Regulation of International Capital Markets

Unit 1 Rationale of Financial Regulation and Supervision

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Unit Overview

The main purpose of Unit 1 is to outline and discuss the reasons that prompt governments around the world to intervene in financial markets by way of legally binding regulation and supervision. In doing so, the unit introduces fundamental concepts of financial regulation and supervision, its objectives and its rationale. The unit then discuss financial markets and assets, prudential regulation and supervision, and the globalisation of financial crises.

Learning outcomes

When you have completed your study of this unit and its readings, you will be able to:

- outline the role of financial regulation and supervision
- discuss the different forms of financial markets and financial assets, and bank and non-bank businesses
- stipulate the purpose of micro and macro prudential supervision
- evaluate the different rationales of financial regulation and supervision
- assess the impact of the global financial crisis and the subsequent reforms to financial regulation.

Reading for Unit 1

Méndez-Pinedo ME (2011) 'Iceland and the EU: Bitter lessons after the bank collapse and the Icesave dispute'. In: I Barkivić Bojanić and M Lulić (Eds.) *Contemporary Legal and Economic Issues III*. pp. 9–42.

Herring R (2007) 'Conflicts between home and host country prudential supervisors'. In: D Evanoff, J LaBrosse and G Kaufman (Eds.) *Global Banking and National Regulation*. New Jersey: World Scientific. pp. 201–19.

Ogus A (2002) 'Regulatory institutions and structures'. *Annals of Public and Cooperative Economics*, 73 (4), 627–48.

Tucker P (2011) 'Macro and microprudential supervision'. Speech given at *The British Bankers' Association Annual International Banking Conference*, London, 29 June.

Avgouleas E (2012) Chapter 2 'Financial markets and financial crises'. *Governance of Global Financial Markets: The Law, the Economics, the Politics*. Cambridge UK: Cambridge University Press.

1.1 Introduction

The regulation and supervision of financial markets by the state and state agencies is nowadays taken for granted. The regulatory function is carried out in accordance with the legal framework established through the normal law-making process such as primary legislation and secondary legislation. The regulatory body is also usually empowered to issue guidance, directives and directions. Regulation is therefore very much a legal function.

Regulation in general signifies the interest of the state in the orderly and safe establishment, structure and operation of markets. Few matters are more important to governments than its citizens' savings, their investments, their pensions and mortgages, the financial resources of corporations and the stability of the banking and financial system as a whole. The regulation and supervision of the financial system by public authorities is now widely regarded as a key component of the global economic system and an essential pre-condition for orderly markets.

The world has seen many financial crises over the 20th and 21st centuries. The Great Depression, the crisis in the 1920s and 1930s that particularly hit the United States of America influenced the political agenda and placed the regulation of the financial system at the top of the list of political priorities.

During the late 1990s, similarly destructive effects of financial instability were felt by ordinary people in a large number of developing and emerging-market countries when widespread failures of the market led to the collapse or near-collapse of the financial sector, with huge economic costs leading ultimately to social and political upheaval. It is notable that in Indonesia alone dozens of banks failed after the non-performing loans of the banking sector reached an estimated 65–70% of total bank loans during the peak of the crisis. At the end the total fiscal cost of the crisis amounted to 55% of the GDP of Indonesia (see Caprio & Klingebiel, 2003).

The 21st century has already seen a number of financial failures. From the collapse of Lehman Brothers in the US to the to the more recent bank run of Northern Rock in the UK. One would have expected lessons to have been learnt after the Great Depression that could prevent further repeats of such major financial crises.

However, crises in the late 1990s and in 2007–08 seem to indicate otherwise: the question is, why are the regulatory frameworks not able to contain these crises?

It is true that the long and unpleasant history of financial crises in developing and advanced economies is not exclusively related to failed or inefficient supervision and oversight of the financial system. The malfunction or collapse of the financial system is never caused by state failure alone. Poor managerial decisions, poor or corrupt banking practices, problematic macroeconomic policies can all cause uncertainty and financial losses that can feed on the inherent instability of financial assets.

Inasmuch as the state is not the only one to blame, nevertheless it normally plays a pivotal role in making matters worse or failing to prevent further deterioration. Failed legal and supervisory institutions, understaffed and with poorly trained regulators, inadequate legal rules and poor or corrupt supervisory practices can certainly exacerbate the inherent vulnerabilities of the financial system and lead to financial instability and economic chaos following the failure of private decisions and macroeconomic policies. At times political meddling can also cause or worsen financial instability. Political meddling was partially blamed for the financial crisis in Venezuela in 1994 as well as in Indonesia, and in the UK's crisis of 2007–08 where the government supported 'light touch' regulation.

1.2 Defining Financial Regulation and Supervision

1.2.1 The concept of regulation and supervision

The concept of regulation refers broadly to the creation of formal rules, standards and codes of conduct which private individuals and firms must follow (here we will refer to them all as 'rules'). Regulation can then be termed as a set of binding rules issued by a private or public body. When ordinarily used, however, regulation refers to the rules that are normally created and enforced by the state. The state will ensure that the rules are followed through persuasion and formal enforcement using the state machinery. Regulation is therefore the sustained and focused control exercised by a public agency over activities that are valued by the community.

If the concept of regulation refers to the establishment of rules and standards, the concept of supervision refers to the separate process of ensuring that those standards are observed and complied with. Regulatory authorities lay down rules that mandate, restrict or prohibit certain patterns of behaviour. But they also supervise those to whom the rules are addressed and seek to ensure that the rules are complied with through persuasion or formal law enforcement.

1.2.2 Financial regulation and supervision

Financial regulation denotes the set of rules, controls and processes, established by state authorities, with the aim to shape or prohibit certain behaviour, decision-making and transactions in financial markets and financial institutions, including prudential regulation. Financial supervision is the process of ensuring that those involved in the financial market observe and 'play' according to these rules.

The financial regulator is therefore concerned with preparing and issuing regulations and promoting a culture of compliance while the financial supervisor is concerned with enforcement and compliance of these regulations. The supervisor has an array of sanctions which can be meted out to ensure enforcement and compliance. However, although the powers of

regulation and those of supervision are different, in most countries these powers reside in the same institutions.

Normally, even though not specified, regulation denotes supervision as well. Financial regulation is therefore a wide concept, which encompasses the regulation and supervision of:

a) *financial firms*, such as commercial banks, investment banks, insurance companies, financial advisers, stock brokers *etc*
b) *organised financial markets*, such as stock exchanges or alternative trading systems where financial assets are normally traded
c) *financial services, processes and transactions*, such as the acceptance of deposits, the granting of loans, the provision of financial advice, the issuance and listing of securities, the execution of trades in financial instruments and so on
d) *the general market infrastructure*, such as systems for the clearing and settlement of large-value bank payments as well as the clearing and settlement of trades in financial instruments.

It is not difficult to see why financial regulation is all about changing and managing behaviour and market practices – normally, by imposing limits on individual and commercial freedom. Take for example the simplest banking transaction: the bank deposit. Now let us assume that there is no state regulation of the banking system and no regulatory standards apply on the business of accepting deposits from the public. In the absence of a law-based regulatory framework every person in the land could describe himself or herself as a 'banker' and seek to accept deposits from the public. In the absence of regulation, there would be no process of ensuring the professional integrity and financial soundness of this person. In such a market, savers and investors would find it extremely hard to distinguish between honest and dishonest, sound and unsound bankers, with disastrous effects for the overall confidence of the general public to the stability and honesty of financial institutions.

Let us now see what happens when the regulatory framework is in place. Most countries in the world do not permit individuals and firms to describe themselves as 'bankers' unless they comply with a long list of regulatory requirements. Crucially, the entry into the banking business is subject to formal approval after ensuring that certain rules relating to the financial soundness and professional integrity of the bank have been observed. This formal approval takes the form of an administrative 'licence' or 'authorisation' or 'charter'. The licence or authorisation constitutes a formal legal instrument, which officially indicates that the firm is subject to state control as regards the institution's conduct, integrity and financial soundness and viability.

The post-financial crisis reforms brought to the attention of regulators the importance of an orderly exit strategy as well as entry requirements. A significant part of the process of authorisation now includes an assessment of whether a bank can be effectively supervised, and if it gets into distress it

can be resolved in an orderly manner so that any potential disruption to the markets is minimised. The regulator now requires evidence of resolvability with the introduction of 'living wills', technically referred to as Resolution Plans, or Recovery and Resolution Plans.

1.2.3 Home and host state regulators

Under European Union (EU) Law, there is a distinction between home and host state regulation involving firms authorised to operate in the European Economic Area (EEA). The home-host divide is a reference to the division of regulatory responsibilities of cross-border firms. Let us take a cross-border firm A, which is headquartered (home) in EEA country X. If A wants to operate a branch in EEA country Y, then A can do this under the authority of a licence granted by the regulator in Y. The technical term referring to the right to provide cross-border branches or services is called 'passporting'. Where a firm establishes a presence in another EEA member state this is called an 'establishment' passport. Where a firm carries out its permitted activities cross-border, without establishing a presence in the host member state, it is called a 'services' passport.

The home regulator therefore is the one which regulates and supervises the cross-border firm. Clearly, therefore, there must be cooperation between the home and the host regulators, not only for the issuance of the operating licence, but also in the way a cross-border firm is regulated and supervised. The example of the 'Icesave' dispute, which happened during the 2008 financial crisis, will help to explain how lack of cooperation and coordination between the home and host regulators can lead to undesirable results.

At the height of the financial crisis in 2008, in October, *Landsbanki*, a privately-owned bank in Iceland (EEA member) went bankrupt. At the time, the bank's Depositors' and Investors' Guarantee Fund had already been drained of capital reserves. This meant there were virtually no funds to reimburse foreign *Landsbanki* customers. *Landsbanki* had branches in the UK operating as *Icesave*, but was regulated not in the UK but by the home regulator in Iceland. In response to the Icelandic Government's refusal to underwrite this liability on behalf of the collapsed guarantee fund, the UK Government froze Icesave's funds to be used for the purpose of reimbursing the UK consumers.

Reading 1.1

Now study Méndez-Pinedo's account of the Icesave dispute, 'Iceland and the EU: Bitter lessons after the bank collapse and the Icesave dispute'.

Your notes on the reading should illustrate the points made above.

Méndez-Pinedo (2011) 'Iceland and the EU: Bitter lessons after the bank collapse and the Icesave dispute' in *Contemporary Legal and Economic Issues III*. pp. 9–42.

This case underscores the importance of coordination and cooperation between the home and host regulators. However, it is important to note that this only operates with branches but does not affect subsidiaries. Subsidiar-

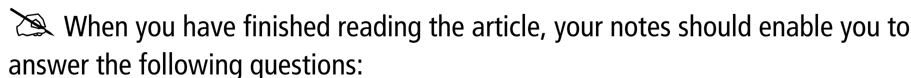
ies are treated in all material aspects as separate and distinct firms and therefore have to be regulated in each of the countries in which they operate.

In light of the problems posed by weaknesses in home state regulation and supervision during the financial crisis the Capital Requirement Directive IV has reconfigured to a significant extent the power relationship between home and host states so that the host state can intervene in the activities of a branch that may be experiencing problems. Moreover, the home and host state relationship has also been reshaped on the EU level with the establishment of the single supervisory and resolution mechanisms. On the international level the soft law measures espoused by the Basel Committee on Banking Supervision tend not to prohibit host states from exercising their authority if a branch was to experience distress.

Reading 1.2

Please now study Richard Herring's paper on prudential supervision, 'Conflicts between home and host country prudential supervisors'.

Herring (2007) 'Conflicts between home and host country prudential supervisors'. In: D Evanoff, J LaBrosse and G Kaufman (Eds.) *Global Banking and National Regulation*. pp. 201–19.


When you have finished reading the article, your notes should enable you to answer the following questions:

- What is regulation?
- What is supervision?
- Explain and distinguish the concepts of financial regulation and supervision.
- Critically discuss how regulation and supervision of the financial sector differs from that of other sectors.
- Critically discuss the concept of passporting.
- Distinguish between home and host state regulators and explain the types of problems that may arise if there is no cooperation and coordination.

1.3 Why Regulate?

1.3.1 Rationale of regulation and what influences the shape of financial regulation

Huge corporate and financial scandals consisting of major forms of mismanagement, fraud and loss have traditionally resulted in some reflection of corporate and financial regulation. Some form of market failure is a key catalyst for regulation. In economics, market failure is a situation in which the behaviour of optimising agents in a market fails to produce a 'Pareto optimal' allocation. A Pareto optimal situation occurs only if, in a market transaction, no agent can be made better off without making someone else worse off. The main sources of market failure are monopolies, which distort efficiency through underproduction or mispricing, and externalities.

Another cause of market failure is asymmetry of information, which exists between suppliers and consumers of goods and services. Market participants may therefore be required to provide more information to ensure that consumers make the right kinds of choices when making purchases. Finan-

cial regulation may be put in place to ensure that the interests of consumers are not adversely affected by those financial products and services.

The markets' knowledge that a state may intervene and provide some form of insurance or guarantee to maintain confidence leads to what is generally referred to as 'moral hazard'. To mitigate the risk of moral hazard, regulation is needed to reduce the likelihood of some corporations taking on too much risk because they suppose that the state will always insure part of the risks they are taking on. (A more detailed of the concepts of asymmetry of information, moral hazard, and other market 'risks' follows later in this unit in Section 1.5.1).

State intervention is influenced by a number of factors and objectives. The first objective might be to maintain financial stability and financial integrity and reduce systemic risk. A second objective might be to improve market integrity, to allow more competition or reduce market abuse and ensure that markets are fair, efficient and transparent. A third may be consumer protection, which also helps to build confidence in the market. A fourth may be protection against malpractices such as using the financial system as a conduit for money laundering or financing terrorism.

When an industry such as financial services is put under the spotlight, we can see that a number of reasons exist for it to be regulated.

- *Public Interest:* regulation is a mechanism for controlling what states consider needs some form of formal oversight, such as maintaining financial stability. The need for regulation traditionally sits on a number of aims and objectives to achieve what the state considers necessary. Various stakeholders, however, will have differing ideas of what is public interest.
- *Maximising Individual Interests:* if from a practical point we view regulation as something that is devised through negotiation between various interest groups, then it is clear that different interest groups will want to shape it for their own interests. The shape of financial regulation is influenced and discussed with the interests of industry and consumers competing to safeguard their own positions and interests. Regulation is the outcome of this continuous negotiation of positions and interests.

Sometimes the groups competing for power and influence are able to influence the regulator, and the decisions the regulator makes lead to what is termed 'regulatory capture'. Where regulatory capture occurs, this usually is by the most organised and influential interest groups. It must be borne in mind that those participating in the market are assumed to be rational and have a clear idea of how to achieve their set goals. They will therefore want to influence the regulation and the regulator so that their goals are achieved. When the regulator is under regulatory capture by the producers, this results in misleading consumers, who may have no real idea about the value of the choices they are making when choosing between products. In the extreme

cases of regulatory capture, the regulator starts confusing the interests and positions of a particular interest group with those of the regulator.

How public and private interests shape regulation will therefore depend on the influence that each side wields. What is clear is that those in business look at maximising their profits – what in the economic literature is referred to as the concept of *homo economicus*, or the economic (rational) man. The economic man is said to be motivated solely by profit. Others (*cf* Julia Black, 2013) have advocated the need to move away from this concept and start developing a regulatory framework which recognises that although profit is key to business, there are other things that make businesses behave honestly, such as reputation, peer pressure and a culture of playing by the rules.

How firms respond to regulation will surely have an impact on how regulation develops. If there is a culture of compliance, there is likely to be harmony and a cordial relationship between the regulator and the regulated. However, where the regulator has to constantly mete out punishment, the regulatory environment is fraught with distrust on both sides. In most instances, however, the response of the regulator is usually measured, to avoid stifling the 'entrepreneurial spirit' of business to pursue profit. In any event it may be seen that putting in place a very stringent regulatory framework may also be counter-productive because where the profit margins are harshly affected, there may either be cost-calculated non-compliance or firms may be forced out of business. It can be said for most that profit is deemed the 'sacred cow' of corporate activity.

In light of the wide range of activities and individuals affected by financial products and services, and the vital role of the financial markets for development and growth, it appears easy to justify why markets should not be left to operate without regulatory intervention. However, it could be argued that externally imposed regulation is a disproportionate reaction, even if we consider the high importance of well-functioning financial markets. Self-regulation might constitute a more adequate alternative, given that the rules or principles drafted by market participants are generally more flexible, better designed and focused, and more cost-effective. Peer pressure and market discipline could prevent and manage market failures.

Moreover, commercial and contract law also has a regulatory dimension in terms of providing sanctions and preventing opportunistic behaviour by market participants. The question, thus, naturally emerges:

- Why are financial products and financial markets special?

This question might best be introduced by an apt quotation.

> If free trade is generally desirable, then what is wrong with free trade in the financial services sector? If nothing is wrong with it, the whole panoply of government intervention into the financial sector – the central bank, government-sponsored deposit insurance and government regulation of the financial system – should presumably all be abolished. If there is something wrong with *laissez-faire*, on the other hand, then what exactly is the problem with it? Why does this problem justify

> intervention? And why does it justify the particular interventions we have, such as a central bank? Most economists take a patently untenable position on these issues. For the most part, they accept the general principle of free trade, but they deny that it applies to financial services. Yet relatively few could give a coherent defence of this position or have even thought that much about it. They oppose free banking more or less instinctively, as its failings are obvious. The response, of course, is that what is obvious is not necessarily true – the history of science is full of cases where the 'obvious' turned out to be wrong.
>
> Source: Dowd (1996) p. 679.

The questions posed here by Kevin Dowd are intriguing and crucial. If the freedom of commerce and trade is so obviously good, why are government intervention and the regulation of financial markets necessary? Why regulate financial markets in a way unseen in any other industry? What is so special about financial services, products and markets as to render state intrusion of such major scope and scale almost inevitable?

Well, the case for financial regulation by government rests on the risk that an unregulated financial market might fail and the impact of that failure on the economy as a whole would be severe. Thus, the policy choice for financial regulation is probably determined by the public pressure in the case of a failure given the high amount of money at risk. The decision to regulate, to intervene, to change the natural functioning of the market is justified on the grounds that the cost of a potential market failure is greater than any costs imposed by regulation.

1.3.2 Rationales of financial regulation in context

So far, the general rationales for commercial harmony have been presented as a justification for the costs of externally imposed regulation by the state on the market. However, three complementary considerations need to be taken into account in this regard.

First, it has to be noted that the pervasiveness of problems associated with activity in the financial markets varies. For example, information asymmetry is higher in the context of retail markets than within wholesale markets because in the latter case the transactions and dealings involve players with roughly the same level of expertise and sophistication. Thus, information failures are less likely to occur in this setting. This observation informs the type of regulatory intervention appropriate. Ideally, regulators should only choose to intervene if the costs of regulation do not exceed its benefits.

Second, it is important to appreciate the market as an institution that requires protection. For example, various regulatory measures seek to enhance market integrity by prohibiting market manipulation, insider dealing and the dissemination of false or misleading information. Accordingly, regulatory intervention is not only justified in terms of protecting specific market participants who are bound to suffer a loss. Rather, the promotion of efficiency and integrity of the market as such is an objective that warrants regulation.

Thirdly, the wide variety of rationales for regulation indicates that different rationales may be accorded more or less relevance depending on the respective sector of the industry. For example, in the banking sector, the mitigation of systemic risk constitutes the key rationale for regulatory intervention. This is evident if we consider the typical examples of bank failures and bank runs. Such incidents might be of low probability, but if they do occur they create serious disturbances for the whole market. A run on a bank quickly raises solvency issues even if the institution originally only faced a liquidity shortage. As discussed above, once a bank is on the brink of insolvency the disruptive effects spread to other banks that are interconnected with the troubled institution. Consequently, bank runs have ripple effects. We will discuss more about this when we consider a recent bank run, the case of Northern Rock in the UK.

Retail banks are those dealing directly with customers. This is where you open your account, make deposits, get personal loans *etc.* The retail banks also use the deposits to loan out to others, including corporations. Investment banks raise money by selling securities (to other companies and governments), take money from investors (such as companies or wealthy individuals) and make investments such as buying stocks on the stock market. They also provide financial services to usually corporate clients for a fee.

Consumer protection therefore becomes particularly important in retail banking (as opposed to investment banking) and in regard to the rendering of financial advice. In this context, the focus is on prudential regulation of banks[1]. Imperfect information and agency problems have the consequence that the consumer is in no position to judge the financial situation of the bank or the inherent value of the product (*eg* a bond or an insurance policy) that he purchases. Furthermore, the value of the investment is influenced by the subsequent behaviour of the financial institution. In order to avoid the adverse behaviour of a firm to its customers, regulatory regimes design conduct-of-business rules and principles such as *good faith* and *duty of care*. Thus, in respect to retail markets regulation is justified because it provides economies of scale in monitoring, limits the potential of conflicts of interests and minimises cases of financial loss and fraud.

To conclude we can therefore say that the main rationale for financial regulation is the prevention and management of market failures. The objectives of and how this can be achieved may vary depending on the parties, the complexity of the financial system, the level of development of the intermediaries, the capacity of the regulator and the different public and private interests.

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[1] It is essential to distinguish between *prudential* regulation that aims at safeguarding the safety and soundness of financial institutions in order to protect consumers, and *systemic* regulation, which aims at safeguarding the safety and soundness of financial institutions for purely systemic reasons.

1.3.3 The costs of financial regulation

After we have established the basis for regulatory intervention in financial markets, it is important to highlight the caveats associated with regulation and the distortions excessive regulation may give rise to. The most common misunderstanding involves the conception that regulation is a *free good*. As such, it may be over-demanded by consumers and over-supplied by the state, thus stifling innovation and economic activity.

It is also important to note that the chosen regulatory approach may constitute a wrong cure or may be based on wrong assumptions. In such a case, the effects of regulation may be negative or unforeseeable. Furthermore, there is always the danger that regulation may be used as a means of promoting political interests rather than economic efficiency and fair play in the financial markets.

The one-size-fits-all approach is another source of concern as it may well be the case that one regulatory approach does not fit all cases. As a result, competition in the market may be distorted and compliance with regulatory standards may amount to a box-ticking exercise characterised by adherence to the letter rather than to the spirit of the rules and principles. We always have to be aware of the potential for creative compliance or substantive non-compliance. Therefore, regulators need to strike a very sensitive balance between prescriptive rules that may entail high inflexibility and low responsiveness to market conditions and broad principles which undermine legal certainty.

Apart from these costs of regulation, another key consideration needs to be incorporated into the analysis. The problem of moral hazard (discussed in Section 1.5.1 below) constitutes one of the main side effects of regulation and one of the main factors to be taken into account when assessing the effectiveness of regulatory provisions.

We have noted that institutions can make increasingly reckless and risky decisions exactly because they know that safety nets are in place, which shield them against a potential failure. Seen from this perspective, regulation distorts the incentives of market participants to monitor their business adequately and exercise due diligence. Similarly, firms run the danger of regarding mechanical compliance with regulatory standards as sufficient and, as a result, they fail to take into account important risks inherent in their particular line of business.

Reading 1.3

Ogus (2002) 'Regulatory institutions and structures'. *Annals of Public and Cooperative Economic*, 73 (4), 627–48.

The following readings provide a fuller background to the topics examined in the foregoing sections, namely the concepts of regulation and supervision, the instruments of regulation and the institutions and processes of regulation.

You should carefully study the interesting paper by Anthony Ogus on regulatory institutions and structures. Although Ogus does not refer to financial regulation in specifically, this text is useful for providing an outline of the fundamental principles of regulation of economic activities by state authorities. The article first analyses the reasons for regulat-

ing market activity, what the author has termed 'justifications for regulatory interventions'.

✍ When you have completed your study, you should answer the following questions.

- Why do governments intervene in markets and regulate market behaviour posing restrictions and limits on commercial and individual liberties?
- Why regulate financial services and markets?
- Why is financial regulation is given so much attention?
- What is a 'regulatory authorisation'?
- Why would the government allow a certain industry to be self-regulated rather than formally regulated by state authorities?
- What are the limits and challenges of self-regulation?

1.4 Financial Markets and Services

1.4.1 Overview

Financial markets constitute a key determinant of development and growth within any given financial system. This comes as no surprise given that the most important function of the markets is to facilitate the raising of capital by matching those who want capital with those who have it. It is now accepted that a primary role of financial institutions and capital markets is to facilitate resource allocation in an uncertain environment across space and time. Within the financial system, individuals, companies and governments constantly move from the role of the borrower to that of the lender, and it is no rarity for them to be in both roles at the same time.

In the broadest terms possible, financial markets enable the transfer of funds from 'savers' (*ie* entities whose income exceeds their consumption) to 'borrowers' (entities whose spending exceeds or is going to exceed their income and therefore need funds to invest in tangible assets or finance their current operations, or even to consume). Financial intermediaries and financial markets provide many different ways in which the transfer of funds from 'savers' to 'borrowers' is performed. The flow of funds from 'savers' to 'borrowers' is either direct – occurring in capital markets (equity and debt instruments), discussed in Unit 6 – or indirect, through the operations of commercial banks, insurance companies and other financial intermediaries.

When a bank accepts the customer's deposit, the customer becomes the bank's creditor and the bank becomes the customer's debtor. The deposit constitutes the customer's asset and the bank's liability. The opposite is the case when the bank makes loans to borrowers. So the assets of financial intermediaries are liabilities issued by borrowers who are the ultimate investors of funds. And the liabilities of a financial intermediary are assets of the ultimate savers and, in the real world, of other intermediaries as well. It therefore becomes clear that financial intermediaries have both their assets and their liabilities predominantly in the form of financial instruments.

As the deposits of the lenders are transformed into loans to the borrowers, the nature of the contractual promises involved changes substantially. And so does the risk allocation. Thus, by concentrating on the role of the financial markets as a mechanism for the accumulation of investment capital and the allocation of resources, a very important function is neglected. Importantly, the financial system is also about the management of risk, since it allows risk to be transferred to the ones more willing, capable and better positioned to manage it.

It is important to refrain from exclusively identifying banks with financial services provision. Instead, there is a great variety of institutions providing financial services, such as insurance or financial advisory companies. In order to obtain an overview, let us look at the activities regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA), the organisations that in 2013 replaced the Financial Services Authority (FSA) which was hitherto, the unified regulator.

There is a long list of regulated activities, which is indicative of the variety of financial services that fall under the supervision of regulators. In accordance with Section 22 of the Financial Services and Markets Act 2000 (Classes of Activity and Categories of Investment) and Part II of the Financial Services and Markets Act 2000 (Regulated Activities) Order 2001 (Specified activities), as amended by the Financial Services Act 2012, the following comprise 'regulated activities':

a) accepting deposits (article 5)
b) effecting contracts of insurance (article 10(1))
c) carrying out contracts of insurance (article 10(2))
d) dealing in investments as principal (article 14)
e) dealing in investments as agent (article 21)
f) arranging (bringing about) deals in investments (article 25(1))
g) making arrangements with a view to transactions in investments (article 25(2))
h) managing investments (article 37)

[…]

p) *advising on investments* (article 53).

The list of specified investments is a long one and includes, *inter alia*, deposits, contracts of insurance, shares, debentures, warrants, certificates representing securities, pension schemes, options, futures, and contracts for difference.

At this point, it is important to note that the list of regulated activities and specified investments need not be memorised and has only been included in your reading for the purpose of highlighting the variety of services and products that form part of the financial markets.

1.4.2 Identification of bank and non-bank activities

From the above, you can see that the list of regulated activities is quite extensive. In the past financial institutions were divided between those undertaking core bank and no-bank activities. With the evolution of modern financial firms, one can see an increasing tendency in firms to combine what would traditionally be deemed banking and non-banking services. However, even with this trend, it is possible to distinguish core bank and non-bank activities.

The hallmark of bank activities is the acceptance of deposits and acting as financial intermediary between depositors and borrowers. This includes dealing with investments as well as managing investments. Advising on investments would traditionally be a non-banking activity; however, with fully grown in-house investment arms in banks, this has become part of the bank package. The same applies to securities. However, financial products like insurance contracts and pension management are traditionally non-banking activities. The fact that these non-bank activities are ultimately linked to a bank or may be taken on by a bank does not make them banking activities. Before the 2008 financial crisis, there was a steady growth of financial conglomerates offering both banking and non-banking services. After the crisis, there was a move back to specialisation, and efforts to ring-fence retail banks and create a clear distinction between retail banks and investment banks.

In summary, therefore, one can say that deposit-taking and offering of bank accounts is the main distinguishing factor between bank and non-bank activities or between bank and non-banking institutions.

1.4.3 Banking risks

Although it has been noted that the modern day financial institution carries out both bank and non-banking activities, there are certain risks which are unique to banks because of their nature. The banking system lies at the heart of a nation's financial system and a systematic examination of the risks they are exposed to is crucial to understanding the core nature and functions of banking.

Amongst financial institutions, banks are in a specific, if somewhat fiduciary relationship, with the public because of the fundamental nature of the traditional banking business – that is, accepting customers' deposits and granting loans to borrowers. Banks borrow money from their customers in the form of deposits in order to lend that money to others. Their profit is the difference between the rate of interest that is paid to them and the rate that they pay to the depositors, less their working expenses. In the words of David Ricardo, 'the distinctive feature of the banker begins as long as he uses the money of others; as long as he uses his own money he is only a capitalist' (Bagehot, 1873: p. 21).

The trouble with the banking business is that it is full of risks, and the banker can provide no assurances that he or she will always return the money to the depositors. You should not forget that from a legal point of view the depositor does not 'own' the money in his bank account. Deposi-

tors have only a contractual claim to be repaid, normally on demand, but unsecured contractual claims are worthless in the event of insolvency. And there have been quite a number of bank insolvencies even in the most prosperous and advanced economies throughout the years, which have rendered the claims of depositors virtually worthless.

Following the destructive force of the financial crisis in Asia, by May 2002 the central bank of Indonesia had closed 70 banks and nationalised 13, out of a total of 237. The non-performing loans for the banking system were estimated at 65–75% of total bank loans at the peak of the crisis and fell to about 12% in February of that year. The banks had closed because their borrowers could not repay the loans and therefore, in turn, the bank could not repay its own lenders (*ie* the depositors). Insolvency was inevitable, and the example illustrates how banks risk the money of other people when they carry out their lending activities.

The collapse of Barings bank in February 1995 attracted wide media attention. Over a course of days, the bank went from apparent strength to bankruptcy. Barings was Britain's oldest merchant bank. It had financed the Napoleonic wars, the purchase of Louisiana and the Erie Canal. What really attracted the world’s attention was the fact that the failure was caused by the actions of a single trader based at a small office in Singapore. The trader was able to get away with his disastrous dealings by keeping his huge losses concealed in two accounts, which were reported to different managers. A lack of checks in the system meant that he was the only person who knew the full picture. The bank went down because the internal processes and control systems were inadequate to deal with the risk of internal fraud and account manipulation.

These two examples help us to understand the nature of banking risks, which in turn emphasise the need and reasons for government regulation. In summary, we can isolate the key risks that banks are exposed to:

- credit risk
- operational risk
- market risk
- liquidity risk
- reputation risk.

Other risks include risk of fraud, legal risk, strategic risk, exposure risks and country risks.

1. First, the Asian financial crisis led to the collapse of several banking institutions simply because their borrowers could not afford the repayment of the loans. This is the concept of credit risk, which represents the most important type of banking risk. Credit risk or default risk is the possibility that a borrower can be unwilling or unable to pay. There are several versions of credit risk. In some cases of international loans to borrowers in foreign countries, the risk of default may be the outcome of government intervention in that foreign

country, such as when for political purposes the foreign government prohibits its own citizens from paying their debts abroad.

2. The example of Barings Bank, which was brought down by the fraudulent activities of a rogue trader, demonstrates the concept of operational risk. In more recent times operational risk includes the possibility that the bank may suffer losses from poor systems of internal control, human error or from a breakdown in a computer system.
3. Increasingly often, banks invest in capital markets and expect to make a profit from the movement in asset prices. Asset prices can go up and down and therefore investments in capital markets carry the risk of losses from undesirable movements in the market price of debt or equity securities. As long as banks limit their activities to accepting deposits and granting loans, there is obviously no element of market risk. However, as soon as they venture into the securities markets, taking positions for their own account (as opposed to acting merely on behalf of their customers), they are invariably exposed to significant market risks. Market risks and the securities activities of banks are pressing concerns for regulators around the world.
4. Another significant source of banking risk is liquidity. Banks need cash to repay their depositors. In most cases, the bank undertakes to repay the deposit on demand – that is, as soon as the customer indicates that he or she wants to withdraw the deposit, in part or in total. The problem here is that the bank uses the money to grant loans to borrowers. So when the bank has converted a large proportion of deposits into loans, it is conceivable that the residual pool of available funds will not be enough to pay back the customers’ deposits in the event of unexpectedly high amounts of withdrawals.
5. Related to the above risks is reputation risk. A bank’s good name is very important and an immeasurable asset. Once a bank loses its reputation, it can trigger other risks may result in panic. Panic can result, for example, in a bank run, which can affect the liquidity position of the bank (Northern Rock).

1.5 Macro–Micro Prudential Regulation and Supervision

In financial regulation, prudential regulation and supervision is concerned with promoting the safety and soundness of financial firms so as to provide the appropriate degree of protection of consumers/customers. The PRA (the Bank of England's Prudential Regulatory Authority) uses a three-pronged approach:

- *Judgement based approach* – determining whether financial firms are safe and sound, provide appropriate protection for customers and meet the threshold conditions
- *Forward-looking approach* – assessing firms not just against current risks, but also possible future risks and, if need be, intervene at an early stage
- *Focused approach* – focusing on those issues and those firms that pose the greatest risk to the stability of the UK's financial system and to consumers.

The goal of the PRA has been said not to seek to attain a 'zero-failure' regime but rather to see to it that in the event of financial failure by a firm, there is minimal disruption to the supply of critical financial services and that the failure does not trigger a chain reaction (contagion) affecting the stability of the financial system.

Micro-prudential regulation and supervision is concerned with safety and soundness of the financial institution. It looks at exposure of the financial institution to exogenous risks. It does not concern itself with endogenous risk and patterns of common behaviour. It concerns itself with the stability of the individual financial firm and the protection of its customers. This may involve:

- certification of those working in the financial sector
- rules governing the holding of assets of a financial firm
- rules of listing, trading and reporting of financial instruments and securities
- evaluating the riskiness of assets.

Macro-prudential regulation and supervision looks at the whole financial sector and the systemic implications of their collective behaviour. It seeks to mitigate risk of the financial system as a whole (systemic risk/contagion). Its main goal therefore is to minimise systemic risk and maintain financial stability. It seeks to internalise and regulate the costs of financial behaviour. This may involve:

- capital adequacy requirements which ensures that firms are well capitalised to withstand financial distress or shocks
- requiring financial institutions to insure or hedge their risks, such as with deposit insurance
- effective diagnosis of systemic risks.

The 2008 financial crisis has demonstrated that micro-prudential regulation is not sufficient to guarantee macro financial stability. More focus has now turned to ensuring that financial firms and the financial system is under both micro and macro prudential regulation and supervision.

1.5.1 Financial risks

We can identify four broad risks that render government intervention in the financial markets, expedient:

- anti-competitive behaviour
- asymmetric information
- moral hazard
- systemic instability.

Anti-competitive behaviour

Governments want to foster competition in financial markets. Competition brings obvious benefits such as improved access to capital for business, cheaper credit and housing loans to consumers, better rates of return on investments and a greater ability to manage risks. Market forces shape competition but they are also likely to create, either intentionally or unintentionally, circumstances where competition is suppressed.

The role of competition regulation is to ensure that these forces operate effectively and are not circumvented by market participants. There are rules designed to prevent collusion, cartels and other forms of anti-competitive behaviour and rules ensuring that the entry into the market and the exit therefrom are free for all market participants.

Asymmetric information

Information asymmetries are inherent in financial markets due to the nature of the products and services involved. Financial products can be described as 'credence goods' – that is, goods the value of which cannot easily be ascertained. For example, many financial products, such as insurance and pension policies, involve consumers entering into long-term contracts, while the value of their investment is determined to a significant extent after the time of sale.

The information about financial products provided by financial advisors can also be difficult to understand and verify. This problem is reinforced by a possible lack of expertise on the side of the customer (particularly retail customers) and deficiencies in the disclosures by firms.

Because of the lack of information and the inherent difficulty in pricing the products offered, a phenomenon that economists call 'adverse selection' is likely to occur. The consequence of adverse selection is that low-quality products drive out high-quality and high-cost products. In brief, this constitutes the well-known problem described by Akerlof in a seminal paper in the 1970s entitled 'The market for "lemons": Quality uncertainty and the market

mechanism'. (Reading this paper is strongly recommended if you have time and access to it; you will find the exact reference at the end of this unit.)

Thus, disclosure of information by financial institutions will never be sufficient to address the problem of information asymmetry. Banks all over the world provide extensive information on the terms and conditions, interest rates, marketing practices and features of bank deposits. But does disclosure of information really address the inherent problem of asymmetric information available to bank managers and ordinary depositors?

Put simply, the depositor's principal question is whether the bank is financially sound, and able to repay the deposit on demand. Ordinary depositors are not able to assess this risk. They deposit their money in the confidence that their money is safe, although in fact the solvency and stability of the bank depends on several factors that are beyond the customer's information and knowledge. This problem is corrected by the regulatory framework which enables state authorities to closely regulate and supervise financial institutions as to their entry into the business, their on-going business activities, their overall risk profile, the nature and amount of their assets and liabilities and so on.

Moral hazard

Closely related to asymmetric information is the problem of moral hazard. In economic theory this arises when a party (in this case a financial institution) is more likely to take risks because the cost of the risk would not be borne by the institution. The underlying principle is that since the financial institution does not bear the cost of the risk, it somehow feels insulated. Put in another way, the financial institution would have behaved differently if it did not have this protection, which acts as a form of insurance.

Moral hazard is linked to the 'too big to fail' argument. According to this argument, regulation shields systemically important institutions against failure. Therefore, regulatory intervention and governmental support for systemically important institutions are highly controversial. The availability of support signals to market participants that they will be able to evade the consequences of excessive risk taking and bad management exactly because of their importance in the financial markets despite the destabilising effects of a potential failure.

Thus, moral hazard and the distortion of market participants' incentives to protect themselves against the risks they undertake need to be considered by regulators and governments before they decide to intervene. The aim must be to achieve the right balance between systemic stability and the responsible participation of the various players in the market. Of course, this is almost never an easy task.

In general, market actors face the problem of asymmetric information *before* they enter into a contract. They do not act under perfect information concerning the features of the product, the financial situation of the debtor *etc.* Moral hazard, on the other hand, becomes relevant *after* the parties have

entered into a transaction (for example, after the investor has purchased shares or taken out an insurance policy). Now each party has an incentive to shirk (*ie* to act in a self-interested way in order to save money, time *etc*) – in particular, if shirking cannot be observed by the other party and does not jeopardise the contract.

Systemic risk

The fourth source of market failure is systemic instability. The financial system is subject to inherent systemic risks. Systemic risk is a phenomenon not limited to the financial system. Perhaps the most natural illustration of the concept can be seen in the area of health and epidemic diseases. In severe cases (such as the Great Plague in the Middle Ages), widespread contamination with a disease may wipe out a significant portion of a population. And that possibility is similar in finance. While contamination effects may also occur in other sectors of the society, the likelihood and severity of its effects in financial systems is commonly regarded as considerably higher.

The fear that the collapse of a few financial institutions can tear down the entire financial system and as a consequence trigger a general economic recession was realised during the 2008 global financial crisis. Insolvency problems of one or two banks and financial institutions triggered a chain reaction leading to failures in other banks and institutions. Sir Edward (Eddie) George, former Governor of the Bank of England, in 1998 described this effect as occurring

> through the direct financial exposures which tie firms together like mountaineers, so that if one falls off the rock face others are pulled off too
>
> Source: George (1998)

Let us give a typical example of how this may happen. Bank A, for whatever reason, defaults on a loan, deposit, or other payment to Bank B, which produces a loss greater than B's capital and forces B to default on payment to Bank C with losses that are larger than C's capital, and so on down the chain. In the event of failure, the interconnectedness of the financial system is what leads to contagion. The realisation that failure of a particular bank increases the likelihood that other banks will also fail, as a result of the existence of a tight network of financial linkages among institutions through the inter-bank market, through the payment system and through the derivatives markets, has long been regarded as a justification for government overview over the entire financial system so that the central bank or other state body may intervene in a timely manner in the event of a crisis.

In the context of the recent financial crisis, let us take, for example, the case of AIG (American International Group Inc.). In September 2008, the US government seized control of AIG, one of the world's biggest insurers, in an $85 billion deal that highlighted the intensity of its concerns about the danger that a collapse could pose to the financial system.

In contrast, in the same year the US government decided to allow Lehman Brothers Holdings Inc., one of the biggest US investment banks, to go

insolvent. The US government assumed that the smaller size of Lehman Brothers and its less significant interdependencies with other firms would allow the authorities to contain the impact of the insolvency. In the case of AIG, the government realised that the company truly was too big to fail.

Its collapse would most probably have triggered large-scale ripple effects with the potential of materially destabilising the entire financial system. Arguably, the Lehman insolvency did have precisely these effects. Accordingly, the decision of the US government not to intervene in the Lehman crisis was harshly criticised in the aftermath of the insolvency. On the other hand, the US government was concerned that a bail-out would merely aggravate the moral hazard problem in the banking sector: if banks could rely on a government bail-out, they would not have sufficient incentive to refrain from excessive risk-taking. In the UK, Northern Rock was 'allowed to go' but the Royal Bank of Scotland was bailed out (Section 1.6 below discusses the globalisation of financial crises).

To summarise, systemic risk constitutes the main externality that provides a justification for externally imposed regulation. Systemic risk arises due to the contagion effects caused by failures or problems of individual institutions. For example, a run on one bank is likely to affect other banking institutions because of the interconnectedness of institutions through mutual exposure and their dealings in the interbank market. The design of deposit insurance schemes and the provision of lender-of-last-resort facilities by central banks constitute key mechanisms for addressing systemic risk.

Reading 1.4

Tucker (2011) 'Macro and microprudential supervision' from *British Bankers' Association Annual International Conference*, London, 29 June.

Now read the speech on regulation by Paul Tucker, Deputy Governor of the Bank of England, which was delivered to the British Bankers' Association Annual International Conference in June 2011.

✍ When you have finished studying the reading, please answer the following questions:

- What is the distinction between micro and macro prudential regulation?
- Critically discuss the various forms of financial risk.
- What is 'information asymmetry' in financial markets and why is it a reason for regulating those markets?
- Define the concept of 'systemic risk'.
- Why are financial systems prone to systemic risk?
- What are the proposed approaches for detecting systemic risk and the regulatory challenges involved?

1.6 The Globalisation of Financial Crises

The booming development of global markets and national economies can sometimes be disrupted by the turmoil and devastation caused by severe financial crises originating in certain parts of the world. Financial crises constitute no rarity in financial markets. This is evident given the long series

of crises, such as the Mexican crisis of 1994, the Asian crisis starting in 1997, the collapse of LTCM in 1998, Brazil's weak foreign exchange reserves in 1998, and the mounting economic problems of Argentina that led to the devaluation of its peso in 2001. As the true impact of these crises was becoming clear in January 1999, *The Economist* in an article entitled 'Time for a redesign?' described the global financial system in the following terms:

> The recent turmoil in Brazil, the depth and spread of Asia's crisis, Russia's chaotic default on its debt and the resulting investor stampede away from risky markets, and the collapse of the hedge fund Long-Term Capital Management are merely the highlights – or rather low points – of an extraordinarily precarious 12 months.
>
> Capital markets proved volatile and susceptible to contagion, and emerging economies suffered the painful consequences. Two-fifths of the world economy is now in recession. Except for Japan, most of the misery is concentrated in the developing world. The sense of crisis is now receding. A global economic meltdown, which seemed possible for a few nail-biting weeks last October, has been avoided. Yet it is widely agreed that this was a narrow escape, and that 'something must be done' to make the global financial system safer, particularly for emerging economies.
>
> Source: *The Economist* (28 January 1999)

Four years down the line, in an article entitled 'A cruel sea of capital', from May 2003, the tone of the argument was less dramatic:

> Financial crises of the sort that hit Latin America in the 1980s, Mexico in 1994 or East Asia in 1997–98 cause recessions equivalent to years of growth forgone. The 1980s were aptly called Latin America's 'lost decade' […] Financial distress is a salient ingredient in Japan's endless economic difficulties, in Europe's current slowdown, in the fragility of America's economic recovery. And if things grow suddenly worse in any of these places, finance will spread the damage far and wide.
>
> So trade in capital is different from trade in goods and services in two main ways: in the scope for getting things wrong, and in the punishment that follows. The first is great and the second is fearsome. It is enough to make a good liberal stop and think. What makes finance so prone to error? Financial markets are asset markets: that is, they are markets for streams of payments spread out over time […]
>
> When you buy an asset you are gambling on the future. Small changes in beliefs about the future can have a surprisingly large effect on the value of the assets concerned. The numbers can seem outlandish, but it is only a matter of the arithmetical relationship between present value, compound interest and future value […] In other words, because asset prices are bets on a distant and uncertain future, they are inherently volatile. Moreover, investors tend to deal with uncertainty in ways that aggravate the problem. If information about underlying value is absent or obscure, they are likely to become preoccupied with the views of other investors. Sometimes, maybe usually, this is a process that uncovers new information and disperses it. Now and then, however, it degenerates into crowd hysteria.
>
> […]
>
> Debts are also a main reason why mistakes in financial markets, when they happen, can have bigger consequences than errors in an economy's less

> excitable parts. Losses may cascade across a series of lenders, many of which may not even have realised that they were exposed to the risk. A surprise that is big enough and bad enough may perturb the mood of self-justifying expectations that had up to then been propping valuations across an entire class of investments, and at worst across the economy as a whole.
>
> A particular risk is that a bank may be threatened with failure as a result of its losses. Banks are intrinsically fragile entities, which is why, historically, they have invested so much in the pretence of security and solidity. They promise to give depositors all their money back on demand. As soon as depositors ask a bank to make good on that pledge, the bank (which retains only a fraction of its deposits in ready cash) goes bust. Depositors at other banks may then want their money back too. And because banks provide the infrastructure of payments services in a modern economy, that comes under threat as well.
>
> Source: *The Economist* (3 May 2003)

The 2008 global financial crisis (GFC) cast fundamental doubt on the suitability of our current financial architecture. It also revealed one of the most important characteristics of financial markets in a globalised world – the high interdependence of financial institutions and the interconnectedness of markets. The distinction between national and international markets has become blurred and the repercussions of a crisis that starts locally are often felt in distant parts of the world.

The crisis started in 2006 with increased defaults in the US subprime mortgage market. By 2007 the prime mortgage markets started experiencing higher than normal defaults too. This resulted in a freeze in private lending in 2008 when the liquidity problems turned into insolvency. This meant that firms were not able to get financing from the financial institutions for their normal operations.

In England, the freezing of the interbank market in 2007 led to a crisis of liquidity at Northern Rock. The bank had to approach the Bank of England (as lender of last resort: LOLR) for a loan. When its customers heard this, panic ensued and it became the first bank in 150 years to suffer a bank run.

The talk then amongst the economics experts both at Wall Street and in London was 'no bail outs'. Northern Rock was taken into public ownership and later sold. In the US, Lehman Brothers collapsed, almost bringing down the global financial system. The governments then decided to take action. AIG (American International Group), another tittering giant, was bailed out in the US. In the UK the Royal Bank of Scotland was also bailed out.

Such credit crises give rise to a vast variety of issues concerning the structure and operations of financial markets around the world. At this stage, it suffices to focus on a particular aspect of the 2007–08 crisis: the interrelations that developed as a result of the on-going globalisation and internationalisation of finance. You need, particularly, to understand that the development of such interconnectedness was a result of the relationships between markets.

1.6.1 Current trends in international financial regulation (post GFC)

Our understanding of the trends and developments in international financial markets is the first step in assessing the 2007–08 financial crisis. The globalisation of markets and the complexity of the financial instruments sold to investors worldwide are two of the basic factors which facilitated the market failures that financial institutions and governments experienced in most parts of the world.

In this section it suffices to make a brief reference to the dynamics that play a role on the global stage and set the scene for the detailed examination of the regulatory framework. As Andrew Crockett, former General Manager of the Bank for International Settlements and Chairman of the Financial Stability Forum, remarks:

> the maintenance of financial stability used to be relatively straightforward in the days when banks and other financial institutions earned protected rents and supervisors and managers could focus on simple risk measures. Over the last decades, the world has become far more complicated. Firms are running more complex risks, sectoral distinctions are blurring and markets are integrating globally. This has made the tasks of authorities responsible for financial stability more difficult to define and execute: there are more parameters to be considered, shocks come from many more corners, and the manner in which supervisory actions affect supervised institutions is far more complex.
>
> Source: Crockett (2001)

This complex financial landscape (which in turn renders financial regulation more complicated and difficult) is the joint product of several market and socio-economic developments:

- the evolving nature of financial risks and activities of financial institutions
- the rapid advances in IT and network technology, which have facilitated the emergence of new products, risks and the cross-border provision of financial services on a global financial market
- sectoral distinctions are becoming increasingly blurred – insurance companies accept deposits, banks provide insurance services, portfolio services and investment services and even supermarkets provide loans and insurance products – some, like Tesco, are even opening banks
- financial markets are now international and global, which enhances competition and makes efficient government intervention more difficult.

Reading 1.5

Now read Emilios Avgouleas study of global financial markets, from *Governance of Global Financial Markets: The Law, the Economics, the Politics*.

Avgouleas (2012) Chapter 2 'Financial markets and financial crises' in *Governance of Global Financial Markets: The Law, the Economics, the Politics.* pp. 21–88.

When you have finished the reading, please answer the following questions:

- What does the credit crisis reveal about the operation of the financial markets?
- What has the recent crisis revealed about the nature of systemic risk and the regulatory failures in addressing it?
- Are there any links between the financial markets and economic activity?
- To what extent do you agree with the statement that major crises will always be a feature of the financial markets?

1.7 Conclusion

There are several important elements of financial regulation that you have studied in this introductory unit. It is important to identify the key issues that are essential for you to understand and to write on:

- concepts of regulation and supervision
- the concept of financial regulation
- fundamental reasons for regulating financial markets
- the costs of regulation
- macro–micro prudential regulation and supervision
- current trends and dynamics in national and international financial markets and their implications on financial regulation and supervision.

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