

ECOS2004 NOTES

WEEK 1 (CH 1): WHY STUDY MONEY, BANKING, AND FINANCIAL MARKETS?

EXAMINE HOW FINANCIAL MARKETS SUCH AS BOND MARKETS ARE CONNECTED TO THE AGGREGATE ECONOMY

DEFINITIONS

- A **security** (financial instrument) is a claim on the issuer's future income or assets
- A **bond** is a debt security that promises to make payments periodically for a specified period of time. Principal is returned to lender at maturity.
- An **interest rate** is the cost of borrowing or the price of credit (the price paid for the rental of funds).

THE STOCK MARKET

- **Common stock (equity)** represents a share of ownership in a corporation.
- A **share of stock** is a claim on the net earnings and assets of the corporation.

EXAMINE HOW FINANCIAL INSTITUTIONS, ESPECIALLY BANKS, PLAY A ROLE IN THE BEHAVIOUR OF THE ECONOMY

- **Financial intermediaries:** institutions that borrow funds from people (households and firms) who have saved and that in turn make loans to other people.
 - **Banks:** accept deposits and make loans
 - Other financial institutions: pension funds, mutual funds and investment companies
- **Financial innovation:** the development of new financial products and services
 - Can be an important force for good by making the financial system more efficient
- **Financial crises:** major disruptions in financial markets that are characterized by sharp declines in asset prices and the failures (or government rescues) of many financial and nonfinancial firms.
- History shows that financial events and monetary policy can play an important role in macroeconomic outcomes:
 - Inflation
 - Business cycles
- Monetary theory ties monetary policy actions to changes in aggregate economic activity and the price level
- The causation flows in both directions

IDENTIFY THE BASIC LINKS AMONG MONETARY POLICY, THE BUSINESS CYCLE, AND ECONOMIC VARIABLES

MONEY, BUSINESS CYCLES, AND INFLATION

- The aggregate price level is the average price (a weighted index of prices) of goods and services in an economy
- Inflation is a continual rise in the price level
- History has generally shown a connection between the money supply and the price level, but the link is complex
- We will be studying tradition and modern views as to how this link works

AVERAGE INFLATION RATE VERSUS AVERAGE RATE OF MONETARY GROWTH, SELECTED COUNTRIES, 2003–2013

- Imprecise relationship between money supply and inflation

GROWTH OF MONETARY AND CREDIT AGGREGATES IN AUSTRALIA

- Credit and broad money are correlated

QUANTITY OF MONEY: DEFINITIONS (AUSTRALIA)

- Currency = notes and coin in circulation
- M3 = currency + bank deposits held by the public
- Broad money = M3 + deposits with non-bank financial institutions (NBFIs)

MONEY AND INTEREST RATES

- Traditional monetary theory postulates that central banks conduct policy by controlling the money supply
- Central bank policy setters no longer think in those terms
- Their actions set the short-term policy interest rate
- Money and credit growth are endogenous responses to these actions and to broader economic conditions
- In Australia this has been explicit in policy statements since 1990

EXAMINE THE ROLE OF MONETARY AND FINANCIAL POLICY IN THE ECONOMY

FISCAL POLICY AND MONETARY POLICY

- Monetary policy is the management of interest rates and the central bank balance sheet
 - Conducted in the U.S. by the Federal Reserve System (Fed); by RBA in Australia
- Fiscal policy deals with government spending and taxation
 - Budget deficit is the excess of expenditures over revenues for a particular year
 - Budget surplus is the excess of revenues over expenditures for a particular year
 - Any deficit must be financed by borrowing or money creation (typically finance through bonds)
 - Budgeted deficit for 2018/19 was \$14.5bn (= 0.8 percent of GDP)

THE FOREIGN EXCHANGE MARKET

- The **foreign exchange market**: where funds are converted from one currency into another
 - Currently 78c
- The **foreign exchange rate** is the price of one currency in terms of another currency
- In a floating rate system, the market determines the foreign exchange rate

EXPLAIN THE IMPORTANCE OF EXCHANGE RATES IN THE GLOBAL ECONOMY AND IN POLICY DECISIONS

AUSTRALIAN DOLLAR EXCHANGE RATES

- Trade-weighted Index – weighted average of movement of all currencies

RECOGNIZE THE IMPORTANCE OF FINANCIAL MARKETS IN THE ECONOMY

THE INTERNATIONAL FINANCIAL SYSTEM

- Financial markets have become increasingly integrated throughout the world
 - Technological innovation has contributed
- The international financial system has important effects on domestic economies:
 - Effect of the exchange rate on domestic economy
 - International transmission of financial stress (e.g. GFC)
 - Role of international financial institutions like the IMF (provide temporary funding for countries)

HOW WE WILL STUDY MONEY, BANKING, AND FINANCIAL MARKETS

- Overview of basic concepts: the financial system, money and interest rates
- Strategic approaches to monetary policy, particularly inflation targeting
- Banking
- The GFC
- Current issues in monetary and financial policy

AGGREGATE OUTPUT AND INCOME

- The most commonly reported measure of aggregate output, gross domestic product (GDP), is the market value of all final goods and services produced in a country during the course of a year
- Aggregate income, the total income of factors of production (land, labour, and capital) from producing goods and services in the economy during the course of the year, is equal to aggregate output

REAL VERSUS NOMINAL MAGNITUDES

- When the total value of final goods and services is calculated using current prices, the resulting GDP measure is referred to as *nominal GDP*. The word “nominal” indicates that values are measured using current prices (that is, the dollar values of spending actually prevailing in the economy today)
- Real GDP removes from the nominal figure the impact of price movements

AGGREGATE PRICE LEVEL

- The aggregate price level is a measure of average prices in the economy
- The inflation rate is its percentage increase
- The most commonly used measure in Australia is the Consumer Price Index (CPI) (the series whose inflation rate is targeted)
- The RBA also focuses on ‘underlying’ measures of inflation, which remove short-term volatility from the CPI measure.

COMPARE AND CONTRAST DIRECT AND INDIRECT FINANCE

FUNCTION OF FINANCIAL MARKETS

- Performs the essential function of channelling funds from economic agents who have saved surplus funds to those that have a shortage of funds
- **Direct finance:** borrowers borrow funds directly from lenders in financial markets by selling them securities
- **Intermediated finance:** an intermediary such as a bank stands between the borrower and lender
- Promotes economic efficiency by producing an efficient allocation of **capital**, which increases production
- Directly improve the well-being of consumers by allowing them to schedule purchases better (time payments better)

IDENTIFY THE STRUCTURE AND COMPONENTS OF FINANCIAL MARKETS

STRUCTURE OF FINANCIAL MARKETS

- Debt and Equity Markets
 - Debt instruments (**maturity**)
 - **Equities (dividends)**
- Primary and Secondary Markets
 - **Investment banks *underwrite* (facilitate the sale of) securities in primary markets**
 - **Brokers and dealers work in secondary markets** (enable primary markets to exist/function)
- Exchanges and Over-the-Counter (OTC) Markets:
 - **Exchanges:** Market with formal location. Includes stock exchange (e.g. ASX)
 - **OTC markets:** Dealers decentralized and linked electronically. Includes foreign exchange and most other markets other than equities and futures.
- Money and Capital Markets:
 - **“Money markets” (more correctly, [ST] securities markets)** deal in ST debt instruments (less than 1 year)
 - **“Capital markets”** deal in longer-term debt and equity instruments (greater than 1 year)
- In looking at the size of these markets, it is important to distinguish between **stocks and flows**
- In stock terms, the majority of corporate funding is equity rather than debt
- Household borrowing comes mainly from banks
- Some figures:
 - Nom GDP (2017) = \$1.8tr (approx.)
 - Bank lending to businesses (Stock outstanding, Dec 2017) = \$836bn
 - Bank lending to households (Stock outstanding, Dec 2017) = \$1.7tr – ASX market (Dec 2017) = \$1.93tr
- Debt securities are issued in Australia by governments, banks, corporates and foreign issuers
- Australian entities can also issue securities offshore

LIST AND DESCRIBE THE DIFFERENT TYPES OF FINANCIAL MARKET INSTRUMENTS

AUSTRALIA: CORPORATE GEARING

- What finance corporations use to finance

RECOGNISE THE INTERNATIONAL DIMENSIONS OF FINANCIAL MARKETS

FINANCIAL SYSTEM INQUIRY DECEMBER 2014 FINAL REPORT:

- “In the international context, Australia’s pattern of corporate debt financing is fairly typical. The proportion of debt funding for Australian corporates that is intermediated by banks is broadly consistent with that of other advanced economies with the exception of the United States, which has an unusually large corporate bond market. Corporates [that is, corporations] in Australia ... tend to issue bonds in Europe and the United States [instead of in Australia].”

SUMMARIZE THE ROLES OF TRANSACTION COSTS, RISK SHARING, AND INFORMATION COSTS AS THEY RELATE TO FINANCIAL INTERMEDIARIES

FUNCTION OF FINANCIAL INTERMEDIARIES: INDIRECT FINANCE

- Lower transaction costs (time and money spent in carrying out financial transactions)
 - Economies of scale
 - Hard to evaluate trust of all borrowers (good risk?)
 - Liquidity services (can give money back immediately)
- Reduce the exposure of investors to risk
 - Risk Sharing (Asset Transformation)
 - Diversification
- Deal with asymmetric information problems:
 - **Adverse Selection** (before the transaction): try to avoid selecting the risky borrower by gathering information about them
 - Try to manage through risk controls: payment history, credit ratings, etc
 - **Moral Hazard** (after the transaction): ensure borrower will not engage in activities that will prevent him/her to repay the loan.
 - Sign a contract with restrictive covenants
- Conclusion:
 - Financial intermediaries allow “small” savers and borrowers to benefit from the presence of financial markets

LIST AND DESCRIBE THE DIFFERENT TYPES OF FINANCIAL INTERMEDIARIES

REGULATION OF THE FINANCIAL SYSTEM

- To increase the information available to investors:
 - Reduce adverse selection and moral hazard problems
 - Reduce insider trading and related violations (SEC in United States; mainly ASIC in Australia)
- To ensure the soundness of financial intermediaries:
 - Restrictions on entry (chartering process).
 - Disclosure of information.
 - Restrictions on Assets and Activities (control holding of risky assets).
 - Deposit insurance (avoid bank runs).
 - Limits on Competition (mostly in the past):
 - Branching (United States)—limits on interstate banking
 - Restrictions on (bank) interest rates (both U.S. and Australia—now abolished in both countries)

IDENTIFY THE REASONS FOR AND LIST THE TYPES OF FINANCIAL MARKET REGULATIONS

REGULATION OF THE AUSTRALIAN FINANCIAL SYSTEM

- The Council of Financial Regulators (CFR) is the coordinating body for Australia's main financial regulatory agencies.
- Comprises the Reserve Bank of Australia (RBA) (which chairs the Council), the Australian Prudential Regulation Authority (APRA); the Australian Securities and Investments Commission (ASIC); and the Australian Treasury. Meetings are chaired by the RBA Governor.
- The CFR members discuss regulatory issues and, as necessary, coordinate responses to potential threats to financial stability.
- Australian Prudential Regulation Authority:
 - The prudential regulator of banks, insurance companies and superannuation funds, credit unions, building societies and friendly societies in Australia.
- Australian Securities and Investments Commission:
 - Australia’s corporate, markets and financial services regulator.