

Seminar on Current Developments in Monetary and Financial Law Washington, D.C., October 23-27, 2006

The views expressed in this paper are those of the author(s) only, and the presence of them, or of links to them, on the IMF website does not imply that the IMF, its Executive Board, or its management endorses or shares the views expressed in the paper.

SHOULD CENTRAL BANKS BE ALSO BANKING SUPERVISORS?

FRANCISCO JOSÉ DE SIQUEIRA



Seminar on Current Developments in Monetary and Financial Law

Washington, D.C. - October 24, 2006

http://www.imf.org/external/np/seminars/eng/2006/mfl/index.htm



SHOULD CENTRAL BANKS BE ALSO BANKING SUPERVISORS?¹

THE LATIN AMERICAN EXPERIENCE

On the second half of the nineteenth century, Latin America's financial systems were composed by banks that were not under state regulation. The systems existed basically for commercial transactions. Issuing was multiple and central bank functions were decentralised. As opposed to the European standard, the systems established in Latin America did not gather the economic and institutional bases that were fundamental for the creation of central banks.

After decades of insufficient control of the financial activity, currency instability and the consequent impact on its acceptation as means of payment made it clear that it was necessary to regulate both issuing and credit. In effect, several countries centralized their issuing in the end of the nineteenth and beginning of the twentieth centuries. However, it happened significantly only after World War I, when, at last, the region improved regulation and control of its monetary systems, with the institutionalisation of central banks. The Central Bank of Uruguay, created in 1896 as the first Latin American central bank, represented an exception to all this process.

Organised by the League of Nations, the Brussels International Financial Conference, in 1920, played a decisive role in the creation of central banks in Latin America. In that meeting, countries that did not yet have their own central banks were

-

¹ This article is based on studies produced by Eduardo Luís Lundberg and Ricardo Vieira Orsi, economic analysts at the Central Bank of Brazil.



advised to constitute one. The central bank would be both the basis upon which the monetary systems of the post-war would rise and the trustful mechanism that would facilitate countries' financial relationship. Central bank autonomy from direct influence of national governments was considered a key factor to oppose budgetary deficit tendencies and, consequently, a guarantee against inflation surges.

From 1923 to 1931 central banks were founded in seven Latin American countries: Colombia (1923), Chile (1925), Guatemala (1925), Mexico (1925), Ecuador (1927), Bolivia (1929) and Peru (1931). In contrast with the Central Bank of Uruguay, inspired by the English model, the majority of those institutions was influenced by the Federal Reserve System (Fed) of the United States of America.

Based upon the past experiences of the region, central banks were later established in twelve other countries: El Salvador (1934), Argentina (1935), Costa Rica (1936), Venezuela (1939), Nicaragua (1941), Paraguay (1944), Dominican Republic (1947), Cuba (1949), Honduras (1951), Brazil (1964) and Haiti (1979).

Influenced by the European civil law, the process of gathering classical functions in Latin American central banks was more a result of legal binding than a natural outcome of economic development. Therefore, the decision to add banking supervision to those functions was commonly a mere consequence of each country's circumstances of legislative policy and governmental structure.

Latin American central banks have evolved to adapt themselves to macroeconomic environments in constant change. In principle, this experience has played a key role on founding the basis on which financial systems have developed. Central banks have truly become vital actors in the acceleration of economic



development as well as decisive instruments in rebuilding the financial stability once missed in episodes of monetary expansionism. Yet, in the former century (1970s), they had to face external disturbances resulting from severe instabilities in world economy. In the 1980s, having established themselves as steady organisms in Latin America, local central banks held actual capabilities to withstand the external debt crisis that damaged countries like Mexico and Brazil.

MONETARY POLICY AND BANKING SUPERVISION

Concerning governmental structures of monetary policy and banking supervision management, two different tendencies can be identified. The first one demonstrates a clear aim of diminishing central bank's functions of banking supervision so that central bank autonomy is strengthened. The second one, which seems to be increasingly followed, defends the combination of banking, securities and insurance supervisors in a unique entity as a natural way of improving consolidated supervision of financial groups.

The latter trend argues that banking supervision should not be amongst central bank responsibilities, so that the principal objective of the institution – price stability – is emphasised. Thus, assembled in a different entity, the supervision of banking, securities and insurance would make the activity of supervising groups that act in every segment more efficient.



Reasons for the separation of functions in central banks

Central bank autonomy is a powerful argument for diminishing the monetary authority's responsibilities of banking supervision. Historically, the protection of central bank functions has justified, in different degrees, the political choice towards committing banking supervision to another entity.

Actually, *central bank* and *monetary policy* are concepts of the present time, for, until the midst of the last century, currency was a piece of commonly accepted merchandise (gold or silver). The concept of monetary policy only started to be relevant after the appearance of banknotes and bank money, when currency became a sort of security (banknote) or a bank account balance (bank money) instead of a sort of good.

The adoption and acceptance of fiduciary currencies (legal tender and inconvertible) did not happen peacefully, without traumas. Public opinion, governments and politicians from the developed world did notice the hyperinflation episodes occurred in Germany and other Eastern Europe countries in the 1930s. It had thus justified a last attempt to keep a sketch of the monetary rules of the Bretton Woods system, according to which the North American currency was convertible into gold, whereas the remaining currencies were convertible into American dollars.

The post-war period consisted of a time of great progress and transformation, in part under the strong influence of Lord Keynes. At that time, two distinct schools of economic thought appear in the debate on the role of currency in economy. Keynesians understood that the variation in the offer of currency affected the real side of economy and defended discretionary conduction of the monetary policy, whilst monetarists stated that currency caused little impact in real economy.



It was also a time when the debate on central bank autonomy became significantly relevant, adding to the controversy on regulation or discretion of monetary policy. Having the gold standard system ended, what would be chosen to replace it: a new system or the discretion of an autonomous central bank? The truth is that economists do not have a clear and unequivocal answer for this question. There are theoretical evidences favourable to the establishment of a rule for monetary policy, but there is no consensus on the design of a definitive rule. There are also empirical evidences favourable to central bank autonomy, but there is no consensus on the precise institutional format of this autonomy.

In this context, the trend that seems to prevail is the one of the maintenance of a discretional monetary policy in which the offer of money is graduated according to the necessities of economy. Moreover, it is important to mention that the most democratic societies do not seem to be willing to confer this discretional power to the government, but prefer delegating it to an autonomous central bank. It is a kind of concern or diffidence justified by what is consensus among economists: that monetary stability is an important pre-condition for long-term growth and that inflation is a socially regressive tax.

When analysing the subject of the central bank autonomy, two main aspects must be highlighted. At first, it is necessary to bear clearly in mind that the desired autonomy of the central bank is basically restricted to the monetary policy. Secondly, the autonomy is a matter of graduation, since the world is evidently interdependent. This aspect also brings a democratic concern: how can a governmental institution have a mandate that may eventually conflict with other areas of a



democratically elected government? This way, the autonomy of central banks consists in fact of broader autonomy granted by society to those institutions, aiming at preserving greater stability of prices.

As central bank autonomy is directly associated to monetary policy, the dimensions of the power to formulate and implement this policy is evidently of significant importance. The imposition of other aims and functions to central banks, as those associated to banking supervision, is seen as a harmful factor to their autonomy, because it weakens and compromises the main objective of warranting currency stability. The more exclusive the objective of a central bank is, in attaining monetary stability, the greater its autonomy is regarded. Therefore, this status is not properly reached if the central bank includes functions of banking supervision in the cast of its attributions.

Regardless of the unanimity in recommending that banking supervision should not be part of the cast of attributions of an autonomous central bank, there is no consensus that monetary policy would be actually better if the central bank were not a supervising entity. The last two presidents of the Fed, a widely known autonomous central bank, are eloquent defenders of the maintenance of its power in the area of banking supervision. The arguments of this defense are normally related to macroeconomic concerns on currency and payments systems stability, as well as to the rediscount window.

But not only the typical arguments for the supervision are recalled in order to justify a central bank with supervision attributions. Alan Greenspan, in a statement before the Committee of Banking, Housing and Urban Affairs of the Senate



of the United States of America, in 1994, affirmed that joint responsibility produces better results for supervision and monetary policy than those that would be obtained by a supervisor that had no macroeconomic responsibilities for its actions or an executor of macroeconomic policy with no involvement in overseeing banking transactions.

If the bank of the banks has better information on banks' health, it will certainly avoid providing rediscount to insolvent banks, in order to protect monetary policy. Furthermore, the access to confidential information derived from the activity of supervision may help monetary policy not only because of the important role that banks play in economy, but also because problems in banks usually precede other economic problems. There are clear evidences that central banks' privileged access to confidential information can be substantially useful.

Reasons against the separation of functions in central banks

In the literature specialised in banking supervision there is no clear concern or discussion regarding the attribution of this function to the central bank. In parallel with the complementarity of objectives (currency and banking system stability) there are strong and justified reasons contrary to the complete separation of the central bank and the entity in charge of banking supervision, mainly based on the fact that the central bank is the lender of last resort of the banks. However, as far as moral hazard is concerned, the literature on deposit insurance indicates that the perspective can be quite different.

Commercial banks are not only part of payments systems but, together with other financial institutions, they also intermediate currency and credit of economic



agents, performing operations in which interest rates are formed. Because of this, there is a strong correlation between macroeconomic stability and the health of financial systems. A country's macroeconomic difficulties affect solvency and liquidity of the banking system. Simultaneously, banks and financial institutions in insolvency jeopardise both the sound functioning of economy and the government's economic policy.

In general, banking insolvency is caused by bad managing, assumption of excessive risks, frauds and unexpected changes in economic conjuncture that affect negatively the returns of loans and investments. The latter factor justifies the usual saying according to which the financial system is always a highly sensitive thermometer of a country's economy, for changes in economic conjuncture have direct influence in the solvency of banks and financial institutions due to their operations with clients and the quality of their loans.

Economic policy is also affected by a fragile and debilitated financial system, principally because of budgetary and monetary impacts caused by bankruptcy of banks and financial institutions. In effect, insolvent financial institutions do not respond to stimulations from the market or the economic policy, especially from the monetary policy. The fragility of the banking system is an obstacle to a contracting monetary policy as well, impeding the rise of interest rates. This has been of growing concern in all countries: with recent exponential increase in international financial and economic transactions, the preoccupation with stability and solvency of financial systems has also become an international issue. As a result of economic and financial



interdependence of several markets and countries, the risk of contagion by local problems has substantially increased.

As the creation of an international supervising entity was not viable, the Bank for International Settlements (BIS) instituted in 1977 the Committee on Banking Supervision. It is called the Basel Committee (of which Brazil is signatory since 1988) and has promoted mechanisms of performance and exchange of information among national supervisory bodies, as a form of controlling international financial system through the control of each country's banking system. The Basel Committee has also intended to spread qualitative standards to be followed by banking supervision, together with the recommendation of autonomy of supervising institutions, though without mentioning its opinion about the desirable position of this supervising organism in the government structure (whether within the central bank or out of it).

Nonetheless, the great concern of several countries about the matter of supervision is in fact related to banking insolvency. There are not great problems about the traditional supervision instruments of the banking safety net: licensing, regulation and supervision of financial institutions. The conflicts and difficulties occur when dealing with the remaining instruments of the safety net: the rediscount window, the mechanisms of intervention and liquidation of banks and the deposit insurance. In this case, the classical discussion regarding deposit insurance -i. e., the problematic on moral hazard - might be invoked.

The protection of depositors by means of deposit insurance is frequently condemned under the argument of the moral risk, mainly when the protection is limitless. However, in the absence of the mechanism, the negative effect of the moral



hazard can still be worse, in case great depositors and banks themselves are certain that government will always eventually intervene in these situations, saving everyone. A proper deposit insurance mechanism, besides preventing the government from reimbursing depositors, eliminates much of the discretion in dealing with these cases, thus reducing the moral hazard caused by the repetitive governmental practice of saving all.

In sum, under the perspective of banking supervision, the prudential recommendations are directed towards cooperation between the supervising and the monetary authorities, precisely because the central bank has the duty to be the banks' lender of last resort, one of the classic instruments of the banking sector safety net. In this case, the great concern (remarked by the specific literature on deposit insurance) is the one about moral risk, which recommends avoiding loan authorizations by the central banks to insolvent banks.

Advantages and Disadvantages of Supervision

The most common argument made in favour of the responsibilities for banking supervision and those for monetary policy rests on the existence of conflict of interests between both activities. Evidently the basis of this kind of argumentation is the autonomy of the central bank, that is the preservation of the currency's guardian. The financial rescue of the banks through rediscount windows may sometimes be excessive, compromising the monetary policy. Due to the bankers' influence, the central bank may be also tempted to give priority to the protection of banks, to the detriment of public policy.



Nevertheless, the main conflict is related to interest-rate setting. The central bank, while performing the role of supervisor, might have difficulties in raising interest rates to curb inflation, since this measure could hypothetically harm the banks' financial health. Usually, the greater the operational dissimilarities between the level of short-term or fixed-rate borrowing and long-term or prefixed-interest-rate lending, the greater the potential harm to these institutions, as a result of interest-rate rise.

On the other hand, the argument of conflict is also used to support the maintenance of supervision in the central bank. A central bank without responsibilities towards supervision would tend to neglect the impacts of monetary policy on the banking system and, consequently, on economy. However, the defenders of central bank autonomy argue that, mostly, the difficulties the banking system goes through are not caused by monetary policy, but, amongst other factors, by assets of bad quality, capital insufficiency and occurrences of fraud; in other words, they would be motivated by deficiencies of banks or banking supervision.

Two main reasons are posed by supporters of the maintenance of banking supervision within the monetary authority's attributions. The first one is associated to the strategical role of payments systems – through which systemic risk is transmitted – in economy. This was the main case of Alan Greenspan in 1994, when defending the role of the Fed in banking supervision before the North American Congress. The second one is related to the solution of systemic crises itself, for the central bank is the lender of last resort to the banking system. The practical issue consists of identifying the moment when the rediscount window must be used in the aid



of banks, considering that supervision utilises other mechanisms to prevent inadequate behaviours deriving from moral hazard.

Rediscount is not an absolute right of the banks. The monetary authority must be aware of lending to banks without solvency problems, though in illiquidity situation. This rule is valid for the liquidation of small and medium banks but not for bigger banks, because their bankruptcy can eventually produce systemic risk. Nevertheless, how can the central bank know that a bank is insolvent, if it is not the supervising agency? How can a situation that is not likely to represent systemic risk be identified, reasoning central bank and government assistance?

This hypothesis constitutes the basis of the argument of those who defend the importance of a central bank with supervision powers. They sustain that the central bank, when playing the role of banking supervisor, assumes vital importance in moments of crisis because it can quickly obtain information. It would be impossible to fast transmit the information and diagnosis to paper in order to deliver it to another entity. Moreover, supervision powers allow for a more efficient action of the central bank if compared with a coordinate action between two distinct entities.

On the other hand, the defenders of the separation argue that better information is acquired when different institutions hold those two functions. This argument is explicitly stated by the supporters of central bank autonomy, who also ventilate that in crisis situations the central bank, invested in the role of banking supervisor, would be more vulnerable to all kinds of political pressure. Under the excuse of protecting the guardian of the currency, the defenders of central bank



autonomy argue that the monetary authority should not be involved with intervention and liquidation of banks, so that the central bank reputation is preserved.

An important argument for the separation of monetary and supervising authorities in two distinct institutions is market regulation. This statement is based upon the function of deposit insurance and its relationship with moral risk. If rediscount regulation were harder, in a way that the access to central bank credit was more difficult, it would be probable that banks and the banking supervisor itself, even in moments of crisis, acted more correctly and efficiently as they would be liable for their occasional economic shortcomings.

Nonetheless, the diminishing of the structure in the central bank of banking supervision does not necessarily mean that the moral risk problem is eliminated. The supervising authorities and banks can actually believe that they will be always helped by the central bank and then neglect supervision or market regulation. Such moral hazard can be as high as the size of the bank in difficulty ("too big to fail"), which may compel central bank intervention as a way to prevent systemic risk. This problem can be minimized by a deposit insurance mechanism not managed by the central bank, but it does not entirely solve the question.

Since the end of the last century, economic theory has paid considerable attention to the case of market regulation ("moral hazard") above. There are evidences according to which less bank bankruptcies occur in countries in which the central bank is invested with banking supervision powers. Comparatively, there are also evidences that in these countries less public resources are used in the assistance of insolvent banks, because resources of commercial banks and the central bank are used in larger scale.



The explanation for this evidence can be related to the fact that the central banks with supervision powers can timely face banking problems, therefore not allowing that they assume great proportions.

International empirical evidence, however, seems to indicate a clear trend towards removing banking supervision from central banks attributions and committing it to a specialised institution, as demonstrated in the attached comparative tables² on the institutional organization of central banks and agencies of supervision of the banking system.

THE CORE PRINCIPLE OF CONSOLIDATED SUPERVISION

One of the main contributions of the Basel Committee on Banking Supervision is the recommendation of consolidated supervision over financial conglomerates. As a response to the concern about the soundness of bank financial groups, the first Basel Accord (1975) already brought the principle of consolidated supervision over international financial groups. The issue is so important that it was included in the core principles for effective banking supervision: "An essential element of banking supervision is the ability of the supervisors to supervise the banking group on a consolidated basis". This recommendation comprises non-banking activities, since these activities can expose the banking activity to risks.

² See annex.



Evidently, this concern is not directed exclusively at banking financial activities. It also reaches other sectors of financial systems (securities and insurance markets), for those require capitalisation to face the risks of the activity. Because of that, in 1996, the *Joint Forum on Financial Conglomerates* was established, under the aegis of the *Basel Committee on Banking Supervision*, the *International Organisation of Securities Commissions (IOSCO)* and the *International Association of Insurance Supervisors (IAIS)*.

The *Joint Forum* has already produced several papers with recommendations. The main ones are "Capital Adequacy Principles", "Principles for Supervisory Information Sharing" and "Coordinator", which is a guide for the coordination of joint supervisions over financial conglomerates by different supervisory bodies. It is important to emphasise that, except the defense of a certain degree of autonomy for the supervisory bodies, the entities of international cooperation on the supervision of banking, securities and insurance sectors have avoided to make recommendations referring the political and institutional organisation of each member country and have only dealt with technical and operational aspects of banking supervision.

CONCLUSIONS ON THE SUBJECT

Within the present context, because of the specific circumstances of some countries, it is important to seek for the best model of banking supervision, either within the central bank or out of it. The autonomy of central banks seems relevant, in such



cases, for there has been a strong international trend towards the conception of a simpler bank model, transferring the role of banking supervision to a specialised supervision body. The loss of the supervisory role by the monetary authority, on its turn, seems to constitute a political bargain in favour of autonomy, so that the central bank does not become a fourth branch in the State.

However, banking supervision is usually a burden, which imposes costs, risks and responsibilities. Therefore, it demands different specialisation and qualification from those expected of a classical central bank.

The main concern, though, is about the costs of bank liquidation, principally of big banks that may bring risks to the system, forcing expenses with the recuperation. Such costs may be high and, consequently, if not supported, they may affect the monetary policy. Great part of this concern can be addressed with the maintenance of an adequate deposit insurance system, although the ultimate responsibility would lie with the government and with the central bank, even when the latter is not the supervisory entity, because it will always have the role of lender of last resort to the banking system.

In fact, while there is not a propitious environment to the concession of autonomy to central banks, according to the classical model, in some countries they should perform both the tasks of implementing monetary policy and those of banking supervision. Otherwise, there is a risk of weakening the conduct of monetary policy and the ability of facing systemic crisis.

As a matter of fact, the joint operation, performed by only one body, through the consolidated supervision of financial conglomerates, is a possibility to be



considered by the countries that have not gone through the process of separation of monetary policy and banking supervision, such as Brazil.



Bibliography

- AGUIRRE, Ernesto, "Basic Reforms of the Banking Systems in Latin America:

 Comparative Analysis, Trends and Outlook", Second International Conference on

 Reforms of the Banking Systems in Latin America, Caracas, Venezuela, October

 27.
- ALESINA, Alberto and SUMMERS, Lawrence H.. "Central Bank Independence and Macroeconomic Performance: Some Comparative Evidence". Journal of Money, Credit and Banking 25, May-1993.
- BANK FOR INTERNATIONAL SETTLEMENTS, "Core Principles for Effective Banking Supervision", Basel Committee on Banking Supervision, n. 30, Sep-1997.
- BANK FOR INTERNATIONAL SETTLEMENTS, "Supervision of Financial Conglomerates", Basel Committee on Banking Supervision, n. 47, Feb-1999.
- BRYANT, Ralph G.. Money and Monetary Policy in Independent Nations. Washington: The Brookings Institution, 1980.
- CALOMIRES, Charles W. "The Postmodern Bank Safety Net: Lessons from Developed and Developing Economies", The AEI Press, Washington, D.C. 1997.
- CUKIERMAN, Alex. Central Bank Strategy, Credibility, and Independence: Theory and Evidence. Cambridge, Massachusetts; London, England: The MIT Press, 1992.
- DALE, Richard, "The Structure of Financial Regulation", Fourth Annual Bank Conference on Development in Latin America and the Caribbean, "Banks and Capital Markets: Sound Financial Systems for the 21st Century", San Salvador, El Salvador, June 28-30, 1998.



- DAVIES, Howard, "Building The Financial Services Authority: What's New?" speach of the FSA Chairman at the London Guildhall University Business School, 3.11.1999.
- DEMIRGÜÇ-KUNT, Aslt & KANE, Edward J. "Deposit Insurance: Issues of Design and Implementation Research Proposal" World Bank and Boston College, November 1997 (mímeo).
- DUQUESNE, Pierre. "The Supervisory Role of the Central Bank", in ENOCH, Charles & GREEN, John H. (Eds.). Banking Soundness and Monetary Policy: Issues and Experiences in the Global Economy. Washington: IMF, 1997.
- ENOCH, Charles, STELLA, Peter & KHAMIS, May "Transparency and Ambiguity in Central Bank Safety Net Operations", IMF Working Papers, WP/97/138 International Monetary Fund, October 1997.
- FRANCO, Gustavo H.B., "O BC e a Supervisão Bancária", in Jornal do Brasil, 5.16.99.
- FRIEDMAN, Milton. "Should there be an Independent Monetary Authority", in Dollar and Deficits: Inflation, Monetary Policy and the Balance of Payments. Englewood Cliffs, New Jersey: Prentice-Hall, 1968.
- GOODHART, Charles. The Evolution of Central Banks. Cambridge: The MIT Press, 1988.
- GOODHART, Charles & SCHOENMAKER, Dirk, "Should the Functions of Monetary Policy and Banking Supervision Be Separated?", Oxford Economic Papers, vol. 47, n. 4 (Oct. 1995), pp. 539-60.
- GUITIÁN, Manuel. "Banking Soundness: The Other Dimension of Monetary Policy", in ENOCH, Charles & GREEN, John H. (Eds.). Banking Soundness and Monetary



- Policy Issues and Experiences in the Global Economy. Washington: IMF, 1997.
- HAUBRICH, Joseph G., "Combining Bank Supervision and Monetary Policy", Federal Reserve Bank of Cleveland, Economic Commentary Series, Nov-1996.
- HELLER, H.Robert. "Prudential Supervision and Monetary Policy", in DOWNES, Patrick and VAEZ-ZADEH, Reza (Eds.). The Evolving Role of Central Banks. Washington: International Monetary Fund Central Banking Department, 1991.
- LINDGREN, Carl-Johan, GARCIA, Gillian & SAAL, Matthew I.. Bank Soundness and Macroeconomic Policy. Washington: IMF, 1996.
- LUNDBERG, Eduardo L.. Histórico e Organização de Bancos Centrais monografía do Curso de Formação Superior (CFS) do Programa de Formação de Técnicos do BC junto a FIA/USP. São Paulo, dez-93 (mímeo).
- LUNDBERG, Eduardo L. Rede de Proteção e Saneamento do Sistema Bancário, in SADDI, Jairo (Ed.). Intervenções e Liquidações no SFN: 25 anos da Lei 6.024. São Paulo: Ed. Textonovo, 1999.
- KIDLAND, Finn E., PRESCOTT, Edward E. "Rules Rather than Discretion: The Inconsistency of Optimal Plans", Journal of Political Economy 85, n. 3, 1977.
- PEEK, Joe, ROSENGREN, Eric S. & TOOTELL, Geoffrey M.B.. Is Bank Supervision Central to Central Banking? Federal Reserve Bank of Boston Working Papers 97-3, July 1997.
- RODGERS, Peter, "The Bank of England Act", Bank of England Quarterly Bulletin: May 1998, pp. 93-9.
- SHULL, Bernard, "How Should Bank Regulatory Agencies Be Organized?", Contemporary Policy Issues, vol. 11, n. 1 (Jan. 1993), pp. 99-107.



- SMITH, Vera. The Rationale of Central Banking and the Free Banking Alternative.

 Indianapolis: Liberty Press, 1990 (1st edition: The Rationale of Central Banking.

 Westminster: Kings & Sons, 1936)
- SWINBURNE, Mark & CASTELLO-BRANCO, Marta. "Central Bank Independence and Central Bank Functions", in DOWNES, Patrick and VAEZ-ZADEH, Reza (Eds.). The Evolving Role of Central Banks. Washington: International Monetary Fund -Central Banking Department, 1991.
- SYRON, Richard F, "The FED Must Continue to Supervise Banks", Federal Reserve Bank of Boston, New England Economic Review, Jan/Feb 1994, pp. 3-8.
- TALLEY, Samuel H. & MAS, Ignacio "Deposit Insurance in Developing Countries", IMF Working Papers, WPS 548 International Monetary Fund, November 1990.
- TIROLE, Jean, "The Internal Organization of Government", Oxford Economic Papers, vol. 46, n. 1 (Jan. 1994), pp. 1-29.
- VOLCKER, Paul A., MANCERA, Miguel and GODEAUX, Jean (speakers).
 Perspectives on the Role of Central Bank. Proceedings of a Conference held in Beijing, China, January, 5-7, 1990. Washington: International Monetary Fund, 1991.



ANNEX

Annex: Institutional Organisation of Central Banks and Supervisory Bodies						
			Super	rvision		
Country	Monetary Policy	Banking	Payments System	Insurance	Securities	Comments
Germany	Deutsche Bundesbank	Federal Banking Supervisory Office			Federal Securities Supervisory Office/ Federal Supervisory Office for Securities Trading	CB independent since its creation, in 1957. At present it is part of the European CB.
Argentina	Banco Central de la República Argentina	Superintendencia de Entidades Financieras y Cambiarias	Banco Central de la República Argentina	Superintendencia de Seguros de la Nación (Ministerio de Economia)	Comisión Nacional de Valores	CB independent (currency board). The Superintendencia is directly subordinate to the CB President (Article 43 of Law 24144 of 23.9.1992).
Australia	Reserve Bank of Australia	Australian Prudential Regulation Authority (APRA)	Reserve Bank of Australia	Australian Prudential Regulation Authority (APRA)	APRA and Australian Securities and Investments Commission (ASIC)	CB independent since 1959. 1998 – separation of the banking supervision from the RBA and merger with the Insurance and Superannuation Commission.
Bolivia	Banco Central de Bolivia	Superintendencia de Bancos y Entidades Financieras	BCB's regulatory power	separate	mixed	CB independent since 1995. 1987 – creation of Superintendencia de Bancos y Entidades Financieras.
Canada	Bank of Canada	Office of the Superintendent of Financial Institutions	Bank of Canada	Office of the Superintendent of Financial Institutions	Office of the Superintendent of Financial Institutions	CB independent. 1925 – creation of Office of the Inspector General of Bank (OIGB). 1987 – merger of OIGB with Department of Insurance.
Chile	Banco Central de Chile	Superintendencia de Bancos e Instituciones Financeiras	Banco Central de Chile	Superintendencia de Valores y Seguros	Superintendencia de Valores y Seguros	CB independent since 1989. 1925 – creation of Superintendencia.
Colombia	Banco de la República de Colombia	Superintendencia Bancaria de Colombia (MF)	Banco de la República de Colombia	Superintendencia Bancaria de Colombia	Superintendencia Bancaria de Colombia	BRC independent since 1991, but Ministro de Hacienda presides the Monetary Board (Junta Monetaria – 7 members, 6 from the BRC).

Country	Monetary Policy		Super	vision		Comments
		Banking	Payments System	Insurance	Securities	
Costa Rica	Banco Central de Costa Rica	Superintendencia General de Entidades Financieras		Separate	Superintendencia General de Valores	CB is not independent. The Superintendencia General de Entidades Financieras is a subsidiary of CB.
El Salvador	Banco Central de Reserva de El Salvador	Superintendencia del Sistema Financiero		Superintendencia del Sistema Financiero	Superintendencia de Valores	CB is no independent.
Ecuador	Banco Central del Ecuador	Superintendencia de Bancos	Banco Central del Ecuador	Superintendencia de Bancos	Superintendencia de Compañias del Ecuador	CB is not independent. 1927 — creation of Superintendencia de Bancos after CB split-up.
Spain	Banco de España	Banco de España	Banco de España	Dirección General de Seguros	Comisión Nacional del Mercado de Valores	CB independent (European CB). 1994 – Banco de España independence.
France	Banque de France	Banking and Financial Regulatory Committee (BC)/ Credit Institutions and Investment Firms Committee/ Banking Commission (BC)	Banque de France		Banking and Financial Regulatory Committee (BC)/ Capital Markets Council/ Stock Exchange Commission	CB independent (European Central Bank). 1996 – Banque de France independence.
Honduras	Banca Central de Honduras	Banking supervisor		Banking supervisor	Banking supervisor	Conforme Aguirre (1997).
Hong Kong	Hong Kong Monetary Authority	Hong Kong Monetary Authority	Hong Kong Monetary Authority		Hong Kong Securities and Futures Commission	CB independent (currency board). 1993 – merger of supervision with the Central Bank.
England	Bank of England	Financial Services Authority	Bank of England	Financial Services Authority	Financial Services Authority	CB independent since 1997. 1997 – separation of banking supervision from Bank of England and merger of supervisions.
Ireland	Central Bank of Ireland	Central Bank of Ireland	Central Bank of Ireland			CB independent (European Central Bank).
Israel	Bank of Israel	Bank of Israel	Bank of Israel			CB independent.

Country	Monetary Policy	Supervision				
		Banking	Payments System	Insurance	Securities	Comments
Italy	Banca d'Italia	Banca d'Italia	Banca d'Italia			CB independent (European Central Bank).
Japan	Bank of Japan	Financial Supervisory Agency	Bank of Japan	Financial Supervisory Agency	Financial Supervisory Agency	CB is not independent.
Luxembourg	Luxembourg Monetary Institute	Luxembourg Monetary Institute	Luxembourg Monetary Institute			CB independent (European Central Bank).
Mexico	Banco de México	Comisión Nacional Bancaria y de Valores	Banco de México/ Comisión Nacional Bancaria y de Valores	Comisión Nacional de Seguros y Finanzas	Comisión Nacional Bancaria y de Valores	CB independent since 1993 (constitutional reform). 1995 – creation of CNBV, by merger of banking supervision with securities supervision.
Nicaragua	Banco Central de Nicaragua	Banking Supervisor		Banking supervisor	Banking supervisor	Conforme Aguirre (1997).
New Zealand	Reserve Bank of New Zealand	Reserve Bank of New Zealand	Reserve Bank of New Zealand		Reserve Bank of New Zealand	CB independent since 1989.
Panama	Banco Central	Banking Supervisor		Separate	separate	Conforme Aguirre (1997).
Paraguay	Banco Central	Banco Central		separate	separate	Conforme Aguirre (1997).
Peru	Banco Central de Reserva del Perú	Superintendencia de Banca y Seguros	Banco Central de Reserva del Perú	Superintendencia de Banca y Seguros	Comisión Nacional Supervisora de Empresas y Valores (CONASEV)	CB is not independent. 1931 - creation of Superintendencia. 1979 - administrative and personnel Superintendencia independence.
Portugal	Banco de Portugal	Banco de Portugal	Banco de Portugal			CB independent (European Central Bank).
Switzerland	Swiss National Bank	Federal Banking Commission	Swiss National Bank			CB independent.
Uruguay	Banco Central	Banco Central	Banco Central			Conforme Aguirre (1997).
Venezuela	Banco Central de Venezuela	Superintendencia de Banca y Outras Instituiciones Finanacieras		separate	separate	1993 – creation of Superintendencia

