrawn on demand while loans are locked in for their term. Banks manage this via reserves and access to wholesale funding markets.

Wholesale and Retail Markets

- **Wholesale Markets:** Large-value transactions between financial institutions and large corporations. Characterised by standardised instruments, low transaction costs per dollar, and sophisticated participants. Examples: interbank lending, bond markets, foreign exchange markets.
- **Retail Markets:** Smaller-value transactions between financial institutions and households or small businesses. Higher transaction costs per dollar; instruments are tailored to individual needs. Examples: personal banking, retail share trading.

Money Markets and Capital Markets

- **Money Markets:** Markets for short-term debt instruments with maturities of up to 12 months. Instruments include Treasury notes, commercial bills (bank accepted bills), negotiable certificates of deposit, and promissory notes. Highly liquid; used for short-term funding and cash management.
- **Capital Markets:** Markets for long-term financial instruments with maturities beyond one year. Include equity markets (shares), bond markets, and mortgage markets. Used for long-term investment finance.

1.5 Flow of Funds, Market Relationships, and Stability

The flow of funds describes how savings are transferred from surplus units to deficit units. Savers invest in financial instruments (equity, bonds, deposits) issued by deficit entities. These instruments are either held directly (direct finance) or through a financial intermediary (intermediated finance). The financial system's efficiency determines how effectively savings are channelled into productive investment.

Stability is a critical concern. The GFC of 2008 demonstrated how interconnections between financial institutions, excessive leverage, over-reliance on short-term funding for long-term assets, and inadequate risk management can cause systemic failure. Key lessons include: maturity mismatch (funding long-term assets with short-term debt) creates vulnerability; excessive leverage amplifies losses; securitisation can spread risk but also obscure it; and too-big-to-fail institutions create moral hazard.

Global Financial Crisis (GFC) 2008: Key Causes and Lessons

Sub-prime mortgage crisis: US banks extended mortgages to borrowers with poor credit. These were packaged into mortgage-backed securities (MBS) and sold globally.
Securitisation: credit risk was obscured as MBS were repackaged into CDOs and rated incorrectly by rating agencies.
Leverage: banks and shadow banks were highly leveraged, amplifying losses when asset values fell.
Maturity mismatch: many institutions funded long-term MBS with short-term commercial paper. When short-term markets froze, a liquidity crisis ensued.
Contagion: the interconnectedness of global financial institutions meant that problems in the US quickly spread worldwide.

Policy response: government bailouts, central bank emergency lending, quantitative easing (QE), and major regulatory reforms (Basel III) followed.

CHAPTER 2: COMMERCIAL BANKS

2.1 The Main Activities of Commercial Banking

Commercial banks are the cornerstone of the financial system. Their primary business is accepting deposits from the public and making loans to households and businesses. In Australia, commercial banks are Authorised Deposit-Taking Institutions (ADIs) supervised by the Australian Prudential Regulation Authority (APRA).

Prior to deregulation (commencing in Australia in the 1970s-1980s), banks operated under an 'asset management' model: loan growth was constrained by the deposit base. Post-deregulation, banks shifted to 'liability management': they estimate expected loan demand and raise funds from wherever available (deposits, wholesale money markets, international capital markets) to meet that demand. This gives much greater flexibility but increases exposure to wholesale funding market disruptions.

2.2 Sources of Funds

Source of Funds	Description
Current Account Deposits	Transaction accounts; cheques and electronic payments; generally low or zero interest; highly liquid for depositor.
Call/Demand Deposits	Can be withdrawn at short notice; pay variable interest; popular for businesses managing short-term liquidity.
Term Deposits	Fixed-interest deposits for fixed periods (1 month to 5 years). The bank's carded rate applies. Locked-in for the term; loss of liquidity for depositor but higher return than call accounts.
Negotiable Certificates of Deposit (CDs)	Discount securities issued by banks with maturities up to 180 days. Investor buys at a discount to face value and receives face value at maturity. Can be sold in the secondary market, providing liquidity.
Bill Acceptance Liabilities	Banks accept (guarantee) commercial bills drawn by customers, creating a liability. The bank's acceptance makes the bill more marketable. The bank charges an acceptance fee.
Debt Liabilities	Medium- to long-term notes and bonds issued into domestic and international capital markets. Important source since deregulation.
Foreign Currency Liabilities	Funds raised in international capital markets; often converted to AUD via FX and interest rate swaps.
Loan Capital and Shareholders Equity	Subordinated debt and equity. Provides the bank's capital base; buffer to absorb losses.

2.3 Uses of Funds

- **Personal and Housing Finance:** The largest category of bank lending in Australia. Includes residential mortgages (owner-occupied and investment), personal loans, car loans, and credit card facilities. Housing finance in Australia is dominated by variable-rate mortgages.
- **Commercial Lending:** Business loans, overdrafts, commercial bill facilities, project finance, leveraged buyout finance. Assessed through analysis of business cash flows, assets, management quality, and industry conditions.
- **Lending to Government:** Banks purchase government securities (Treasury bonds, Treasury notes) as part of their investment and liquidity portfolios. Government securities are low-risk and