

Class: M.Sc. Sem 3

Subject: Actuarial Practice 1

Chapter: Unit 1 Chapter 2

Chapter Name: Regulations



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List some of the factors of the external environment that an actuary needs to keep in mind when providing actuarial advice or taking any decisions



It is important to consider and bear in mind the external environment when providing actuarial advice

A non-exhaustive list of external influences include:

- Legislation regulations
- State benefits
- Tax
- Accounting standards
- Risk management requirements
- Capital adequacy and solvency
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- Commercial requirements

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Legislation and regulations

- require compulsory insurance in certain circumstances
- influence the types of product available
- regulate the sales process

State benefits

- raise employers' awareness of the need to top-up State benefits
- raise individuals' awareness of the need to top-up State benefits
- reduce levels of saving if benefits are means-tested
- may require compulsory contributions
- can introduce moral hazard, ie the risk of individuals relying on the State and not purchasing their own cover



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Tax

- affects the form of benefits within products
- means that product innovations may be designed to avoid paying tax, eg inheritance tax
- directs savings towards the most tax-effective forms (ie preference for income or capital gains) or tax shelters (eg ISAs)

Accounting standards

- influence an employer's provision of employee benefits
- influence the range of products marketed



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Risk management requirements, capital adequacy and solvency

- form part of banking and insurance regulation
- may impose minimum standards of risk governance, including risk management roles within a firm, as well
 as minimum capital requirements
- are moving towards risk-based frameworks, eg Solvency II for insurers

Corporate governance

- encourages managers to act in the best interests of stakeholders
- incentivizes managers accordingly
- may utilize non-executive directors
- influences the way in which stakeholders' needs are met



- Legislation regulations Commercial requirements Changing cultural and Lifestyle considerations

Private companies

- may find the same difficulties as mutuals in raising capital, but
- benefit from a close involvement of the owners and potential access to significant additional capital

Changing cultural and social trends

- include aspects such as the level of home ownership
- impact on the financial products, schemes, transactions and risk assessment approaches available



- Legislation regulations

- Commercial requirements
- Changing cultural and social

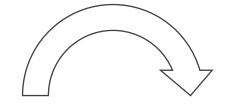
Competitive advantage and commercial considerations – Underwriting cycle

The underwriting cycle represents the ebb and flow of the business between the profitability and nonprofitability of an insurance company.

The profitability of an insurance company depends on the market forces of demand and supply, combined with the actual claims experience and economic climate.

The underwriting cycle moves in the following manner:

More companies enter the market



Profits are Business become squeezed profitable



Companies exit the market



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Demographic changes

- can have a major impact on main benefit providers, eg the State
- include increasing longevity and falling birth rates
- may result in an ageing population, which leads to:
 - less spending, as people of working age save more as they get older
 - a strain on social welfare systems
 - an increased cost of healthcare
 - the cost of education falling



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Climate change and other environmental issues

- influence the ways in which the Government, advocacy groups and individual participants act, and hence the behavior of the financial markets
- have led to providers offering products that promote environmental and ethical issues
- affect how providers communicate with customers, eg reducing the amount of paperwork

Lifestyle considerations

- younger people have preferences for loans rather than savings
- people with children may have a need for life insurance protection products
- older people may have a need for annuities and long-term care products



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may lead to overseas products being replicated in the domestic market, subject to tax and legislative considerations

Technological changes

- impact on the way in which financial products are provided, e.g. internet, price comparison websites, telephone banking, social media
- impact on wider administration processes, eg registering claims, customer enquiries.

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2 Regulation - Overview



Regulation is a secondary form of legislation that ensures laws passed are being adhered to. It influences the type of financial products being introduced in the market.

- Regulations requires price caps and limitations on charges for certain products, thus making it affordable for people to purchase them
- Regulations helps in eradicating problems caused due to information asymmetry to a certain extent, because it requires product providers to educate the customers about the features of the product and inform them about the risks associated with it.
- However, providing **detailed explanation** about the product may at times **demotivate** the providers from introducing complex products such as derivatives to the market as it makes the sales process lengthy.



2 Aims of Regulation

Lack of regulation in a financial market, can lead to **inefficiency**, **financial frauds** and will eventually make the **public lose confidence** in the financial system of the country. Thus, financial markets are thoroughly regulated to avoid **malpractices** and **misinformation**.

The government acts as a **lender of last resort**, intervening through the central banks and providing finances to other banks and financial institutions in case of financial mishaps as this can affect the entire economy and the country in general. Regulations reduce the possibility of the government acting as the lender of last resort.

The **principal aims** of regulations are therefore:

- To correct market inefficiencies and promote an optimum and orderly market
- To protect the buyers of financial products
- To maintain public trust and confidence in the financial system
- Help reduce financial fraud



2 Aims of Regulation

Example : The Glass Steagall Act, 1933

<u>Timeline:</u> As a means of regulation, the U.S. Government passed the Glass Steagall Act, 1933. The act was passed in the aftermath of the Great Depression of 1929.

Overview:

This act separated commercial banks and investment banks.

Investment banks were prevented from taking deposits, and prevented commercial banks from:

- Dealing in non-governmental securities for customers
- Investing in non-investment grade securities for themselves
- · Underwriting or distributing non-governmental securities
- Affiliating with companies involved in such activities

This act was a regulatory measure, to keep financial institutions from playing with people's money, and maintaining their trust and confidence in the financial system.



3 Costs of Regulation



Regulation has a cost – Regulators must attempt to develop a system that can achieve the aims of regulation at a minimum cost and that the benefits of regulation which are difficult to quantify outweigh the costs of regulations

Regulation costs can be grouped into two categories:

Direct costs

Indirect costs

Direct costs are mostly of two types:

- 1. Administrative Costs: These costs are also known as paperwork costs. It is with respect to the collection and processing of data, and the cost incurred in the inspection and enforcement of regulations.
- 2. Compliance Costs: It is the cost incurred to adhere to the regulations. This includes the cost of testing procedures, equipment modifications, supplying and collating of information and assembling reports.



3 Costs of Regulation

Indirect costs: These are costs incurred by the society in general because of changes in the behavior of providers and consumers of products, in response to the incentives created by regulators.

Some of the costs include but not limited to:

- 1. Reduction in consumer protection mechanisms, developed by the market itself
- 2. Reduction in product innovation
- 3. Reduction in competition and thereby a reduction in the choices that consumers have
- 4. A reduced sense of responsible behavior of the intermediaries and advisors

Example: An increase in petrol prices will eventually lead to a fall in the sales of cars, as people will then prefer traveling by public transport than a private vehicle.



4 Need for Regulation

Confidence

Asymmetric information

Confidence

- The different financial institutions such as the central bank, commercial banks, investment banks, insurance companies, mortgage companies, credit unions, etc. which make up the financial system are all interlinked with one another.
- As a result of this, the failure of one institution, can have a **domino effect** on other institutions and can lead to a systemic collapse of the entire financial system. Thus, weaking the economy and the country in general and disrupting people's confidence and trust in the system.
- An establishment of effective regulation and supervision that acts on economy wide systemic risk
- Creation of a strong international financial architecture that can send early warnings and induce effective international policy coordination to reduce systemic risk internationally.



4 Need for Regulation

Asymmetric information



Information asymmetry between the providers of products and the end customer is an area of concern for the regulators. There is a difference in the expertise and the negotiating strength that exists in financial transactions particularly in retail markets

<u>Example:</u> A sale of an agricultural land, where the seller knows whether or not the land is barren and lacking in nutrients required for cultivation, but the buyer has no idea and often cannot find out until sometime after the sale occurs.

Information asymmetry is a matter of concern particularly in financial transactions related to investment, insurance and pensions, as they have a significant impact on the future economic welfare of the individuals. Also in most countries, majority of the population is not well educated in financial matters, and find the financial jargon and aa range of options and solutions complex and confusing.

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5 Functions of a Regulator

- Providing advice and counsel to the government on policy matters and other related matters to private sector involved
- Overseeing the functioning and fairness of the financial markets and that of the institutions that are a part of it
- To prevent and investigate frauds, keep markets efficient and transparent and make sure customers and clients are treated fairly and honestly
- Enforcing regulations, investigating suspected breaches and imposing sanctions



5 Functions of a Regulator

The **IRDAI** (Insurance Regulatory and Development Authority of India) is responsible for regulating and licensing insurance and reinsurance companies in India.

It has the following functions:

- It prescribes the norms for insurance companies for auditing, accounting, solvency, commission to agents, etc.
- It finalizes premium rates for insurance, terms and conditions, and other benefits
- It can penalize companies and suspend or cancel the insurance
- It sets **standards for agents and bankers** for selling products
- It also addresses grievances and redressals by insurance reimbursements



Two areas of information asymmetry:

Anti-selection

Moral hazard

Anti Selection



People will be more likely to take out contracts or insurance, when they believe their risk is higher than what the insurance company has accounted for in its premium. This is known as anti-selection.

Examples:

- A prime example of anti-selection in health insurance, is when a smoker gets the insurance at the same premium, as that of a non-smoker. This increases the risk exposure of the insurance company. In order to lower its risk exposure, the company may charge a higher premium to all of its customers. This causes the non-smoking policyholder to not buy the insurance at that premium rate, as a result of which the insurance company loses its business.
- Another source of information asymmetry is when a prospective policyholder, tries to avoid divulging any information to the policyholder.



Moral Hazard



The action of a party who behaves differently from the way they would behave, if they were fully exposed to the consequences of that action. The party becomes less prudent than they would otherwise, leaving the organization to bear the consequences of their action.

Unlike anti-selection, moral hazard takes place within the terms of the contract.

<u>Example:</u> Moral hazard exists when the owner of the property because of the availability of insurance is less inclined towards protecting the property against fire, because any damage caused to the property will be remunerated by the insurance company, thus taking the burden away from the owner.

Suggest which of the following can be considered as moral hazard



- Not admitting to being a frequent smoker, in the application form when applying for a term assurance contract
- A person suffering several ailments, applying for a life insurance contract
- A person carelessly storing highly inflammable material in his godown



Dealing with information asymmetry

- **Disclosure and Education** product providers must keep the customers fully informed about the features and risks of the product in simple language and a comprehensible manner or through consumer education mechanisms initiated by the regulator. For example, the disclaimer that is shown at the end of every advertisement for the marketing of mutual funds
- Conflicts of Interests transfer of confidential information can be restricted by putting insider trading regulations in place, having Chinese walls or separation of functions between different organizations.
- Negotiation the weakness of an individual when negotiating with financial institutions can be reduced by the regulation of selling practices, by giving them the right to terminate the sales process, or a cooling off period, where the contract can cancel without any penalty, or price limits on premium rates and management fees



Dealing with information asymmetry

- **Unfair features of insurance contracts** the firm being the designer of the contract will word it in a manner that suits their best interests, as a result of which the consumer is at a disadvantage. Many countries have consumer protection legislation, that requires unfair terms in insurance contracts to be set aside. The contract should be worded in simple language and usage of industry jargon to be limited
- **Treating the customers fairly** in many countries, legislation or regulation ensures that providers of financial products consider the interest of their customers and treat them fairly. Since this can vary across the range of financial products and across different providers of products, it is accepted that benefits and charges of the products, should not be too dissimilar than those that customers were led to believe they would receive when they entered the contract.



Competence and integrity

- Individuals of a professional organization, need to have the respective qualifications or certifications to prove their competence to the regulators. Example: A lawyer needs a license to practice law
- Professionals, especially those at a senior level need to work with integrity and must be a fit and proper person. It should be someone:
 - Who hasn't been accused of previous frauds
 - Must not have been bankrupt
 - Should have the necessary qualifications
 - o Should not have been associated with an institution which has breached regulations in the past



Risk Management Requirement, Capital Adequacy and Solvency

- As a matter of regulation, companies are subject to **minimum standards of risk governance**, and can have specific regulatory requirements in terms of risk management in order to avoid and reduce the financial and economic costs of disasters.
- Financial institutions like banks and insurance companies, are required to have a certain level of capital
 adequacy and solvency. This ensures the security of the funds of the people and prevents banks from
 providing loans and other credit facilities beyond a certain level.
- Nowadays many financial institutions are now moving towards a risk-based capital requirement
 approach, that establishes a minimum regulatory capital. This approach protects financial firms, their
 investors, their clients, and the economy as a whole.
- ?

Suggest the aims of regulatory requirements of capital adequacy and solvency for banking and other financial institutions.



Capital adequacy

- To protect the interest of customers and to reduce systemic risks, all institutions must hold sufficient financial resources such as capital, cash in hand, liquid assets, credit lines etc. to cover liabilities.
- For example, insurance companies are required to show that assets are sufficient to cover their benefits promised, and that they have sufficient capital requirements in case of worsening of claims experience.
- Capital adequacy can be demonstrated in the form of a ratio, by dividing a banks capital by its risk
 weighted assets, or institutions need to have assets at specific proportion to their liabilities, with both
 being calculated in the same manner



Stock exchange requirements

- To be listed on the stock exchange, companies need to fulfill certain criteria of financial stability and also disclose financial and other information.
- For <u>example</u> if a company wants to be listed on the NSE they must fulfil the following criteria
 - o A paid up equity capital post issue of not less than Rs 10 crores
 - The company needs to be registered under the Company Act, 1956, so that it is bound by the provisions of the act
 - To provide the annual reports of three preceding financial years.
 - The company should not have defaulted on the payments of interest or principal amount to the debenture or bond holders.
- The regulator will monitor prices at which business is done and the reporting of deals to prevent insider trading and prevent substantial acquisition of a large number of shares to protect the position of other shareholders

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Forms of regulation

- 1. **Prescriptive form** this form requires giving attention to details and setting specific rules of what may or may not be done. It ensures a high level of regulation thus reducing the possibility of things going wrong. However, this form of regulation comes at a very high cost and is not preferred much as it may exceed the marginal benefits of regulation
- **2. Freedom of Action** this form allows firms a certain freedom to function as they want. However, in the process, the need to keep the interested stakeholders well informed, by publishing sufficient information at regular intervals.
- **3. Outcome based** here the regulator prescribes the outcome, i.e. he is only concerned with end result. The means of achieving it is at the discretion of the product provider.



Forms of regulation

1. Unregulated market and unregulated lines of business

Regulations come at a cost and the cost may at times exceed the benefits gained from regulation. A market where only professionals work, or which sells guaranteed benefit products like a term assurance, endowment assurance or retirement products, the consumers are well informed of the terms and conditions of the product and is such there is no need for specific regulations.

2. Voluntary code of conduct

The success of a voluntary code of conduct greatly depends on the co-operation of all the operators and public confidence in the system. It is the cheapest from of regulation, with rules set out by those having the greatest knowledge about the efficient working of the system

3. Self regulation

Participants of the system, organize, operate and regulate the system, without government intervention. The driving force behind self regulation, is that it results in the economic good of the consumers which they are willing to pay for, thus benefitting all the participants. Also, the fear of statutory regulation imposed by the government, makes people prefer self regulation.



Forms of regulation



Association of Merchant Bankers of India (AMBI) was set up by the SEBI as a self regulatory body, to set professional standards, provide efficient services and establishing standard practices in the field of merchant banking and financial services

4. Statutory regulation

Under such a regime the government establishes the rules and regulations, which are to be adhered to.



Self regulation

Advantages of self regulation

- The regulations are set by those having the **greatest knowledge** about the working of the system, and those who have the greatest advantage of achieving an optimal cost to benefit ratio.
- Any changes in the system, can be quickly incorporated in the regulatory system.
- It easier to persuade firms to operate in a self regulatory environment, than get entangled in government bureaucracy

Disadvantages of self regulation

- The closeness of the regulator to the industry, increases the risk of there being a biasedness towards
 the interests of the operators of the market, which leaves the consumers at a disadvantage and is
 unfair.
- Self regulatory regimes could lead to **market monopoly**, by forming rules that restrict the entry of new participants. By imposing high standards of capital requirements, they can discourage small size product providers who may find it difficult to acquire large capital at the initial stages of incorporation



Statutory regulation

Advantages of statutory regulation:

- It brings in **greater public confidence** as they believe that the government will have an unbiased approach towards regulation and will protect their interests
- It ensures **greater efficiency** in regulation through economies of scale, by grouping activities by function and not by business. For example, different regulators can be made responsible for monitoring the market conduct and regulatory solvency

Disadvantages of statutory regulation:

- It is a costly form of regulation, and is inflexible
- People running the system, have an efficient and cost-effective way of regulating it. Rules imposed by the government can be **expensive** to follow and may not achieve the desired aims



8 Role of major financial institutions

Central bank

The central bank acts as a regulatory authority of a countries monetary policy and supervises the providers of financial products.

- They control the money supply
- Determine the inflation and interest rates
- Participate in open market operations to control the cost of borrowing and lending
- Set the reserve ratio for commercial banks and act as a lender of last resort

These functions of the central bank, affect the terms at which the providers of financial products offer their product. Other functions affect the economy in general and the ability of consumers to invest in financial products.



8 Role of major financial institutions

State intervention

- Certain financial products are the monopoly of the government, they can only be offered by the government. The government also imposes a tariff rate or special charges on providers of financial products, to protect consumers.
- This might, however, be a barrier on market freedom and restrict the market to only those providers who can meet state requirements. This damages new innovation and new developments

Large market participants

- Large companies that charge high premium rates, may allow smaller companies to cater to low level consumers and thus stabilize premium rates
- But, at times they may act in a manner to monopolize the market and practice anti-competitive activities.
 Regulations are kept in place to prevent this and protect the consumers
- Some companies can take up a significant amount of the market's resources, thereby leaving very little for the regulator to monitor the market



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