Licensing Banks: Still Necessary?

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Group of Thirty, Washington, DC

The William Taylor Memorial Lectures 5

This is the fifth lecture in the series dedicated to the memory of William Taylor (1933–1992). William Taylor's career in Washington DC included 15 years at the Board of Governors of the Federal Reserve, where he rose to the position of Staff Director of Banking Supervision and Regulation, and culminated in his appointment as Chairman of the Federal Deposit Insurance Corporation in 1991. The lecture series is intended to honor his long career of distinguished public service and to recognize his dedication to ensuring the strength and stability of the financial system.

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About the Author

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I. Introduction

Financial and technological innovation is fostering competition in the supply of services once provided only by banks. Both facts and ideas are moving towards an erosion, if not an abandonment, of the *principle of licensing banks*. The entry of new players in the business of supplying bank-like products and the increasing reliance on electronic channels for their distribution is challenging the belief that strict controls over entry into the banking business are really needed.

Two different mottos are currently creeping into the debate. The first, "*no regulation*", views technological developments as depriving banks of their special features. It implies that no specific dividing line should be drawn between banks and other corporations, so that any entrepreneur would be left free to enter the market without any public regulation and/or safety net influencing their behaviour and ability to innovate. The Cato Institute, together with George Benston and George Kaufman, can be taken as champions of this line of thought. The second motto, "*let things happen*", can perhaps be inferred from the words of no less influential a person than Alan Greenspan: "*Government action can retard progress but almost certainly cannot ensure it*" and "*…our regulatory roles are being driven increasingly toward reliance on self-regulation similar to what*

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emerged in more primitive forms in the 1850s in the US". According to this view, the rationale for bank regulation should not prevent the private, non-banking sector from trying out new solutions, with a greater role to be played by self-regulation. Both mottos suggest that a new free-banking era seems to lie ahead of us.

In this lecture, I shall argue that the licensing principle should be both restated and strengthened. It has to be *restated* in order to limit public interference in the process of financial and technological innovation as much as possible, and to ensure that end-users will enjoy the full potential benefit of the process. However, it also has to be *strengthened* and implemented on a global scale in order to preserve the ability of our financial architecture to deal with systemic tensions, and to ensure competitive equality among market participants.

More specifically, I am convinced that bank licensing needs to be maintained in order to uphold the *pyramidal* organisation of the financial system, with the central bank at the top as the ultimate supplier of liquidity, licensed banks—as lenders of "next-to-last" resort—on the second level and various non-bank financial institutions on the third level. Banks have a special position because of their function of providing liquidity on demand to the other sectors of the economy, allowing for both credit and debit positions. This function is also a durable one, since the demand for liquidity is not affected by financial or technological innovation. Indeed, I perceive this as the most appropriate definition of the *essence of banking*. Finally, and almost tautologically, non-bank financial institutions can be defined as institutions which, for their liquidity needs, have to rely on support from a bank.

This construction also reflects the different objectives of regulation and supervision as related to the two layers of financial institutions. Owing to the "fragility" of the function of providing liquidity, *systemic* regulation and supervision, including measures to maintain public confidence in the banking system, need to be extended to banks. Banks, as other intermediaries, also need to be subject to *prudential* regulation and supervision, thus reducing the risk of a single institution failing and mitigating the moral hazard effects created by the safety net. *Conduct of business* and *consumer protection* regulations, in addition to requirements related to the disclosure of information, apply to banks as well, although here the approach is largely shared with other financial institutions, and even with non-financial firms. The third layer institutions do not need to be subject to the full range of measures; however, the reasons for licensing and regulating them are beyond the scope of this lecture.

At this point I should like to summarise, and anticipate my conclusion with regard to how best to maintain viable licensing as follows: a regulatory approach mindful of the public interest at stake and friendly to market calls for a combination of two elements. First, reserving the core banking activity, i.e., the provision of liquidity on demand, for licensed and supervised institutions. Second, refraining from placing any binding constraint on the range of financial activities that these institutions are allowed to perform. As I will show, this approach would best accommodate any new forms of *de facto* banking.

I shall begin by examining events and conceptual developments relating to increased non-bank involvement in the activities traditionally dominated by banks, then discuss the arguments which support the special role of bank licensing. After that, I shall go on to explore the problem of maintaining the licensing principle in practice. This calls for an examination of the two issues of the *essence of banking,* which should remain licensed, and the appropriate *scope of other permissible activities* for licensed banks.

II. Facts And Ideas

Traditionally, banking has been seen as a *cluster of products and services*, whose joint supply implied taking a set of different, but tightly bundled, risks. Deposit-taking and the provision of payment services have generally been considered fundamental elements of banking *activity*. Moreover, the ability to meet the financing needs of a wide variety of customers, through day-to-day contacts enabled by a network of branches, has long been interpreted as a special feature of banking *organisation*. Nowadays, we are being increasingly driven by financial innovation and technological change in a world in which such long-standing pillars no longer seem to hold.

Looking at the *assets side* first, we see that new financial contracts (such as derivatives) or modifications of traditional contracts (such as securitised loans) have allowed financial intermediaries to unbundle products and risk profiles that were previously included on the bank balance sheet; bank loans can be embodied in securities and credit and market risks can be traded separately from their underlying assets. The traditionally strict correspondence between the type of financial *contract*, the type of *risk* and the type of *institution* managing it has become more and more blurred. Relevant portions of what was previously considered core-banking business have now become disentangled from banking and are handled by a much larger set of institutions. The evolution of credit derivatives and asset-backed securities, particularly in the United States, provides examples of new ways to disentangle and trade credit risks. As another example, the French *fonds communs de créances* sell units of a composite portfolio of bank loans, thus separating illiquid assets from sight, or very short-term forms of funding, such as deposits.

Turning to *liabilities*, we see that deposit-like products are increasingly supplied by non-banks, which in many cases also provide payment services. *Money market mutual funds* are just one example. In many countries they offer an explicit or implicit par value clause, so that the subscriber is sheltered from adverse market movements. Furthermore, even if the fund needs to rely on a bank to provide cheque-writing and payment services, its products are increasingly perceived as strict substitutes for banking services. These institutions cannot, as far as I know, open credit lines or supply funding facilities to customers. It is possible, however, to use complex financial contracts, incorporated in negotiable securities, that would provide the same service. While money market mutual funds are generally subject to detailed regulations, listing precisely the type of securities in which they can invest, there is nothing preventing a *de facto* supply of banking services. I therefore tend to agree with Ernest Patrikis' opinion that they should be viewed as *"over-regulated, under-supervised banks with no capital"*.

Another development pointing in the same direction is that of *non-financial companies*, such as supermarkets or department stores, supplying accessory financial services to increase the attractiveness of their basic businesses. The cards and the credit facilities offered by such companies are one example of how it has become possible to move into areas of deposit-like products together with payment services and overdraft facilities.

In some countries, the flourishing of *finance companies* also seems to be contributing to the blurring of the distinction between banks and non-banks. On the assets side, finance companies act as a type of specialised credit institution, often supplying short-term funding to the corporate sector. As for the liabilities side, while this used to consist mainly of own funds, bank loans and commercial paper, more recently ever newer funding instruments have been developed. The survey of finance companies conducted by the Federal Reserve shows, for instance, that by 1996 traditional liabilities only accounted for 33.7% of the total (49.5% in 1990), while "debts not elsewhere classified" amounted to 39.3% (32.3% in 1990). The growth of new sources of financing is of course a positive sign of innovative capabilities, and probably most of these liabilities comprise medium-term notes and asset-backed securities. However, once again, these developments seem to foreshadow a scenario in which finance companies come very close to carrying out full-blown banking activity.

The event that poses the greatest challenge to the licensing principle is perhaps the diffusion of *non-bank means of payment and settlement*. Even though payment instruments and the service of settling transactions by transferring assets are still predominantly supplied by banks, no major technical obstacle prevents the future entry of non-banks into this market. Electronic money, used for either face-to-face or internet transactions, has materialised in the two forms of closed and open circulation. While with *closed circulation* the (electronic) money always returns to the issuer after use, with *open circulation* holders use it to settle an indefinite array of transactions, which is very much what happens with banknotes and coins. The main difference between the two arrangements concerns the frequency and value of settlement, which is greatly reduced in the case of open circulation. However, in both cases the issue of electronic money by non-banks challenges the role that banks have traditionally played in providing payment instruments and final settlement of transactions. In some European Union Member States (the United Kingdom, Finland and Luxembourg) and in the United States, electronic money is also currently issued outside the banking system. Closed circulation is adopted in many national electronic money schemes, while the Mondex scheme is a paramount example of open circulation; one that could suddenly spread if it finds favour with the public.

Last but not least, let us consider the revolution in the *delivery network*. The traditional branch is no longer the only place where the bank meets its clients. Customers are increasingly able to access financial services electronically, via computers, mobile telephones and the television. For the bank, the geographical location of the premises is gradually becoming irrelevant, and economies of scale are increasing dramatically due to the size of capital investments required to keep pace with technology and to provide adequate security.

Today, banks outsource some of their activities to technology companies, in order to fully exploit the opportunities offered by *electronic access*. Such companies are gradually developing the infrastructures and the skills that could be used to offer banking services autonomously. At the end of this path, it is quite possible that the master is supplanted by the servant, as the latter has superior technological skills, control of the means of electronic access, and is not burdened by the cost of maintaining both a branch and an electronic infrastructure. Firms which supply and control access to the internet (such as Yahoo, Excite and Microsoft) can significantly drive future market developments.

In addition, the so-called *customer relationship* (i.e., the special assistance that can be given to customers thanks to the intimate knowledge developed through repeated contact), can no longer be considered a distinctive feature of traditional banking. There are already fields of electronic commerce in which sophisticated data-processing capabilities have been developed to the point of allowing the service supplied via the internet to be personalised. The customer is recognised, and they are offered a menu of choices based on their preferences.

Do these actual developments point to a gradual disappearance of the traditional notion and organisation of the core banking activity, namely, as I have said, the provision of liquidity on demand, allowing for both credit and debit positions? I would argue that this is indeed the case. The very term *"non-bank banks"* that is currently used in the debate indicates that full coincidence of the set of activities performed and the license granted has already been disrupted.

There are already non-bank institutions that actually or potentially provide core banking services or their close substitutes. Of course, for the time being, the function of providing liquidity is still dominated by banks; non-banks rely largely on the provision of liquidity by a licensed bank, because this entity has access to central bank liquidity. However, the crucial point is that this licensed entity can be very small compared with the activity performed by the whole group or conglomerate, since the "laws of large numbers and netting" mean that the final settlement is usually only a small fraction of the entire customer credit and debit positions. Hence, this small entity can support a wide range of non-licensed, *de facto* banking services. This practice is already quite significant, and the *public perception* is that core-banking services are produced by non-bank entities. I will return to the implications of this issue later on.

Not only facts, but also *ideas* are challenging firm adherence to the licensing principle. The conviction that we are heading towards an unregulated industry for banking services, where every individual or company can freely enter the market and supply any type of financial contract without undergoing special supervision, is starting to spread. Since Bill Gates identified branch banking with dinosaurs, many have foreseen a future in which banks, especially the smaller local and traditional ones, are driven out of business by unfettered competition from companies which fully exploit the new technological opportunities for efficient collection, management and transmission of information.

As I have said, two types of liberal attitudes are developing. Let me examine them briefly.

The extreme supporters of the *"no regulation"* motto think that there is no longer any special feature distinguishing banks from other financial companies, or for that matter, from any commercial firm. Hence, they suggest that the licensing principle should be abandoned, together with extensive public regulation and the safety net.

This new generation of *free-bankers* often refers to the experiences of the 19th century as a model for the future evolution of the banking system. In doing so they seem to overlook the fact that in the actual experiences of free-banking the special nature of banking had always been recognised. Even though no specific licensing requirements were in place, specific rules were adopted concerning the responsibility of owners in the event of insolvency, the need to deposit securities with a state agency, and sometimes even capital and reserve requirements.

A less extreme version of the *"no regulation"* motto is adopted by those who advocate a re-evaluation of some successful free-banking experiences, such as those of Scotland and of some individual states in the US. From this standpoint, historic free-banking can help to provide an understanding of what may happen when financial and technological innovation erases the exclusive role of central banks as suppliers of high-powered money. Mervyn King has recently argued that owing to developments in computing power and electronic transfers of wealth *"there is no reason … why final settlement could not be carried out by the private sector without the need for clearing through the central bank"*. In a world of competing private payment instruments, very much resembling a pure exchange economy, there would be no room for a monopolist (the central bank) to decide who should be allowed to have access to the business.

A more pragmatic approach follows the *"let things happen"* motto. This approach focuses on the risks of regulatory interference in the innovation process. Followers of this approach seem to be enjoying growing support for the ideas of letting new products and distribution channels develop freely and of relying as much as possible on the ability of market participants to adopt self-regulation. In order not to distort private incentives, so they say, public regulation should be seen as an *ex post* intervention, to be activated only if and when systemic problems arise. In Alan Greenspan's view, *"the private sector will need the flexibility to experiment, without broad interference by the government"*. Therefore, non-banks should be allowed to devise new solutions and to compete with banks as far as possible, without strict implementation of the licensing principle.

III. Why Licensing?

At the end of the path foreshadowed by these facts and ideas, bank licensing would vanish. It is somewhat surprising, to my mind, that public debate, in both academic and political circles, has so far devoted only limited attention to a careful appraisal of the advantages and disadvantages of this ultimate implication. In order to determine whether it is desirable to advance further towards such a situation, let me turn from the facts and ideas working towards an erosion of the licensing principle to the arguments in favour of firmly preserving it.

First, I shall deal with the arguments put forward by the supporters of free-banking, since devices for screening the institutions accessing the market also naturally emerge if there is no public regulation. Actually, once licensing by public authorities is not used as a rationing device, it is likely to be more respectful of market outcomes than the typical “club” rules prevailing in a free-banking world. Second, I shall argue that there are good reasons for licensing, in so far as it allows banks to be distinguished from other financial and non-financial companies, and a special role in the institutional framework to be attributed to them, aimed at safeguarding financial stability.

Ideological disputes, in which free-traders and supporters of public intervention are set against each other, do not help when the issue of licensing is addressed. As a matter of fact, I am convinced the regulatory framework that has gradually developed in the last ten to fifteen years is not so distant from the *"historic free-banking"* experiences. As I have already mentioned, in those experiences the special nature of banking activity was also widely recognised as a rationale for their specific regulation. Moreover, the key instruments then introduced to limit the effects of bank failures were not so far removed from the present ones.

In historic free-banking, banks were generally required to deposit high-quality bonds as collateral to redeem their liabilities at par value in case of difficulties. This constituted a type of compulsory insurance aimed at protecting note holders, along much the same lines as present deposit insurance arrangements. Another pillar of free-banking regulation was a form of unlimited, or partially limited, responsibility on the part of bank shareholders. These arrangements stemmed from the acknowledgement that bankers may be inclined to gamble with depositors' money, especially when business perspectives start to look bad, since limited responsibility would protect them from excessive losses. Modern capital requirements fulfil the same function, aligning as far as possible the incentives of bank owners and managers with those of depositors, and ensuring that a sufficient buffer of own funds shelters the bank from unexpected losses.

Of course, the difference (which is certainly not irrelevant in the context of this lecture) is that in historic free-banking, entry into the market was *not* regulated, and banking institutions had *no* access to the liquidity support of central banks. However, if we take a closer look at the free-banking experiences, we see that in many cases private arrangements have spontaneously emerged to fulfil the same function. In order to economise on liquidity needs and to cope with liquidity strains, associations (i.e., clearing houses) were frequently created to clear cheques and provide emergency liquidity assistance to members. These associations extended membership only to banks with adequate capital and required a membership fee. They monitored the behaviour of their members through regular audits, used sanctioning powers on imprudent behaviour that was damaging to other members, and had the power to expel members. Thus a procedure of *"licensing plus supervision plus liquidity support"* emerged as a natural device to cope with the typical problems encountered by banks because of their special role.

The problem with these *club-type* arrangements was that, being collusive in nature, they artificially created a tiered system ranging from first-class banks running the clearinghouse, followed by other minor members, to the "underworld" of non-members. Hence, as Fred Hirsch has argued, in a system without a central bank there seems to be a tendency towards concentration and an oligopolistic structure, which can generate anti-competitive behaviour. Furthermore, the high number of cases in which the suspension of convertibility had to be declared indicates that the ability of these private arrangements to cope with major liquidity needs in times of stress was limited. Thus the advent of public involvement in the licensing process was a way of preserving the screening function of the clearinghouses, while amending the drawbacks arising from their private nature.

It is true that public control of entry also has its shortcomings. In the aftermath of the crises of the 1930s banking legislation was substantially tightened, thus establishing an *oligopolistic structure* in which sufficient generation of extra profits would cushion the industry against losses. Moreover, a variety of public goals were pursued, heavily influencing the allocation of credit and the structure of the financial system. Extensive reliance on conduct regulations, such as price and interest rate controls, credit ceilings, restrictions on permitted activities, and limits set on branching, seriously affected the business opportunities of financial institutions. In most countries these controls involved an external assessment of the needs of the markets and a sort of social planning that impaired competition and artificially raised banks' charter values.

We now know that, in the long run, this approach proved to be not only costly and inefficient, but also increasingly ineffective, as market participants found ways to circumvent restrictions. However, in recognising the drawbacks of past regulatory approaches and amending their inefficient components, we should be very careful not to lose other components which remain valid. We should not, as the saying goes, throw the baby out with the bathwater.

In recent years public regulation and supervision have gradually adopted and strengthened a *market-friendly attitude*. Substantial progress has been made in devising regulations that mimic market functioning and rely on incentives instead of forcing a particular market outcome. Prudential and information requirements have gradually become the pillars of the regulatory framework: the former including, for instance, capital requirements and large exposure limits, and the latter defining the types of information to be provided to market participants in order to improve market discipline.

Regulation and supervision have also been geared towards ensuring efficient risk management by the banks *themselves.* The complexity of the risk profile of each institution and the high speed at which the positions of financial markets and banks change make uniform and simple regulatory formulae increasingly ineffective and even distortionary. The “internal models” approach, adopted for market risks by the Basel Committee on Banking Supervision in 1997, was a significant step away from controlling transactions and risk positions, towards monitoring the way in which business activity is conducted. The further work now under way on revising the Capital Accord also with respect to credit risk is proceeding along the same route.

Strict adherence to the licensing principle is fully compatible with the promotion of competition and wide access for new entrants. Indeed, licensing does not have to be, and should not be, intended as a public rationing device. It is true that the rationing of new licenses has been practised in many countries for many years. However, today, controls on entry into the banking market focus increasingly on minimum initial capital requirements and on an assessment of the quality of managers and relevant shareholders. The screening of the quality of shareholders and managers is similar to that practised in other professions, such as for architects or medical doctors, where customers are unable to assess the qualifications of the supplier. If properly exercised, these controls do not prevent any sound banker from entering the market.

Should, then, public authorities take another step backwards, leaving the responsibility of controls to the industry itself? My answer is that *self-regulation* is necessary and desirable, but cannot be a substitute for public regulation and supervision.

Today we can see the efforts that are being made by the industry to promote best practices for risk management among market participants. A recent example is provided by the recommendations of the Counterparty Risk Management Policy Group, concerning the management of market, credit and liquidity risk. I am firmly convinced that these initiatives are useful when they anticipate and complement public policy measures. Indeed, regulators should rely as much as possible on the self-defence mechanisms which can be devised by market participants. Self-regulation, however, does not supply sufficient protection against systemic disruptions, and its intensification, although welcome, cannot allow supervisors to relinquish their responsibilities. As a matter of fact, the recent reform of financial supervision in the United Kingdom was also a correction of the shortcomings of a fragmented world of self-regulatory bodies.

The industry cannot take into due account the negative externalities of a crisis which can extend well beyond the boundaries of the set of "member" institutions. Moreover, the knowledge that public authorities are not in a position to stick to a "no involvement" stance if confronted with a major breakdown might lower the incentives to take, in a timely fashion, all the measures needed to curb risk-prone behaviour. Further, even more important in the field of licensing practices, self-regulation is likely to impose even stricter access requirements, since incumbent players have a collective interest in limiting competitive pressures from new entrants. Ultimately, *public* regulation and supervision are rendered necessary by the fact that simple, voluntary co-ordination among market participants is unlikely to correct a market failure.

Let me now turn to the second set of arguments, relating to the need to preserve the special position occupied by banks in our financial architecture.

As shown in the short overview on the free-banking era, the licensing principle emerged historically as a fundamental tool to identify the institutions that were granted access to the liquidity support of central banks. This evolution gradually produced a layered financial architecture, a sort of *pyramid* with the central bank at the top, licensed banks subject to specific regulation on the next level down, and other financial, non-supervised institutions one further level down. Thanks to this organisation, the financial system proved increasingly able to take on greater amounts of risk, while limiting the scope of systemic disruptions.

Even in very different institutional frameworks, the licensing procedure always plays a central role in identifying the institutions responsible for providing liquidity to other intermediaries and to the economy as a whole. It is aimed at screening high-quality institutions, which will then be subjected to extensive prudential monitoring. This special regime is warranted since these "elect" institutions enjoy the insurance supplied by the safety net. The possibility of having access to central bank liquidity if the need arises, and the explicit or implicit public coverage of their liquid liabilities, helps to foster the confidence of the general public in their viability, thus favoring an easier funding of their activities.

When the central bank is entrusted with supervisory responsibilities, the selection of counterparties for monetary policy purposes and the set of licensed banks tend to coincide. When this is not the case, the central bank itself has to choose its counterparts carefully, relying on criteria that allow safe and prudent institutions to be singled out. This "quasi-licensing" by central banks is often accompanied by some sort of counterparty monitoring, which in certain institutional settings goes so far as to include on-site inspections. In screening the eligible institutions, the central bank has therefore another "key to the door", which might prove valuable in amending the shortcomings of an increasingly relaxed attitude by supervisors. However, this might be insufficient if much of the *de facto* banking activity is in the non-bank components of the group, with the licensed entity deprived of any real function apart from accessing central bank liquidity. In any case, the procedures proposed by supervisors and central banks should largely contribute to the same goal: the design of an institutional framework capable of limiting the likelihood of systemic crises.

Recent experiences show that, notwithstanding the impressive progress that we have recorded in financial practice, *systemic crises* are still a real threat. The development of new instruments, such as OTC derivatives and structured notes, has greatly increased the ability of financial institutions to leverage capital positions. The episodes involving highly leveraged institutions, like LTCM, and more generally the disturbances that took place in 1998 after the Russian crisis, show that high leverage may well exacerbate the adverse impact of a shock.

In the aftermath of the recent crises, many observers have advocated an extension of regulation and supervision and a specific licensing procedure for highly leveraged non-bank institutions. Others have taken the view that banks, as licensed and regulated "core" intermediaries, can deal with the problems posed by highly leveraged institutions, supplying liquidity when needed and carefully monitoring their non-bank counterparts. Without going into the details of this debate, it has clearly confirmed the need for a regulated and supervised set of institutions.

Numerous examples show that adverse movements of financial market prices have caused stress at non-bank financial institutions, with the banks acting as *lenders of next-to-last resort* to channel liquidity where it was most needed. This is exactly what gives banks a special position in the financial structure and explains why bank stability is so relevant.

Systemic crises may originate outside the banking system and do so with increasing frequency. Thus, regulation and supervision of financial institutions are now extended well beyond the boundaries of licensed banks, and are sometimes also coupled with some form of public insurance. However, if we look back at the episodes of turbulence over the last decade, a striking regularity is that difficulties assumed systemic relevance only when and where the banking system was fragile. When turbulence occurred outside the banking system it could be managed if banks were in a position to support the liquidity needs of other intermediaries, letting those that were insolvent face their own destiny and mitigating the risk of the whole market collapsing. Crises *not* involving banks or a disruption of the monetary process—what Anna Schwartz has called “pseudo crises”—have had few systemic implications. The collapse of the junk bond market or the standstill in the commercial paper market, to give just two examples, did not jeopardise the overall functioning of the financial system. When, however, the banking system itself comes under pressure, we are still confronted with a marked need for public intervention.

Strict enforcement of the licensing principle in banking is essential for the survival of the present organisation of the financial system in which institutions are seen as being on different levels, with the central bank providing ultimate insurance against the risk of meltdown. If the principle were abandoned or seriously eroded, one of the very foundations on which market economies have prospered for about a century would be undermined and the resilience of such economies to serious financial stress would again become doubtful.

In fact, if non-licensed and non-supervised entities assume a relevant role in providing full-blown banking services, the ability of the central bank to cope with systemic disturbances may well be jeopardised. Moreover, a central bank liquidity guarantee, and hence a public safety net, would be unduly broadened beyond the scope of supervised and regulated intermediaries. The well-known moral hazard arguments, calling for adequate regulation and supervision whenever a safety net is provided, would be disregarded, with adverse consequences for the overall amount of risk-taking in the financial system.

Eventually, it all boils down to a question of confidence. If the licensing principle were significantly relaxed, public regulation and supervision would not survive. The coherence between the activities performed, the controls exercised by public authorities, and the insurance coverage would be broken.

The general public would clearly perceive that banking activities are carried out by entities that are not licensed or supervised as banks. This could lead to a loss of confidence in the financial system and in the ability of the institutional framework to deal with threats to stability.

To sum up, licensing is an essential prerequisite of public regulation and supervision. It represents a building block of an institutional framework aimed at containing the scope of systemic risk, organised in different tiers of institutions and attributing to banks a special role in providing liquidity support. It is consistent with a policy aimed at enforcing good market practice and limiting moral hazard related to the safety net. Finally, as the experience of the last decade shows, it is not an impediment to financial innovation.

I do not advocate defensive regulation, erecting insurmountable barriers to entry for new players in an attempt to save banks from extinction; my point is simply that, when such players conduct banking business, they need to be licensed as banks.

IV. What Is Special About Banks?

Up to this point, I have spoken about licensing banks as if there were no controversy about what a bank is. We all know, however, that this is not the case. Of course, it would be impossible to be strict on licensing if there were no clear and enforceable definition of a bank. Thus, before discussing the options available to ensure appropriate licensing, we obviously need to be more precise in defining activities that require a bank license. In this context, two questions need to be distinguished. First, what is the *essence of banking*, i.e., what is necessary and sufficient for a business to be considered a bank and, therefore, to be subject to a licensing procedure? Second, what is the appropriate *scope of banking*, i.e., what other activities should a bank be allowed to carry out?

First, the *essence of banking.* The academic state of the art has evolved strongly over time on this question. Anyone who has examined this topic has probably noticed that the individual pieces of literature often deal with only a part of the issue, and that the whole picture appears so complex and changing that it does not distil a clear-cut definition. Yet, what I see emerging from the academic debate is an agreement that the joint supply of deposits and loans puts banks in a unique position to *provide liquidity on demand.* This feature strikes me as a *durable* one.

It was first recognised in the early 1970s that banks are not like intermediaries in other industries which just buy goods (in this case money) from those with excess supply and sell them to those with excess demand, saving on the transaction costs in between. If banks did only that, they would probably face extinction because the progress in the fields of telecommunications and computer technology is greatly reducing the costs of exchanging information between lenders and borrowers. Applying the progress in the economics of information, it was acknowledged that banks transform financial contracts and securities in such a way that overcomes *informational asymmetries* between lenders and borrowers, which are of a fundamental nature, and exist despite technological advances.

There are three basic conclusions from this literature. First, as originally pointed out by Douglas Diamond, banks supply the basic economic services of processing information about borrowers and monitoring their actions, but end up with opaque assets due to the non-marketability of the loan contracts. Second, as shown by Douglas Diamond and Philip Dybvig, banks provide liquidity insurance to depositors, but the maturity mismatch between deposits and loans makes them vulnerable to runs. Third, the possession of private information by banks generates a *logical link,* strongly connecting the assets and liabilities sides of bank activity, which puts banks in a *unique* position to supply liquidity on demand. This function, however, entails systemic risk, since instability at a single bank can spread via contagion, which in turn is the basic justification for the safety net (deposit insurance and lending-of-last resort), regulation and supervision.

It may be interesting to note that the theoretical discussion is broadly in line with a *common factor* of the existing legal definitions of banking activity. Indeed, any legislation in the world would define an institution granting loans on its own account *and* collecting deposits from the public as a bank. This may not be a necessary condition in the existing legal definitions, but it is certainly a *sufficient* one. In addition, the First Banking Coordination Directive of 1977 adopted this definition and prescribed objective criteria for the granting of a bank license. This Directive started the process of harmonising the key prudential provisions in the European Union, and the fact that harmonising licensing was the starting point demonstrates the central role of this regulation.

Can we expect institutions supplying liquidity on demand to remain in place in the foreseeable future? Or, as the *"no regulation"* motto suggests, will innovation on both sides of banks' balance sheets, non-bank settlement through electronic means, and competing payment instruments annihilate the special role of banks, and, with it, the need for regulation and supervision, not to mention central banks' monetary control?

My clear answer is that no annihilation is in sight. To explain why, I should like to refer to the fundamental step forward in the history of financial markets which John Hicks calls the passage from an *"auto-economy"* to an *"overdraft economy"*. By this was meant the passage from an economy in which agents' financing needs can be satisfied only if savings have been previously accumulated to one in which access to liquidity is granted on demand at pre-set conditions through debt instruments. The flaw in the reasoning underlying the *"no regulation"* motto consists, in my view, of overlooking the fact that such passage was *economic* in nature, rather than *technical*. New technologies may modify the *modus operandi* of the overdraft economy, but would not represent effective progress if they were to drive us back to a situation in which overdraft facilities were no longer possible and no institution could offer liquidity on demand to those in need of it. Hence, the demand for liquidity provision in an economy is independent of the financial and technological innovation process.

For example, the impressive growth of bond markets and the spread of securitisation in the United States, even of small-business loans, have supplemented, rather than replaced, the demand for checkable deposits and credit lines by banks. Even in Fischer Black's thought-provoking world without money, where all transactions are settled, perhaps electronically, on privately held accounts, banks are identified as institutions allowing their customers to switch freely from credit to debit positions. This is the essence of liquidity provision. The economic need for it will not be swept away by computers.

To conclude, providing liquidity on demand will remain indispensable for the functioning of a market economy, as it is the core activity of institutions that we should continue to call "banks", and it continues to entail systemic risk. Since it is not possible to supervise an *activity* without referring to an economic *agent* that carries it out, the essential step is to identify such an agent via a licensing procedure and to supervise it carefully. Finally, the whole scope of the activity should be regulated and supervised as a bank, as regulation and supervision should not be limited merely to the "tip of the iceberg", namely, the ultimate settlement with central bank money.

I now turn from the essence to the *scope of banking*. Somewhat surprisingly, this second issue has not been as actively researched as the first. For a long while, the debate focused on the possible conflicts of interest arising from the joint supply of banking, securities and insurance services, while some literature also addressed the issue of separation of banking and commerce. The starting point was the debate on the factors determining the disruptions of the banking and financial systems experienced during the Great Depression. Some theoretical and empirical contributions have challenged the relevance of these factors, arguing that excessively narrow definitions of the permissible activities for each category of intermediaries was preventing competition and hindering the efficiency of the market for corporate control.

However, while a degree of consensus was being reached on the need for broadening the scope of banking activity, Robert Merton and Zvi Bodie argued that in order to eliminate the systemic risks involved in banking, we should impose a *narrow bank* model. This solution would oblige banks to hold their assets in liquid, safe and marketable assets only, thus breaking up the maturity transformation, and hence, the two-sided function of providing liquidity carried out by banks. In so doing, they follow the suggestion of a "100% reserve" banking, put forward by James Tobin and Milton Friedman years before. The "narrow bank" would be closely supervised, while the remainder of banking and financial activity should be completely free of any licensing and supervision arrangement, as well as excluded from any access to the safety net.

I know that it is difficult to argue against a proposal supported by three, and perhaps more, Nobel Prize winners. Yet, on the basis of actual experience and the function of supervising banks, I would advise against following the narrow bank model. In my view, such a restriction would damage the basic economic rationale of banks and break up the present synergies, leading to efficiency losses. This view also has academic support. For instance, Anil Kashyap, Raghuram Rajan and Jeremy Stein demonstrate that, since deposit-taking and providing credit lines can be regarded as manifestations of the same liquidity provision function, there are synergies between the two: the need for liquid reserves and other resources would be greater if the two services were produced separately. Moreover, the way in which financial activity is now structured in complex organisations of financial groups or conglomerates would make it attractive and easy for firms to circumvent this regulation. Finally, in the presence of deposit insurance, narrow banking is also advocated by its supporters as a means of reducing the moral hazard problem of excessive risk-taking by the insured institutions, through restricting the investment options available to them. However, by artificially restricting the margins earned by banks, one could actually increase the incentives to gamble in order to earn higher return on investment. Hence, a narrow banking model would need to be coupled with very strict supervision of compliance with the investment restrictions and the monitoring of any circumventing behaviour.

Paradoxically, adoption of the narrow bank model could lead to a financial environment in which non-bank banks develop even further, and uncontrolled and unsupervised risks spread even more. This is so because, although the core function of banks can be clearly identified, a definite dividing line between traditional banking and other activities cannot be easily drawn. The defence of this frontier would not withstand the endless, and in some respects even socially useful, attempts to bypass regulatory restrictions. In an ideal regulatory arrangement we would indeed offer intermediaries a wide menu of choices, ranging from an all-encompassing banking license to more limited charters, with supervisory requirements graduated according to the systemic concerns raised by each item on the menu. I fear, however, that this ideal arrangement would be very difficult to attain.

V. Essence and Scope

The facts reviewed at the beginning of this lecture show that some toothpaste has already gone out of the tube, or is in the process of doing so. While the ability of non-bank financial institutions to compete with banks on specific product lines is a positive development, allowing the core banking service to be supplied by non-licensed, non-supervised entities would seriously impair the resilience of the financial system. To avoid this undesirable development, an effort is called for to focus on the essence of the banking business, and not on the practical instruments, organisation or technology used in carrying it out. The sooner the supervisory community acts, the lower the costs of the transition will be, and the smaller the probability of having to revert to a heavily regulated environment in order to restore public confidence.

Can a *strategy* be identified to tackle this problem? Even though there is no single, simple "silver bullet" definition of banking activity, common principles can and should be identified and the options narrowed down. Hence, let me now move from the theoretical discussion to a more pragmatic review of the options available with respect to defining (i) the essence of banking and (ii) the scope for other allowed activities. In my view, three options can be identified, representing different combinations of the possible answers to the two questions concerning the essence of banking and the scope of activities. I shall call them the *narrow-narrow, broad-broad* and *narrow-*

broad options respectively, depending on the type of approach applied to the two dimensions.

The *narrow-narrow* option identifies banks as providing liquidity on demand and lists a limited range of other activities that they can undertake. According to this approach the license is seen as a great competitive advantage for banks, which is balanced by restrictions on the scope of business. Banking legislation implemented in the United States in the 1930s, and relaxed only in recent years, is the major example of this approach.

In the *broad-broad* option no specific attention is devoted to confining the essence of banking to deposit-taking or to the joint provision of more than one service, and the scope of banking activity includes a wide range of financial services. In the extreme case, all providers of financial services have to be licensed and supervised as banks, irrespective of their liability structure. French banking law and German legislation before the recent amendments are the best examples of this approach, although they do not extend so far as to include securities dealing among the set of services that only banks can perform.

The *narrow-broad* option entails a definition of banks as institutions which couple deposit-taking with the supply of loans, but it places no restriction on the possibility of offering the whole range of financial services. By contrast with the first option, attention is focused on identifying the activities that can be performed by banks only, rather than on the business barred to banks. Banks co-exist and compete with non-banks in a number of markets, but the joint supply of deposits and loans is reserved for them. They remain the only providers of liquidity for the financial system and the economy at large. The prominent example of this option is the legislation of the European Union. The combination of a narrow essence with a broad scope is achieved by separating the definition of a bank (Article1 of the First Banking Coordination Directive) from the indication of a list of activities (an Annex to the Second Banking Coordination Directive) that different national legislators can allow (narrowly defined) banks to conduct. The list of activities covers a broad range of financial services and it can be updated under a flexible procedure, in order to adapt to changes in the nature and scope of banking services. Mutual recognition by each Member State of the others' licensing processes is coupled with harmonised minimum standards so that the host supervisors can rely on the controls exercised by the responsible home country's authority on the banks operating in their jurisdictions. Although it is referred to as following a *universal banking* model, this approach accommodates differences in national definitions, which can range from narrow-narrow to broad-broad.

The three options can be evaluated on two main grounds: impact on the innovation process and docility to public control. It can be argued that the narrow-narrow model is strongest on the former and the weakest on the latter, the broad-broad model representing the opposite case. The narrow-broad option would be an intermediate one on both grounds.

The broad-broad model would be the least conducive to innovation: if every company introducing new ways of doing old things already had to fear the scrutiny of public authorities and forced absorption into the banking system, it would have weaker incentives to innovate. As an all-encompassing solution, the broad-broad model would naturally be the most forceful approach with regard to the maintenance of public control.

As I have argued, regulations and supervisory tools can be devised to be "market friendly" (as indeed they have been recently), interfering little with the innovation process. However, the US-type narrow-narrow approach is more exposed to the risk of relaxing the public control of banking activity, since it constrains banks' activities, but does not prevent non-banks from providing banking services and actually provides the highest incentives to do so. The EU-type narrow-broad approach is more effective in attributing to banks their specific role in the architecture of the financial system. Whichever approach is taken, the appropriate response to the supply of banking services by non-banks that rely on methods not contemplated in the current legislation is to update the definition of banking so as to include these new methods. The proposal of a EU Directive specifying that the issuance of electronic money should be subject to bank-like licensing and prudential controls is an example of the inclusion, in the realm of supervised business, of all the new tools for delivering *de facto* banking services. In the United States this has been regarded as falling outside the area that requires a bank license.

My inclination toward the composite, EU-type, may not surprise you, as I took an active part in the work which led to the adoption of this model for the European Union. The model has enough flexibility to deal with the new forms of banking, but also has the advantage of supporting a level playing field, and is less prone to circumvention than the narrow-narrow model. The problem with the broad-broad approach is that it does the job of guaranteeing public control too effectively. It can expand the supervisory responsibilities and the scope of the safety net too far, amplifying the moral hazard problem and endangering the effective monitoring of all licensed institutions.

A legislative definition of banking activity is of no help if customers can freely access the services of non-chartered banks incorporated in countries in which the licensing principle is not rigorously followed. This is why a degree of international co-operation is clearly called for. Otherwise the industry would be open to breaches in the licensing requirements and the general public would have no assurance that those offering banking services in the narrow "essence" definition are actually chartered (and regulated and supervised) as banks.

The risk of an international route of circumvention is growing as new technologies progressively allow bank customers to look throughout the world for the best source of services, including retail banking services. The "Core Principles" issued by the Basel Committee on Banking Supervision are the first step in the direction of attributing global reach to the basic principles of the licensing procedure. However, we must go further on this route, agreeing on the *essential* elements of banking activity, continuously updating the definition of the contractual and technical means of fulfilling this function, and above all, sharpening the instruments used to enforce a strict implementation of the licensing principle.

Of course, reaching international agreement about the *scope* of banking activities would be a much more difficult task. In fact, I do not think we really need a monolithic notion of the list of financial services in which banks can be involved. Not even the EU felt this was necessary for its highly integrated Single Market. Actually, regulatory competition can be fruitful in adapting the scope of activities as financial innovation and technological progress open new frontiers in market practices. In any case, what recent experience shows is that if regulators have a restrictive attitude towards the scope of permissible activities, banks can easily circumvent national provisions by opening subsidiaries in other jurisdictions.

As my final point, I would like to stress that one needs to be *strict* when enforcing any adopted licensing principle. What do I mean? I mean that there needs to be adequate imposition of sanctions in the case of *abusive banking*. Whenever a license is abused or there is apparent circumventing behaviour, strict sanctions should be imposed.

VI. Conclusion

In conclusion, we can see that two possible attitudes can be adopted in the face of the challenges posed by technological change and financial innovation. The first is to step back and limit the scope of the safety net to a narrowly defined set of institutions with firm restrictions on the composition of assets and liabilities. The second is to adopt a definition of banking that would allow the licensing and supervisory framework to recognise as a bank every firm performing—with whatever technical means, organisation and contracts—what in economic terms is a banking function.

All the arguments that I have tried to put forward in this lecture suggest that the second solution is preferable. The fundamental strengths of the present financial architecture should be preserved, while moving towards regulation that does not prevent us from reaping the benefits of financial innovation.

For some, my argumentation may have a strong continental European flavour, allowing economic activity to take place only after explicit permission from the public authorities. In the United States, the approach has been to intervene only when public interest is clearly injured. I am an admirer of the US system, which is in many senses a superior system in terms of promoting freedom of enterprise. I think, nevertheless, that in such a systemically delicate area as banking, we cannot afford to adopt the attitude of "letting things happen".

The task of regulators is not, of course, to prevent Darwinian selection in the financial system. Dinosaur banking should not be protected from extinction, but rules have to be laid down to avoid ruthless experiments of genetic manipulation leading us into a world in which no certainty exists about the quality of the product delivered and the reliability of the firm supplying it.

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