ACCT3013 NOTES

WEEK 1: BUSINESS AND STRATEGY ANALYSIS

FINANCIAL STATEMENTS

- FSA views financial statements as a **key source of information** to all business stakeholders and the capital markets in particular
- Both internal stakeholders (company management) and external stakeholders (everyone else) rely on financial statement information
- Financial statements are the primary means of **communication between internal and external** stakeholders
- Financial statements form part of a greater information process and affect the processing of information
- The accounting information system **identifies, measures and summarises** the economic consequences of business activities in published financial statements
- Hence, the primary role of financial statements is to **convey the impact of business fundamentals** to and its implications to external stakeholders
- Business fundamentals characterise the raison d'etre of a business
  - E.g. product quality, customer base, pricing, innovation, supply chain, market share, IP, employees etc

FINANCIAL ACCOUNTING

- So accounting is assigned with the task of measuring the monetary effect of these business fundamentals
- But **accounting is largely a subjective process** due to **accrual accounting**, which can be a double-edged sword:
  - It is a powerful tool for recognising the timely allocation of resources and reflecting expectations of economic performance
  - But the underlying flexibility gives the opportunity for misrepresentation, intentional or non-intentional
  - E.g. ask two accountants to value the same intellectual property and they will come up with different answers
- Accruals accounting also allows management to be selective to what is reported, according to their interpretation of what is reliable and relevant information
  - **Reliability** is the extent to which information is verifiable, representationally faithful and neutral
  - **Relevance** is the extent to which information has an impact to timely decision making, and possesses predictive value and/or feedback value
- **Signaling problem:** the management must also find a balance between conveying significant valuation information without giving away too much proprietary data
- The question arises how much can we trust accounting's representation of business fundamentals? Are financial statements a **true and fair representation**?
- As you have learned in other units, there are many ways of measuring the value of an asset or liability so it is critical to first understand **the impact of accounting policies** and the expectations imbedded in accrual accounting
- The interaction of companies with markets is a complex 'game' that is strongly characterised by an **information feedback loop**:
  - Financial statements affects market opinion but markets affect business fundamentals and determine managerial action

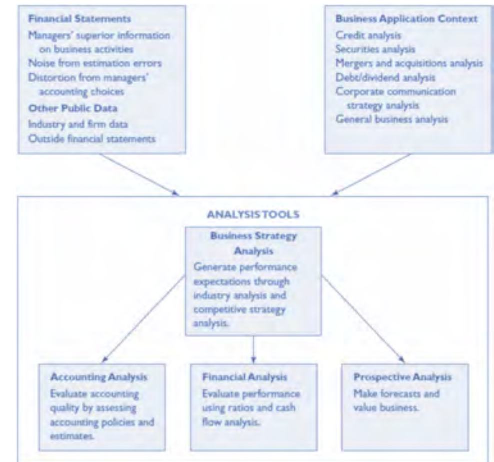
INFORMATION PROCESS AND INTERMEDIARIES

INFORMATION PROCESS

- Even though the underlying **Business Fundamentals** are very much an **objective representation of reality** ...
- **Accounting** is a mere interpretation of this reality that represents the **subjective view of the management** and its accountants
- Business stakeholders and the market must then make sense of this *filtered information*
- They are faced with two difficult tasks:
  - Evaluate the impact of changing business fundamentals
  - Decipher the management's view and signals

- Information process and the process of information
- Information (from fundamentals to decision making) is processed by **two classes of agents**, in the following order:
  - **Information intermediaries** who enhance/adjust/interpret the information content of financial statements
    - These are **auditors, financial analysts, credit rating agencies, financial press, regulators**
  - **Financial intermediaries** who identify worthwhile investment opportunities on the basis of this data and rely heavily on the work of information intermediaries
    - These are **superannuation funds, banks, insurance companies, managed funds,** etc

INTERMEDIARIES

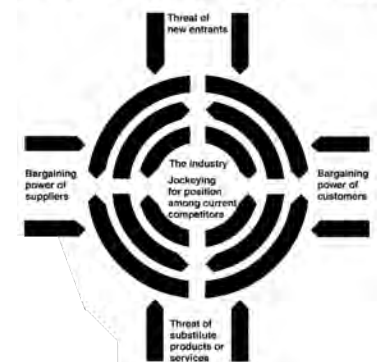


- **Intermediaries cannot observe all business fundamentals** in the same way as the company, simply because company sensitive fundamentals are hidden from public view
- Intermediaries rely on financial statements as their primary source of information of business fundamentals, and then match their understanding of fundamentals with the information released by management
- Financial statements are key input to business analysis

COURSE OUTLINE

- FSA is largely structured around this information process
- First we demonstrate tools for analysis:
  - Business strategy analysis
  - Accounting analysis
  - Financial analysis
  - Prospective analysis
  - Then we **apply the analysis** to answer questions of: Equity valuation and security analysis
  - Credit analysis and distress
  - Financial policy etc

BUSINESS ANALYSIS



- Business strategy analysis identifies the **risk/return profile** of a business in terms of its **fundamentals**
- How does strategy affect performance – think of company failures such as Kodak or Lehman Brothers
- Michael **Porter's 5-forces** framework is a conceptual framework for understanding the impact of the business environment particularly with respect to competition and industry positioning

PORTER'S 5-FORCES

- The key in understanding competitive forces and the risk-return profile of a business in terms of fundamentals is its relative standing within the industry

INDUSTRY ANALYSIS AND COMPETITION

- The key in understanding competitive forces and the risk-return profile of a business in terms of fundamentals is its relative standing within the industry

F1: RIVALRY AMONGST EXISTING COMPETITORS

- A critical factor that determines rivalry is **product differentiation**
- Retailers function by reselling processed products, so unless the retailer has exclusive access to a product or service then there would be intense price war amongst retailers selling the same product
- In this case, by-products or services surrounding become critical
  - E.g. airlines which compete for the same flight route at similar prices, would differentiate on the basis of safety record, seat space, in-flight entertainment etc
- Non-differentiable retailers therefore have competitive prices with **low switching costs**
  - The Internet makes it easy to switch airlines on the basis of cost, everything else held equal

- Insurance brokers (e.g. iSelect) makes it easy to choose from rival insurance companies
  - Did you notice that wherever there is a Woolworths supermarket right next to it there is a Coles, IGA or ALDI supermarket, and wherever there is a David Jones store there is next to is a Myer's store? This is specifically to enable low switching costs!
- The **industry growth** rate will also determine the degree of rivalry → the bigger the market the more there is to share
  - In fast growing industries (e.g. computer technology, renewable energy, finance) it is urgent for rivals to compete on existing market shares but could focus on attracting new customers, perhaps through specialising in demographics
- The **economies of scale** determine the cost advantage from the increasing size of the corporation.

F2: THREAT OF NEW ENTRANTS

- The greater the economic rent (maximum possible market profit) the greater the attraction to new entrants
- Rivals are therefore mindful not only of existing competition but also of potential competition
- Most factors analysed in 'Force 1: Rivarly' also determine the extent of potential threat from new entrants
  - Industry growth (↑ growth = ↑ threat of new entries)
  - Excess capacity (↑ capacity = ↑ threat new entries), where excess capacity is excess available demand volume
- Asset base profile and economies of scale of industry will largely determine the time it takes for a new entrant to become competitive
- The lower the scale and the lower the ratio of fixed to variable assets = more new entries and quicker for them to become competitive
  - Energy industry is a fixed-assets intensive industry with investments predominantly in property, plant and equipment (infrastructure)
  - It is extremely hard to build up competition from scratch, and this is why it is generally preferable to enter such industries through mergers and acquisitions

FIRST MOVER ADVANTAGE

- A unique feature of this force is the power and brand awareness that is attached to the **first entry** (or first few entries) in a new market – known as **First Mover Advantage**
- First movers create markets and create industries, so they have the advantage to determine the 'rules of the game'
- The **First Mover Advantage** gives the upper hand to the first entries and the opportunity to grow fast before the new entries build capacity
- First movers are **ahead of regulators** who must then work together to set up new accounting standards, consumer protection mechanisms, environmental regulations etc
  - E.g. in the 1990s' the DotCom boom took regulators by surprise, and by the time it caught up the boom turned into a bubble that eventually burst and wiped out $5 billion of market value
- First movers also have the opportunity to **determine industry standards** that are hard to replace
  - E.g. the QWERTY keyboard layout was developed in 1870s as a prototype for typing machines, and later adopted by the first IBM computers terminals. QWERTY is a standard that is extremely costly to replace.
- Other examples?
  - Digial cameras (Kodak ended up bankrupt!)
  - Portable computers (bad for IBM who were in mainframes)
  - iPhones, iWatches etc
- **Legal barriers to entry** is a key factor that determines whether the market is open to new entrants
- Certain markets or industries are protected by patents
  - Barriers to entry are strong in many R&D intensive industries that are protected by patents and copyrights, but also in highly regulated/monitored industries such as defense and national security, but even taxi services whose number of permits are capped by law

F3: THREAT OF SUBSTITUTE PRODUCTS

- Substitute products can be non-differentiated products that serve the same function
  - E.g. substitute office supplies, in which case they would compete on the basis of pricing
- The most severe form of substitute products, are those which make existing products (or services) redundant by **shifting demand to the new, more advanced product**
  - E.g. some years ago the floppy disk was seen as a marvel, then it was replaced by the CD, then by the DVD drive, then by the USB drive. Now the focus is cloud technology!

F4: BARGAINING POWER OF BUYERS

- **Bargaining power** describes the extent to which one agent can influence the actions of another agent
- Under equal bargaining power all parties have equal influence and there is a perfect competitive equilibrium where no one wins or loses → neutral outcome
- However, in real applications someone always gains the upper hand, most notably because of two reasons:
  - **Asymmetry in information** between supply chain nodes
  - **Cost structure** and how the price of a product is determined (how does it add up to the total cost)
- Asymmetry in information can be a key advantage to sellers (not always though) who like to be a step ahead of customers...
  - E.g. it is said that the next generation laptops has already been developed, but it is not released because the demand for this generation has yet to saturate, and also the inventory stock has not depleted yet
- Competition kicks in when a rival introduces features of the next generation product, and suddenly all rivals have no choice but to release similar competitive features
- **Buyers have strong bargaining power when switching costs are low** and can see through the cost structure of a product
  - E.g. much of the consumables today focus their strategy to attracting customers by clever marketing and packaging
- Once the consumer realises that a big portion of the product's price is due to expensive marketing and packaging and not due to quality or quantity, then the consumer will simply switch to less expensive product

F5: BARGAINING POWER OF SUPPLIERS

- Suppliers have strong bargaining power when they have access to a unique node in the supply chain
  - E.g. to manufacture a new table you need (simplified):
    - Extraction → Transport → Design → Processing → Marketing → Retail → Business services → Customer
- If a forestry company has unique access to mahogany wood then it can choose its customers who require access to this resource on the basis of favourable trading agreements
- If the table manufacturer has a patented design then the uniqueness (differentiation) and degree of demand of its product will determine its power to bargain with retailers
- **Non-differentiable suppliers have lower bargaining power** and as their number increases their bargaining power decreases
  - E.g. Australian dairy farmers (suppliers of milk and dairy product) have been under a lot of pressure the last few years, and many of them have been forced to shut down or merge into cooperatives
  - Lost bargaining power by comparison to Woolworths and Coles who are the no.1 sellers of dairy product
  - These supermarkets exerted unbearable trading agreements to suppliers and also introduced their own very cheap brands of similar quality...

COMPREHENSIVE BUSINESS ANALYSIS

- Industry analysis explains the force exerted on the business and the business's calculative response to surviving the pressure and grow (in the long run, growth is key)
  - "A smart analyst anticipates changes in strategy and the value that might create or destroy"
  - (Penman S., 2013, FSA and Security Valuation, McGrawHill, p.15)
- Beyond the position of the firm within its environment, the analyst must also have a good understanding of the overall **business model** or strategic outlook of the firm and how it fits with market or non-market forces
  - Stephen Penman gives a checklist of how one can 'master the details' of a business model

MASTERING THE DETAILS CHECKLIST

- Know the firm's products
  - Types of products
  - Consumer demand
  - Price elasticity of demand
  - Product substitutes and differentiation
  - Brand strength
  - Patent protection
- Know the technology required to bring the products to market

    - Production
    - Marketing process
    - Distribution channels
    - Supplier networks and supply chain
    - Cost structure
    - Economies of scale
- Know the firm's knowledge base
    - Direction and pace of technological shift
    - R&D program
    - Information networks
    - Product innovation
    - Production innovation
    - Economies from learning
- Know the competitiveness of the industry
    - Industry concentration and scale
    - Barriers to entry
    - Switching costs
    - Firm's position
    - Competitiveness of suppliers
    - Industry capacity
    - Relationships and alliances with other firms
- Know the management
    - Track record
    - Background training
    - Entrepreneurial spirit
    - Is the focus on shareholders or other stakeholders
    - Ownership concentration
    - Compensation plans
    - Corporate governance
- Know the political, legal, ethical and regulatory environment
    - Firm's political influence and lobbying
    - Legal constraints
    - Regulatory boundaries
    - Taxation
    - Banking culture

CLASS DISCUSSION QUESTIONS

1. Julie, an accounting major, states, 'Strategy analysis seems to be an unnecessary detour in doing financial statement analysis. Why can't we just get straight to the accounting issues?' Explain to Julie why she may be wrong?
2. What are the critical drivers of industry profitability?
3. One of the fastest growing industries in the last twenty years is the memory chip industry, which supplies memory chips for personal computers and other electronic devices. Yet the average profitability for this industry has been very low. Using the industry analysis framework, list all the potential factors that might explain this apparent contradiction.
4. What are the ways that an organisation can create barriers to entry to deter competition in its business? What factors determine whether these barriers are likely to be enduring?
5. Fred argues, 'The standards that I like most are the ones that eliminate all management discretion in reporting – that way I get uniform numbers across all companies and don't have to worry about doing accounting analysis'. Do you agree? Why or why not?

WEEK 2: ACCOUNTING ANALYSIS AND EARNINGS MANAGEMENT

ACCOUNTING ANALYSIS

WHAT IS IT? HOW DOES IT FIT WITH FSA? WHY DO WE NEED TO DO IT?

CONSIDER THE ACCOUNTING INFORMATION PRODUCTION PROCESS

QUALITY OF ACCOUNTING NUMBERS & FIT WITH FSA

- Who cares about Accounting Analysis / FSA ?
  - Security Analyst may ask
    - How well is the firm performing?
    - What are its future prospects?
    - What is it "worth" given my projections of current / future performance?
  - Credit Analyst may ask
    - What are the risks/benefits of lending to this firm? - How is it performing?
    - How is it managing its liquidity and solvency?
    - What is its business risk?
    - What is its financial risk? (financing, dividend policies)
  - Management Consultant may ask
    - What is the industry structure?
    - What are the competitive strategies pursued by the various players? - Are they value creating?
    - Are they sustainable?
  - Manager may ask
    - Is my firm "properly" valued?
    - Does our investor communications program facilitate this? - Can we grow through acquisition?
    - Is this firm a takeover target?
    - How do we finance the acquisition?
- Why do they care?
- What do they care about? Examples?
- Where can they find the information about it?
  - Our main focus in accounting analysis:
    - Financial statements e.g. accounting reports from the company including footnotes
    - Other disclosures by the company e.g.
      - Press releases
      - Stock exchange filings
  - External but important in FSA
    - Analyst reports – analysts' own opinions
    - News reports
- How should they use it?

FUNDAMENTAL QUESTIONS USE ACCOUNTING NUMBERS TO ADDRESS

- Issues which help us to understand
  - Current performance and,
  - Financial position.
- Start with accounting analysis of financial statements back to start ....
- Issues which assist us in gaining insights into
  - Future prospects

A KEY BUILDING BLOCK IN FSA

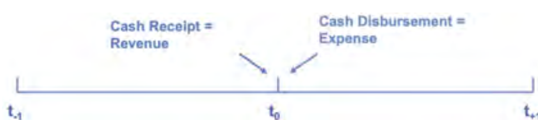
- WHERE do financial statements come from?
  - Influences / pressures that come to bear on their production such as institutional and regulatory differences (e.g., across countries), management contracts, debt contracts, ...
- WHAT are the accounting policies?
  - Are they appropriate to the business model / industry?
- WHAT are their limitations?
  - Are estimation errors likely to be large? [opportunity to manipulate]
  - Are there likely to be biases? [incentive to manipulate]
  - How predictive are the financials?

GAAP AND A 'TRUE AND FAIR' VIEW

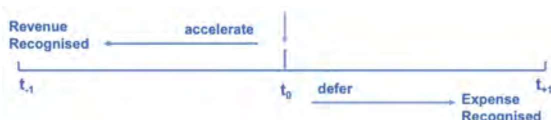
- Financial statements are supposed to
  - Have been prepared according to GAAP and have no material
  - Misstatement that would mislead users and,
  - Reflect a true and fair view of economic activities and how the
  - Business environment impacts financial performance and position
  - E.g. without bias, BUT
  - True and fair is subjective (there is no single 'truth') There are many shades of truthfulness and fairness
- What is the quality of the information that is presented in financial statements?
  - Are financial statements representative of business reality?
  - Has the information been 'directed' by managers in order to meet certain benchmarks, provide signals, obscure reality or hide sensitive data?

ACCRUAL ACCOUNTING – POSITIVES AND NEGATIVES

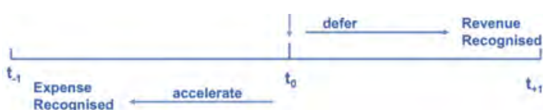
- Cash Accounting:



- Accrual Accounting:
  - Revenues may arise at different point in time from cash receipt
  - Likewise for expenses and payments
  - Apply "matching principle"
  - Judgements can improve or worsen earnings quality
  - BUT over the life of the firm
    - $\sum_{t=1}^{T} Cash\ Earnings_t = \sum_{t=1}^{T}\ Accrual\ Earnings_t$
- Aggressive: (profit enhancing)



- Defensive: (profit reducing)



- $Assets = Liabilities\ and\ Owner's\ Equity$
- Thus, $_{max}^{\uparrow}Assets = {}^{min}_{\downarrow}Liabilities + {}_{max}^{\uparrow}Owner's\ Equity$
- Regardless of the definition, if the normal course of reported earnings has been purposefully directed then the financial statement information is 'noisy' and introduces considerable uncertainty in its interpretation
  - The noisier the signal the greater uncertainty in the future payoff (i.e. in the realisation of earnings)
- Accrual accounting is a tool that has been designed to address business uncertainty, but when misused it brings additional uncertainty in the information produced:
  - Flexibility in accounting standards and choices in policies
  - Timing of accruals and transactions
- Cash accounting recognises income and expenses when cash changes hands. Cash transactions are instantaneous, self-contained and unambiguous
- Accrual accounting recognises income when it is earned and expense when it is incurred
  - The focus is on the timing of exchange of resources
  - Accrual transactions carry over periods, are completed in multiple records and are open to interpretation as they involve estimates about the future
  - If performance was measured over the life T of the business then:
    - $\sum_{t=1}^{T} Cash\ Earnings_t = \sum_{t=1}^{T}\ Accrual\ Earnings_t$
- Bad quality accounting information may arise due to misstatements and biases because of honest miscalculations, incorrect forecasts and unintentional choice of inappropriate policies → estimation errors
- This is hard to detect, interpret or even take actions against

EARNINGS MANAGEMENT

- Bad quality accounting info may arise due to misstatements and biases with the specific intention to mislead users
- Often difficult to detect
- If/when detected, it would most likely lead to prosecution with heavy penalties and punishment relative to the harm that is done

ATTEMPTS TO DEFINE IT

- Schipper (1989) "Earnings management is disclosure management in the sense of a purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain, as opposed to merely facilitating the neutral operation of the process"
- Healy and Wahlen (1999) "use judgment in financial reporting and in structuring transactions to alter financial reports either to mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers"

REGULATORS LAMENT POOR QUALITY EARNINGS

- In 1998, the SEC Chairman, Arthur Levitt, had this to say:
  - "Too many corporate managers, auditors, and analysts are participants in a game of nods and winks. In the zeal to satisfy consensus earnings estimates and project a smooth earnings path, wishful thinking may be winning the day over faithful representation. I fear that we are witnessing an erosion in the quality of earnings, and therefore, the quality of financial reporting. Managing may be giving way to manipulation. Integrity may be losing out to illusion... earnings reports reflect the desires of management rather than the underlying financial performance of the company."

WORLDCOM – INAPPROPRIATE CAPITALISATION

- Worldcom's demise was a very basic misclassification of expenses (periodic charges for use of third-party services and facilities) into capitalized expenditure (i.e. fixed assets) that was subsequently slowly depreciated
- As a result the current bottom line was artificially inflated