

# Open Review of Management, Banking and Finance

«They say things are happening at the border, but nobody knows which border» (Mark Strand)

## Raffaele Mattioli: A pioneer of modern banking in post-second-world-war Italy

by **Fabiano Colombini**

**Abstract:** This paper aims to analyse a selection of key points in the banking thought of Raffaele Mattioli by examining the balance sheet reports issued during Raffaele Mattioli's position of managing director of Comit, essentially during the period 1945-1971. The analysis considers the most relevant points in the evolution of banking business and underlines their importance in the development of modern banking.

This investigation focuses on selected quotations of Raffaele Mattioli, drawing attention to the modern criteria that inspired Raffaele Mattioli's thought. His approach prefigured the current and rational criteria to be applied to banks in Italy, Europe and world-wide, with awareness of concepts such as corporate social responsibility, credit and debt relationships, financial transformation, production diversification, liquidity, solvency and investment trusts.

Modernism appears in Mattioli's thought: thus it is important to read his writings in order to appreciate the sound principles he put forward, which still have a crucial role to play for management of a bank in modern times. In a period when financial and bank crises still produce a severe impact on economic growth and bank survival, sound and rational management principles should always be kept in mind.

Raffaele Mattioli, a 20<sup>th</sup> century Italian banker, offers a valid example of good management and stands as an enduring example of a highly competent manager with excellent professional skills and strong moral principles and rectitude. He also offers a highly instructive example for future generations of bank managers in Italy, Europe and throughout the world. His enduring heritage is confirmed by the successful results of the bank during the period of his management and by the highly instructive teachings recorded in his banking reports.

Unfortunately, however, Mattioli's thought is known only to a restricted circle as his writings are in Italian, which does not favour world-wide circulation of ideas and sound and brilliant principles. This paper examines the key points in the banking thought of Raffaele Mattioli, with the aim of underlining the above-mentioned crucial aspects and, especially, of highlighting the significance of his thought in modern times as well as its continued relevance in banking management.

**Summary:** 1. Introduction – 2. Corporate social responsibility – 3. Credit and debt relationships – 4. Financial transformation. 5. Production diversification 6. Liquidity 7. Solvency 8. Investment trusts. – 9 Final remarks

1. The yearly balance sheet reports presented at the General Assemblies of Banca Commerciale Italiana for the 1945-1971 accounting periods highlight the thought of Raffaele Mattioli, an Italian banker, on the themes of banking and financial markets. Mattioli devoted considerable attention to the management aspects of banking, while also offering in-depth reflections on the economic situation of Italy during the period in question. His extremely insightful observations still have remarkable present relevance (Calamanti, 2016).

Considered by “Le Monde” as “the greatest Italian banker after Lorenzo dei Medici”, Raffaele Mattioli made an important contribution to Italian economic development during the late twentieth century post-war period. In particular, he applied the rational criterion of selection in financing the investment projects of Italian enterprises. Furthermore, not only was he a highly illuminated banker with a profound cultural background, but he was also a humanist of great value, strongly committed to the promotion of journals, cultural projects and patronage of the arts and culture.

As a banker, Raffaele Mattioli was a rare example of great skill and competence, far-sighted awareness of the complexities of banking and an all-embracing vision of the field as a whole. He was widely appreciated among throughout many fields of public life as one of the most highly accomplished members of the ruling class that governed Italy during the 20<sup>th</sup> century.

2. With regard to the responsibilities he was called upon to assume in the field of banking, he asserted: “This line of action must be accompanied by a sense of responsibility, which will become the guiding force of a more far-sighted vision of our interest” (Mattioli, 1937).

He further asserted that: “The bank.....is an enterprise *sui generis* which carries on its shoulders a great burden of responsibility. The caution called for can never be exaggerated, its errors are always too severe. Its action must be bold and cautious at the same time, linked to present-day reality but in harmony with the predictable reality of tomorrow” (Mattioli, 1941).

He also makes another significant point: “ We are aware that we bear the responsibility ... for ensuring ... that an increase in our ordinary loans .... is directed exclusively to financing the production process ... excluding categorically any support for speculative positions....” (Mattioli, 1946). Additionally, he emphasises that “we aimed, during the recently concluded accounting period, to support, within the limits of carefully weighed caution, the effort of the Italian economy to achieve a new and balanced situation adjustment” (Mattioli, 1947).

Raffaele Mattioli expressed an idea of the bank that is still of great relevance today, especially in the light of the recent financial crises that have involved numerous countries in a world-wide perspective (Acharya, Philippon, Richardson, Roubini, 2009; Adrian, Shin, 2010; Allen, Carletti, 2010; Bernanke, 2015; Blanchard, Dell’Ariccia, Mauro, 2010; Boccuzzi, 2011; Bolton, Jeanne 2011; Calabria 2009; Capriglione, Semeraro, 2012; Capriglione, 2015; Cassidy, 2009; Claessens, Dell’Ariccia, Igan, Laeven, 2010; Colombini, 2011; Colombini, Calabrò, 2011; Crescenzi, 2010; Davies, 2010; Dowd, Hutchinson, 2010; Duffie, 2010; Eichengreen, 2008; Estrella, Schich, 2011; Financial crisis inquiry report (2011); Franke, Krahen, 2008; Fratianni, 2008; Fornasari, 2009; Geithner, 2014; Goodhart, 2008; Haldane, 2009; Hubbard, 2009; King, 2016; Marconi, 2010; Masera, 2009; Mishkin, 2010; Reinhart, Rogoff, 2011; Shiller, 2008; Sorkin, 2009; Spaventa, 2010; Stiglitz, 2010; Wolf, 2014). He emphasised the important role played by the decisions adopted, which had ensured survival on the market and, at the same time, appropriate financing of the economy.

Solidity and reputation are acquired by the bank through a series of choices made on the basis of solid principles of rationality in management of the bank. Raffaele Mattioli's statements highlight the need to apply rational criteria for sound management of the bank, while at the same time maintaining a positive relation between revenue and costs so that profit is generated.

A further requirement which must be satisfied at the same time is that of corporate social responsibility (CSR), which basically refers to the principle of social responsibility. This concept has recently been included among the objectives to be pursued and, consequently, among the organisational strategies applied in Italian, European and international banks. In defining their strategies, banks are called upon to take into account the principles of social responsibility and to include environmental, social and governance themes as part of their industrial plans. The commitment of the world of banking in favour of sustainable and socially responsible development goes hand in hand with the aim of encouraging growth on the Italian, European and international level.

In effect, banks devote considerable attention to corporate social responsibility as a driver for innovation and growth, as well as for improvement of skills that will boost competitiveness on financial markets in the medium and long term. Thus the aims embodied in CSR imply the need to create new products and business models and, at the same time, to link public interest with the pursuit of the bank's interests.

3. A further observation by Mattioli is of considerable significance: "More than once we have emphasised, in this context, a truth that is self-evident only in its formulation: namely, that the bank exists in order to grant credit. The gathering of funds provides the bank with its raw material. The so-called 'intermediation' sets the two aspects side by side. Considered jointly, it can be seen that the essential function of the bank is precisely that of mediating: mediating in two complementary senses. Namely, mediating between the raising of funds and their utilisation, and mediating between saving and investment. The result of the former type of mediation is the granting of credit, which in turn prompts renewed attention to the raising of funds. The result of the second type – or intermediation, as it is generally called in banking circles, namely the buying and selling of currencies and securities on behalf of clients – is the channelling of some quantities of savings towards the financial market, their integration in the production process by means of the subscription of shares and corporate bonds and government bonds.

It is the responsibility of whoever is in charge of such tasks to keep watch over the two forms of mediation and ensure that rather than becoming unfavourably entangled with each other, they are appropriately harmonised and integrated" (Mattioli, 1961).

In this context, banks and financial intermediaries establish credit and debit relations with a great mass of subjects, for the utilisation and gathering of monetary resources (Boyd, Prescott, 1986; Partington, 1989; Williamson, 1987). The existence of a vast range of credit relations with many different subjects thus calls for the establishment of rational management methods. This, in turn, requires the correct functioning of banks and other financial intermediaries.

A great variety of options is available for composition of assets. To a certain extent this constitutes one of the distinguishing features of banking intermediation, as credit relations can be established with a great mass of subjects (Bencivenga, Smith, 1991; Boyd, Prescott, 1986; Williamson, 1986). At the same time, this also allows application of the law of large numbers in predicting the possibility of default on loans. Similarly, choices for composition of liabilities in banking intermediation also present a large selection of options, debt relations being established with a considerable range of subjects. By the same token, this allows easy application of the law of large numbers for calculating the length of time required for debt repayments.

In short, the extension of the number of subjects and sectors creates the conditions for production diversification, by broadening the series of available instruments, as well as the channels for their placement and the production volumes (Colombini, 2008). Accordingly, the interconnection between loans and debts is associated with the series of credit relations between the bank and a number of different subjects and sectors: this creates the appropriate conditions for stability and development.

Banking intermediaries fulfil the task of creating credit, thereby increasing the potential for expenditure by the various subjects and sectors (Cotula, Pittaluga, 1989; Lindsay, 1970; Pierce, Shaw, 1979; Howells, Bain, 2007). This also distinguishes between the manner of utilisation of the credit, either for consumption or investment, with a range of differentiated implications.

Basically, then, the creation of credit and, therefore, the growth in the lending potential of subjects and sectors is a distinguishing feature of banking intermediaries, in the sense that credit and money creation is a prerogative of banks rather than of other financial intermediaries. It is important to underline the distinction between the behaviour of banks in comparison to other financial intermediaries with regard to the expansion of loans, as the different influx of the monetary base must be taken into account. By the same token, the different proportion of the flowback due to the demand for liabilities resulting from expansion of loans negotiated with the above-mentioned intermediaries must also be considered (Arcelli, 2007; Goodhart, 1989; Lindsay, 1970). Naturally, each individual typology makes a different contribution on the plane of the capacity for expansion and credit creation; consequently, these typologies also differ with regard to the granting of loans in the context of the economic system.

The financial intermediaries create their own financial instruments, essentially in the form of a debt by means of the purchase of money (Campbell, 1982; Gurley, Shaw, 1960; Partington, 1989; Revell, 1987).

The issuing and sale of liabilities is linked to the choice and preference expressed by subjects in surplus, who wish to make decisions concerning the composition of their financial portfolio. Such choices are influenced predominantly in terms of the formation of differentials among the rates of return, although the level of risk and other economic-technical aspects must also be taken into consideration.

It can be noted that the financial intermediaries display differences in return on assets and also in the extent of profit achieved. This implies divergences in remuneration of their liabilities and also a difference in the capacity to attract the preference of subjects in surplus.

Unquestionably, the innovative processes that have been developed have sought to extend the range of liabilities of bank intermediaries, with the aim of adjusting to the trends that have become apparent in the economy. While it cannot be doubted that these innovative processes are of considerable importance in the composition of financial portfolios, this aspect by no means eliminates the important role of differentials in interest rates: rather, in certain cases it reinforces operators' ability to orient their decisions and choices on the basis of better yields, other conditions being equal.

4. Raffaele Mattioli also draws attention to another important aspect: "the raw material of this impalpable manufacture of ours, credit is .....the credit that we, in turn, receive from depositors – crude credit, indistinct or only very minimally refined, and restricted by constraints and requirements of advance notice, which it is our task to set up in a myriad 'made to measure' credit operations" (Mattioli, 1956).

However, as Mattioli additionally points out, "there is always a downside as well. An account in which operations follow one another at a fast pace is certainly a sign of activity: thus it is a demonstration of the usefulness of our function as a bank, and this gives us great satisfaction. But the faster the operations take place, the shorter is the average length of time during which the funds

remain in our accounts, and this is not so satisfactory. And it is even less pleasing when, concurrently, there is a decrease – even though it may be only by a fraction of a second, in the repayment speed at which our loans follow one another” (Mattioli, 1957).

Mattioli also notes that “in the long run, if the two opposite tendencies were to persist and lead to more noticeable divergences than the current minimum percentages, we could be faced with a situation of having to finance increasingly less fluid loans with increasingly volatile funds” (Mattioli, 1957).

In this context, the financial transformation consists partly in negotiation of assets with a longer maturity than that experienced in connection with the corresponding liabilities; it also consists in modification of the respective interest rate attributes, liquidity, divisibility of the amounts, repayment techniques and risk (Edmister, 1986; Gilbody, 1988; Gurley, Shaw, 1956; Greenbaum, Thakor, 1995; Krasa, Villamil, 1992; Mishkin, Eakins, 2006; Podolski, 1986; Saunders, Cornett, 2008; Tobin, 1963; Williamson, 1987). Banks are usually characterised by credit with longer maturities, and higher interest rates, in addition to more limited liquidity and dividability, difference in repayment methods and in risk as compared to those defined on debts to the banks’ own clients (Deshmukh, Greenbaum, Kanatas, 1983b; Diamond, Dybvig, 1986; Podolski, 1986).

In actual fact, it is helpful to distinguish the broker model from the asset transformer model. The broker model is suitable above all in cases where there is a need to find an offset for the exchange of credit, with the aim of expanding assets and liabilities without changing their respective and identical attributes. The asset transformation model, on the other hand, involves the need to obtain better conditions that will satisfy the preferences expressed by subjects in surplus and in deficit, pursuing the development of assets and liabilities and modifications in their respective attributes. From this it follows that the financial transformation and the range of risks are noticeably higher in the second model that has been presented.

The arguments presented above basically reflect the asset transformer model, which corresponds to a more complete concept of the financial intermediary. It is therefore more acceptable also on the basis of events forming part of what can be noticed in concrete experience (Chant, 1987; Deshmukh, Greenbaum, Kanatas, 1983a; Lacker, 1989; Merrick, Saunders, 1985; Niehans, 1981).

Therefore, banks do not merely handle the passage of funds from sectors in surplus to sectors in deficit, but they also deal with changes in maturities and in the overall attributes on liabilities and assets, thereby influencing the range of risks.

It should also be noted that the manner in which the financial transformation function is carried out typically also affects the interest rate risk (Bhattacharya, Foley, 1991; Dermine, 1985; Haley, 1982; Toevs, Haney, 1986). This is a risk that arises from interest rate changes when there is a different rate of repayment on liabilities and assets, or when there are differences in the typologies of interest rates that have been negotiated, or in the periodicity of the flows or the indexing parameters. This is reflected in the oscillations of value of the profit and loss account and of the capital account, with potentially negative effects that may be quite substantial.

In this context, it can be noted that an accentuation of the financial transformation function must be accompanied by adoption of initiatives and policies designed to control the interest rate risk. Accordingly, economic and/or capital-related targets that are considered to be of priority importance, and similarly the appropriate instruments, must be fixed at the same time. The concrete modes of operation of the above-stated function exert an influence both on the rise and the dynamics of other risks, which are basically attributable to the composition of assets and liabilities of banks and of other financial intermediaries.

5. In Mattioli's own words: "The interest margin between the mean return on our loans and the mean cost of our deposits was shrinking uninterruptedly, resulting in a contraction of over a fifth, which has left no trace in our profit and loss account because, in parallel, the overall bulk of our operations was expanding vigorously. This has left no trace on our profit, but we are genuinely confident – indeed, we can say we are 'certain' that it has left a strong mark on the economy of the whole country" (Mattioli, 1962).

In this context, the idea of production in the financial intermediaries can be understood essentially as forming part, on the one hand, of the production approach and, on the other, of the intermediation approach (Berger, Humphrey, 1997). In the production approach, items concerning assets, liabilities and off balance sheet are considered as output, while labour and capital are considered as input. This approach implies an extended concept of production. The intermediation approach, on the other hand, considers the items of assets and off balance sheet to be the output, while labour, capital and liabilities are regarded as input. This implies a restricted idea of production.

It should be noted that in arguments forming part of subsequent passages from the paper in question, the concept of production corresponds to the production approach.

Although intensity of operation varies, the commercial banks pursue product diversification by inserting and expanding balance sheet and off-balance-sheet items. This typically increases the growth of off-balance sheet items (OBSIs). Also pursued, at the same time, is the creation of more intense customer relations and a profit increase.

Naturally, the different importance that can be awarded to the above described instruments is highly regulated. It forms part of the strategies pursued by financial intermediaries for maintaining or expanding their market share. The techniques and manner of implementation of such strategies affect the solidity and future prospects of financial intermediaries.

Banks can implement direct production diversification by augmenting the range of products, sales and revenue, or they can adopt indirect production diversification by obtaining a controlling stake in financial intermediaries, financial institutions or financial companies by increasing dividends and revenue or, in other cases, "agency" production diversification with an increase only in sales and revenue (Llewellyn, 1990; Mottura, 2006).

The need for production diversification is prompted by the rise of stiffer competition, which erodes market share in the traditional areas of loans and debts. Although the individual financial intermediaries are subjected to constraints and specificities, the production range can be amplified by making use of items pertaining to assets, liabilities and off-balance sheet.

The question of whether production diversification will lead to positive or negative results depends essentially on the choices adopted by the management. There can be no doubt that the changes which have come about have led to the problem of the redefinition of business areas, and of the search for appropriate ways of expanding the production volumes. It is indispensable for commercial banks to address these problems.

That is to say, the model of the specialised bank does not preclude such answers, but it reveals rigidities and limits in direct diversification. The model of the universal bank postulates concrete answers and reveals element of flexibility even in conditions of direct diversification. The model of a life insurance company is based on the implied possibility of engaging in direct diversification. The model of a non-life insurance company manifests rigidity and limitations in direct diversification. Likewise, the model of a banking or insurance group does not prevent similar responses, although it is emphasised the indirect diversification. "Agency" diversification can be achieved without any kind of problem in the context of banking models.

Choices concerning production diversification lead to additional costs and revenue and problems concerning the fixing of the prices involved. This leads to the need for proper assessment of the economic aspects.

The existence of financial intermediaries and the extensive diversity within their range of products certainly offer the opportunity for expansion of the range of financial instruments.

Thus there emerges an interdependence between choices made by the financial intermediaries concerning asset and liability classes, in relation to the different modes of financing and investments of subjects and sectors in deficit and in surplus.

The degree of sophistication of the various financial choices is linked to evolution of the financial systems of the different countries. On the other hand, elasticity in the composition of assets is still always an important factor in the adjustments, which have to take a number of different motivations into account, in particular the rate of return in relation to analogous time constraints, risk and taxation. Likewise, elasticity in the composition of liabilities still remains an important factor in relation to similar time constraints as well as similar risk and taxation.

Moreover, the ongoing process of innovation is oriented towards an increase in financial choices, and aims to boost competitiveness. However, research and experimentation with new forms of assets and liabilities must always be pursued with full respect for market requirements.

6. Let us take another look at a significant observation by Raffaele Mattioli. "... liquidity, even though it may be at an elevated level in percentage terms, is not very meaningful unless it expresses an adequate capacity to continue 'granting credit'. That is to say, it is not sufficient merely to be in a condition to cope with the extreme hypothesis of a demand for repayment of a large proportion or indeed the total of all deposits. What is required is to be in a position to cope with the actual day-by-day and fully justified requests for new credit facilitations. A bank that finds itself having to reimburse its depositors is a bank that is going into liquidation. A bank that does not continue to grant credit goes into hibernation. .... Thus in order to maintain a good degree of effective liquidity, a bank of commercial credit has only one means at its disposal: to ensure the rapid turnover of its credits.

Thus the turnover speed of our credits, which is an intrinsic part of the general picture of the economic activity of the country, no longer merely measures our potential for elasticity and liquidity .... Rather, it also reflects, as in a mirror, the liquidity within the market, considered overall, and in the individual sectors and the different areas" (Mattioli, 1956).

A further observation by Mattioli is of considerable interest: "Evidently there has arisen, between ourselves and the choir of those with whom we engage in conversation, a fundamental misunderstanding, a confusion regarding the meaning of a word. Liquidity is not the liquid that stagnates, but liquid that flows. It is the possibility for entrepreneurs to find prompt availability of funds, both fixed and circulating, that they need for their projects. Our interest focuses on this aspect, and on this matter we unfortunately perceive an inadequate response. Liquidity taken in the 'static' sense, (i.e. as the ability to pay one's debts and to 'go out of business' without going bankrupt, *rectius* 'solvency') has a defensive character, it protects and guarantees the *status quo*, it respects and assures balance in the relations of giving and taking. But effective liquidity is the crucial factor, it is essential liquidity that has a dynamic function, and which ensures the continued agility, flexibility and propulsive nature of the productive organism in all its ramifications: this is the liquidity that most keenly interests us" (Mattioli, 1965).

In almost all countries, the bank has to satisfy the requirement of the creation and maintenance of the obligatory liquidity reserves, by applying rates on deposits and, consequently, observing the requirement of liquid resources in its assets.

More generally, the bank does not utilise all the available resources for investments to increase its assets; rather, it creates very liquid instruments for a fraction of the liabilities. This is necessary in order to be able to cope with demands resulting from rapid and unexpected requests for repayment of liabilities, or from temporal mismatches with regard to placing them on the market, or because of sudden rapid expansion of loan expenditure or failure to recover loans.

There is a trade-off between profit and liquidity. The higher the use of monetary resources for risky instruments, particularly with regard to loans to clients, the lower is the level of freely created liquid reserves, and the greater are the risks but also the opportunity to achieve a profit. In contrast, the higher is the proportion of freely created liquid reserves in comparison to loans, the lower are the risks and the opportunity to achieve a profit while facing fewer problems.

Spontaneously created liquid reserves can be distinguished into primary reserves and secondary reserves (Santomero, Babbel, 1997; Kidwell, Peterson, Blackwell, 1997; Kohn, 2004). Primary reserves consist of cash and free deposits held at the central bank, where they contribute to building up immediately available and utilisable resources. Secondary reserves, on the other hand, consist of instruments forming part of the money market that are easily negotiable, thereby increasing the resources that become available subsequent to the negotiation on the market.

The return on freely created liquid reserves is naturally situated at a lower rate than the return on a decidedly more risky class of loans. The level and composition of liquid reserves are the outcome of management decisions.

Liquidity consists in the capacity to repay debts at maturity. This, in turn, presupposes the availability of sufficient monetary resources for current business. Availability is measured by the ratio between liquid assets and total deposits or total assets. Such a concept implies that monetary outflows will occur at various dates when payments fall due. Therefore, this involves the need to identify and maintain proportions among liquid asset aggregates and total liabilities or total assets (Revell, 1975).

The liquidity risk refers to the capacity of a bank to settle its debts at the various maturities. There would be no liquidity risk under the hypothesis that the bank could achieve a perfectly symmetrical composition of its assets and liabilities with respect to the values and maturities involving the classes of instruments that appear in its balance sheet. However, such a hypothesis is rather remote; in addition, it would disregard capital or the eventuality of missed interest payments or missed loan reimbursements. Naturally, the pursuit of liquidity by synchronizing deadlines concerning assets and liabilities would presuppose the ability of a given bank to reconstruct and obtain knowledge of maturities on loans and debts (Revell, 1973; Ricci, 1988).

Let us suppose that a given bank has exact knowledge of its maturities  $t_i$  con  $i = 0, 1, \dots, n$ ; let us also assume that it is capable of replicating and matching values and maturities of assets and liabilities, reducing values as maturities increase with = and . This would achieve a perfectly balanced situation.

Apart from the almost insuperable obstacles in this regard, if many banks and, even more strikingly, almost the total number of banks present within the banking industry of a given country, were to achieve perfect symmetry in maturities and in the values of their respective financial instruments, this would end up by eliminating the financial transformation that is typical of financial intermediaries and, above all, of banks themselves. In such a manner, the supply of liquidity to the economic system would be reduced or annulled (Diamond, Dybvig, 1986; Freixas, Rochet, 1997; Wallace, 1996).

Cases where loan utilisation and conversion of deposits into money involve amounts and times that are not easily foreseeable affect above all the liquidity risk, causing pressures involving monetary outlays.



Since banks make use of the fractional reserve system, there exists no perfect equivalence between volume of sight deposits and volume of liquid reserves. Such a situation leads to problems arising from unexpected, rapid and massive demands for conversion of deposits into money or from unexpected large increases in loan utilisations.

A decline in the general public's trust tends to increase the liquidity risk, which can turn into an insolvency risk. In order to estimate the demand for liquidity, it is necessary to forecast monetary receipts and outflows for given intervals of time, in order to quantify excess outflows as compared to monetary receipts. This allows identification of the appropriate monetary resources to cover imbalances. The estimate in question requires reconstruction of the monetary flows associated with the various asset, liability and off-balance sheet instruments.

In the evolution of the banking business, matching and management of maturities involving instruments dealing with assets, liabilities and off-balance sheet cannot be separated from liquidity management. In particular, interest rate movements influence the conditions negotiated for the raising or use of additional liquidity over time. The very presence of an interest rate risk can be associated essentially with the different maturities: accordingly, the difference in repositioning of the rates on asset and liability instruments should be considered by means of appropriate variations in the types of instruments available to the banks and also in the interest rates.

It can thus easily be seen that there exists a close link between liquidity problems and solvency problems, even if different time periods are taken into consideration.

7. It is interesting, additionally, to examine Mattioli's reflections on the turnover of loans: "Although the turnover of loans may be satisfactory, a certain portion will inevitably slow down from time to time or may even stagnate. The stagnating portion may, in actual fact, be perfectly healthy and remunerative, but it cannot be offset by an equivalent portion of deposits, because the latter – even though they may be bound by various constraints – must always be 'liquid' for the client. .... These portions of 'slow-moving' credit could have the disadvantage of freezing part of the deposits, and would thus reduce, to the same extent, the bank's capacity to grant credit. The bank has to address this situation with its capital, namely the means that cannot be withdrawn upon request and which therefore ideally lend themselves to the task of 'financing' the less liquid part of the loans. In this sense, a bank's capital serves as an "antifreeze" (Mattioli, 1956).

In this framework, capital management is designed to encourage the growth of available resources, reinforce the bank's business wealth and ensure respect for adequacy criteria. Its development and management constitute an intrinsic aspect of the maintenance of solvency and profitability.

The financial structure of banks rests to a large extent on indebtedness, rather than capital. The following categories of indebtedness can be distinguished: short-term, medium-term or long-term maturities, fixed or indexed interest rate and the consequent financial charges that reduce the level of profits; the bank's capital, on the other hand, is characterised by indeterminate maturity, an oscillating rate of return and dividends that affect the distribution of profits that have been obtained.

The peculiarity of the financial structure of banks is associated with the trust and reputation acquired on the market. The acquisition of trust and reputation facilitates the emission and placement of the bank's liabilities: accordingly, indebtedness may rise to considerably high levels. Changes in the financial structure and, therefore, the utilisation of instruments involving debt and capital respond to different needs on the part of the public: essentially, these divergent needs involve insufficient – or, alternatively, a vast quantity – of information concerning the business areas with which a given bank is concerned.

The strategic role of capital arises from the protection awarded to depositors and purchasers of liabilities in the hypothesis of failed repayment of credits, which would reduce the value of a bank's assets and could lead to its insolvency and bankruptcy. Such circumstances are by no means a purely remote eventuality, since there exist well-known problems of adverse selection and moral hazard that can generate negative outcomes and ensuing chain reactions.

Capital is regarded as the bulwark of the stability and solidity of commercial banks for three fundamental reasons: absorption of fluctuations in the value of assets; stabilisation in the sources of financing; absence of contractually established remuneration constraints (Berger, Herring, Szegö, 1995; Pecchioli, 1987; Pringle, 1974; Taggart, Greenbaum, 1978).

Differences among risks, when the latter are linked to different business areas, lead to unequal requirements as regards capital and processes aimed at increasing on capital within banks (Lindquist, 2004). The presence of information asymmetries, the extent of available instruments, the danger of massive and rapid requests to convert deposits into money must be taken into account when a bank seeks to identify the suitable level of capital.

An increase in capital creates the appropriate preconditions for development of intermediate and productive volumes, with positive effects on the formative process of the profit and loss account. This is not all: the increased incidence of capital over liabilities reinforces the solidity of the bank's financial situation and, therefore, the solvency of the individual banks.

A capital increase creates the premises for development of intermediated and productive loans, with positive influence on the formative process of the profit and loss account. Furthermore, the increased incidence of capital versus liabilities reinforces the degree of solidity of the bank's financial situation and, therefore, of solvency of the individual banks.

The increase in capital and in available resources is reflected in the effects on investments, with particular regard to investment in new technologies.

With regard to commercial banks, for a medium and long period time horizon there exists a direct relation, as can easily be noted, between the expansion of capital and that of loans. This progressively enhances available resources, and also ensures protection of buyers of liabilities (Gunther, Moore, 1993; Moore, 1992).

The increase in capital is linked to the following aspects: retention of profits for reserve formation, placement of shares on the market, and creation of subordinate liabilities.

In this context, it is worth taking another look at a meaningful observation by Mattioli on related questions: "We have always made an effort to help small enterprises become larger and large companies to acquire the size that is economically most advantageous for them; moreover, we have not held back from exhortations urging them to discard old clothes" (Mattioli, 1965).

In the activity of screening and monitoring concerning the range of loans, the Comit headed by Raffaele Mattioli aimed to encourage the size development of companies and, at the same time, to create the premises for economic growth. By granting loans to reliable clients the bank pursues its own interests but also pursues the general interest consisting of the reinforcement of enterprises which, more than others, can contribute to economic growth while maintaining solid bases for the future.

8. Another innovative proposal that Mattioli viewed in a favourable light was the possible introduction of investment trusts: "it is also to be hoped that legislation will soon be passed – a comprehensive and adequate legislation – concerning the measures that have long been under study,

which will allow the establishment of investment trusts fully identical with those already in operation in other countries “ (Mattioli, 1965).

In this context, it is worth highlighting that investment trusts would indeed subsequently be introduced in Italy, albeit many years later, during the 1970s. This confirms the intelligent judgment and farsightedness of the proposals expressed many years earlier by the Italian banker Raffaele Mattioli, who sought to modernise and reinforce the Italian financial system.

Investment funds are specialised in the selection of a portfolio of financial instruments. The management pursues an increase in value of the assets and, therefore, aims to achieve positive results in the medium and long term. Additionally, the management pursues growth of intermediated volumes and, therefore, the best distribution of fixed costs. However, it should be pointed out that these objectives raise the problem of rational choices and strategies, in line with principles and techniques that are an intrinsic aspect of the theory of portfolio choices.

The above described processes are carried out mainly by means of technology, which is deployed in order to deal with a considerable volume of fixed costs. At the same time, the technology renders the procedures accessible to the investment funds but not to individual persons.

The investment fund determines the choice, centralisation and collective management of the monetary resources of many small and medium-sized savers: without this fund, such savers would not have been able to participate in diversified portfolios composed of monetary items, bonds, shares and derivatives. Therefore, they would have been unable to benefit from such investment funds, which make it possible to lower or eliminate non systematic risk (Haslem, 2003; Hubbard, 1994; Mishkin, Eakins 2006; Saunders, Cornett, 2008).

The creation and management of a portfolio of financial instruments aim to achieve the optimal risk-return combination which, being situated on the efficient frontier, can succeed in lowering risk while maintaining the same level of return, or vice-versa (Markowitz, 1959; Sharpe, 1970; Tobin, 1965).

The function of diversification can successfully be applied to an appropriately sized portfolio of financial instruments, and has the advantage of making it possible to eliminate non systematic risk, thereby stabilising the return on assets. On the other hand, clients of investment trusts suffer the consequences of the risks inherent in portfolio management: in other words, they have their share of the gains but also of the losses (Mack, 1993; Robinson, Ochel, 1993).

Investment trusts are present systematically on the financial markets and can be considered as equivalent to institutional investors.

The assets are typically composed of securities that give rise to liquid assets, while the capital most frequently consists of tranches of the same unit value, which similarly give rise to liquid instruments.

These circumstances do not imply any particular financial transformation, since extensively similar attributes are present in the transition from asset to capital or viceversa.

A connection can generally be observed between the inflow of monetary resources deriving from the sale of shares, and the outflow resulting from investments. At least in the open model, the investment trust must always be ready to act in accordance with the preferences expressed by the public and thus to purchase (outflow of money) or to sell (influx of money) shares with different risk profiles, and different returns at the time of disinvestment. Naturally, such actions typically have repercussions in terms of contraction or growth of assets.

Securities that are fairly liquid, or securities that involve only scanty liquidity as far as assets are concerned, basically correspond to the choice of either very short or extremely prolonged maturities in composition of the portfolio. Additionally, they reflect a lower or higher risk-return profile.

Furthermore, careful examination of such situations shows that the return is linked to management ability of the portfolio including interest, dividends, increases in value, net of operational costs. A positive result enhances the value of the assets side and, at the same time, of the share values, and shows more accentuated or reduced variability. It follows that there exists a symmetry between oscillations in the asset values and in the share values and, consequently, in the return and the accumulated or distributed remuneration.

Successful management is measured by the rates of increase in value of the assets: that is to say, by the overall return obtainable as a result of the management policies in the respective areas of monetary, bond and share activity. Therefore the investment trusts in question specialise in the selection and management of securities with diverse characteristics and maturities: attention thus focuses on aims involving the growth asset values and of the intermediated volumes, together with period performance, albeit adjusted and interpreted with respect to risk.

These volumes undergo change over time, and reflect subjective conditions of the individual subjects in surplus as regards their preferences concerning composition of their financial portfolio. At the same time, however, the volumes in question also reflect objective conditions of the individual financial markets, and above all the trend of short, medium and long term interest rates.

9. This paper examined the banking thought of Raffaele Mattioli, a famous Italian banker who worked in the twentieth century at Comit in Milan. The banking ideas of Raffaele Mattioli have been extracted from his balance sheet reports drawn up over many years and now kept in the Archivio Storico of Intesa SanPaolo.

His writings clearly highlight the relevance and importance of studying and applying principles for bank management which he addressed in numerous cases and which can be clearly derived from an examination of the topics he addressed and his manner of expression. At the same time, emphasis should also be placed on the upright, highly principled rectitude of the Italian manager Raffaele Mattioli, in running the business of the bank which had experienced the turmoil of the great crisis of 1929.

Raffaele Mattioli showed professional skills at a high level. His writings, documented in his yearly balance sheet reports, reveal solid foundations that enabled him to avert banking crises and, at the same time, to build up a strong performance and reputation. At a crucial time in Italian postwar history, he accepted the responsibility of running a banking business, introducing rational ideas and rational principles that are now the essence of modern banking. His achievements must not be forgotten.

## References

Acharya V., T. Philippon, M. Richardson, N. Roubini (2009), *The financial crisis of 2007-2009: causes and remedies*, in "Acharya V. M. Richardson, (eds.), *Restoring financial stability: how to repair a failed system*", New York, Wiley.

Adrian T., H. S. Shin (2010), *The changing nature of financial intermediation and the financial crisis of 2007-2009*, in "Annual Review of Economics", 2.

Allen F., E. Carletti (2010), An overview of the crisis: causes, consequences and solutions, in "International Review of Finance", 1.

Arcelli, M. (2007), L'economia monetaria e la politica monetaria dell'Unione Europea, Padova, Cedam.

Bencivenga, V.R., B.D. Smith (1991), Financial intermediation and endogenous growth, in "Review of Economic Studies", April.

Berger, A.N., R.J.Herring, G. Szego (1995), The role of capital in financial institutions, in "Journal of Banking and Finance", June.

Berger, A.N., D.B. Humphrey (1997), Efficiency of financial institutions: international survey and directions for future research, in "European Journal of Operational Research", April.

Bernanke, B. S., (2015), The courage to act. A memoir of a crisis and its aftermath, London, Norton.

Bhattacharya, A.K., J.C. Foley (1991), Overview of asset/liability management models and interest rate risk control, in F.J. Fabozzi, A. Konishi (eds), "Asset/liability management. Investment strategies, liquidity requirements and risk controls for banks and thrifts", Chicago, Probus.

Blanchard O., G. Dell'Araccia, P. Mauro, (2010), Rethinking macroeconomic policy, in "IMF Staff Position Note", February 12.

Boccuzzi G. (2011), Towards a new framework for banking crisis management. The international debate and the Italian model, in "Quaderni di Ricerca Giuridica", 71, Rome, Banca d'Italia

Bolton P., O. Jeanne (2011), Sovereign default risk and bank fragility in financially integrated economies, in "NBER Working Paper", 16899.

Boyd, J.H., E.C. Prescott (1986), Financial intermediary-coalitions, in "Journal of Economic Theory", April.

Calabria M. A. (2009), Did deregulation cause the financial crisis?, in "Cato Policy Report", 4.

Calamanti, A. (2016), La Banca di Raffaele Mattioli. Una visione unitaria e sistemica, Torino, Aragno.

Campbell, T.S. (1982), Financial institutions, markets and economic activity, New York, McGraw-Hill.

Capriglione F., G. Semeraro (2012), Crisi finanziaria e dei debiti sovrani. L'Unione Europea tra rischi e opportunità, Turin, Utet.

Capriglione, F. (2015), The EU-wide stress tests: a storm before a "new order" of the financial market. The Italian case, in "Open Review of Management, Banking and Finance", 1.

Cassidy J. (2009), How markets fail. The logic of economic calamities, New York, Farrar, Straus and Giroux.

Chant, J. (1987), Regulation of financial institutions. A functional analysis, in "Technical Reports", n. 45, Ottawa, Bank of Canada, January.

Claessens S., G. Dell'Araccia, D. Igan, L. Laeven (2010), Cross-country experiences and policy implications from the global financial crisis, in "Economic Policy", 62.

Colombini F. (2008), Intermediari, mercati e strumenti finanziari. Economia e integrazione, Turin, Utet, 2008.

Colombini F., A. Calabrò (2011), *Crisi finanziarie. Banche e stati. L'insostenibilità del rischio di credito*, Turin, Utet.

Colombini, F. (2011), *Crisi finanziarie e risk management. Rilievi critici*, in "Rivista Trimestrale di Diritto dell'Economia", 4.

Cotula, F., G.B. Pittaluga (1989), *Funzioni e caratteristiche del sistema finanziario*, in F. Cotula (a cura di), "La politica monetaria in Italia. Il sistema finanziario italiano e il contesto internazionale", vol. I, Bologna, Il Mulino.

Crescenzi A. (2010), *Propagazione ed effetti della crisi finanziaria sull'economia reale*, in Crescenzi A. (ed.), "La crisi mondiale. Storia di tre anni difficili", Rome, Luiss University Press.

Davies, H. (2010), *The financial crisis. Who is to blame?*, Cambridge, Polity Press.

Dermine, J. (1985), *The measurement of interest rate risk by financial intermediaries*, in "Journal of Bank Research", Summer.

Deshmukh, S.D., S.I. Greenbaum, G. Kanatas (1983), *Lending policies of financial intermediaries facing credit and funding risk*, in "Journal of Finance", June.

Diamond, D.W., P.H. Dybvig (1986), *Banking theory, deposit insurance and bank regulation*, in "Journal of Business", January.

Dowd K., M. Hutchinson (2010), *Alchemists of loss. How modern finance and government intervention crashed the financial system*, Chichester, Wiley.

Duffie D. (2010), *How big banks fail and what to do about it*, Princeton, Princeton University Press.

Edmister, R.O. (1986), *Financial institutions. Markets and management*, New York, McGraw-Hill.

Eichengreen B. (2008), *Ten questions about the subprime crisis*, in "Financial Stability Review", Banque de France, 11.

Estrella A., S. Schich (2011), *Sovereign and banking sector debt: interconnections through guarantees*, in "OECD Journal: Financial Markets Trends", October.

Financial crisis inquiry report (2011). *Financial crisis inquiry report. Final report of the National Commission on the causes of the financial and economic crisis in the United States*, January.

Fornasari F. (2009), *I dati e gli insegnamenti della crisi finanziaria USA*, in "Economia Italiana", 1.

Franke G., J.P. Krahen, (2008) *The future of securitisation*, in "CFS Working Papers", 31.

Fратиanni M. (2008), *Financial crises, safety nets and regulation*, in "Rivista Italiana degli Economisti", 2.

Freixas, X., J.C. Rochet (1997), *Microeconomics of banking*, Cambridge (Mass.), MIT Press.

**Geithner, T.F. (2014), *Stress test. Reflections on financial crises*, London, Random House.**

Gilbody, J. (1988), *The UK monetary and financial system. An introduction*, London, Routledge.

Goodhart, C.A.E. (1989), *Money, information and uncertainty*, London, MacMillan.

- Goodhart C. (2008), The background to the 2007 financial crisis, in "International Economics and Economic Policy", February.
- Greenbaum, S.I., A.V. Thakor (1995), Contemporary financial intermediation, Orlando, Dryden Press.
- Gunther, J.W., R.M. Moore (1993), The long-run relationship between bank capital and lending, in "Financial Industry Studies", Federal Reserve Bank of Dallas, n. 3.
- Gurley, J.G., E.S. Shaw (1956), Financial intermediaries and the savings-investment process, in "Journal of Finance", May.
- Gurley, J.G., E.S. Shaw (1960), Money in a theory of finance, Washington, Brookings Institution.
- Haldane A. G. (2009), Why banks failed the stress test, Bank of England, February.
- Haley, C.W. (1982), Interest rate risk in financial intermediaries: prospects for immunization, in "Proceedings of a conference on bank structure and competition", Chicago, Federal Reserve Bank of Chicago.
- Haslem, J.A. (2003), Mutual funds. Risk and performance analysis for decision making, Malden, Blackwell.
- Howells, P., K. Bain (2007), Financial markets and institutions, Harlow, Prentice-Hall/Financial Times.
- Hubbard D. W. (2009), The failure of risk management: why it's broken and how to fix it, Hoboken (NJ), Wiley.
- Hubbard, R.G. (1994), Money, the financial system and the economy, Reading, Addison-Wesley.
- Kidwell, D.S., R.L. Peterson, D.W. Blackwell (1997), Financial institutions, markets and money, Orlando, Dryden Press.
- King M. (2016), The end of alchemy. Money, banking and the future of the global economy, London, Little Brown.
- Kohn, M. (2004), Financial institutions and markets, Oxford, Oxford University Press.
- Krasa, S., A.P. Villamil (1992), Monitoring the monitor: an incentive structure for a financial intermediary, in "Journal of Economic Theory", June.
- Lacker, J.M. (1989), Financial intermediation, optimality and efficiency, in "Canadian Journal of Economics", May.
- Lindquist, K. G. (2004), Bank's buffer capital: how important is risk?, in "Journal of International Money and Finance", April.
- Lindsay, J.R. (1970), Bank and nonbank financial intermediaries and monetary policy, in M.E. Polakoff (ed), "Financial institutions and markets", Boston, Houghton Mifflin.
- Llewellyn, D.T. (1990), Competition, diversification and structural change in the british financial system, in Fair, D.E. , De Boissieu C. (eds), "Financial institutions in Europe under new competitive conditions", Dordrecht, Kluwer Academic Publishers.
- Mack, P.R. (1993), Recent trends in the mutual fund industry, in "Federal Reserve Bulletin", Federal Reserve System, November.

Marconi F. (2010), *Le origini e la diffusione della crisi finanziaria: evidenze teoriche ed empiriche*, in Crescenzi A. (ed.), *“La crisi mondiale. Storia di tre anni difficili”*, Rome, Luiss University Press.

Markowitz, H. (1959), *Portfolio selection. Efficient diversification of investments*, New York, Wiley.

Masera R.(2009), *Financial turbulence and the capital standard paradigm: a sequel*, in Masera (ed.), *“The great financial crisis. Economics, regulation and risk”*, Rome, Bancaria Editrice.

Mattioli, R. (1937), Notes, communications and reports, in *“Archivio Storico di Intesa Sanpaolo”*.

Mattioli, R. (1941), Notes, communications and reports, in *“Archivio Storico di Intesa Sanpaolo”*.

Mattioli, R. (1946), Notes, communications and reports, in *“Archivio Storico di Intesa Sanpaolo”*.

Mattioli, R. (1947), Notes, communications and reports, in *“Archivio Storico di Intesa Sanpaolo”*.

Mattioli, R. (1956), Notes, communications and reports, in *“Archivio Storico di Intesa Sanpaolo”*.

Mattioli, R. (1957), Notes, communications and reports, in *“Archivio Storico di Intesa Sanpaolo”*,

Mattioli, R. (1961), Notes, communications and reports, in *“Archivio Storico di Intesa Sanpaolo”*.

Mattioli, R. (1962), Notes, communications and reports, in *“Archivio Storico di Intesa Sanpaolo”*.

Mattioli, R. (1965), Notes, communications and reports, in *“Archivio Storico di Intesa Sanpaolo”*.

Merrick, J.J., Jr., A. Saunders (1985), *Bank regulation and monetary policy*, in *“Journal of Money, Credit and Banking”*, November.

Mishkin F. S. (2010), *Over the cliff: from the subprime to the global financial crisis*, in *“NBER Working Paper”*, 16609.

Mishkin, F.S., S.G. Eakins (2006), *Financial markets and institutions*, Boston, Addison Wesley.

Moore, R.M. (1992), *The role of bank capital in bank loan growth: can the market tell us anything that accountants don't?*, in *“Financial Industry Studies”*, Federal Reserve Bank of Dallas, December.

Mottura, P. (2006), *Gli intermediari finanziari. Cambiamento, competizione, strategie e modelli istituzionali e organizzativi*, Milano, Egea.

Niehans, J. (1981), *The theory of money*, Baltimore, Johns Hopkins University Press.

Partington, I. (1989), *Applied economics in banking and finance*, Oxford, Oxford University Press.

Pecchioli, R.M. (1987), *Prudential supervision in banking*, Paris, Oecd.

Pierce, D.G., D.M. Shaw (1979), *Economia monetaria*, Bologna, Il Mulino.

Podolski, T.M. (1986), *Financial innovation and the money supply*, London, Basil Blackwell.

Pringle, J.J. (1974), *The capital decision in commercial banks*, in *“Journal of Finance”*, September.

Reinhart C., K. Rogoff (2011), *This time is different. Eight centuries of financial folly*, Princeton, Princeton University Press.

Revell, J. (1987), *Towards a microeconomic theory of financial institutions*, in *“Research Papers in Banking and Finance”*, Bangor, University College of North Wales.



Revell, J.R.S. (1973), *The british financial system*, London, MacMillan.

Revell, J.R.S. (1975), Solvency and regulation of banks, in “Bangor Occasional Papers in Economics”, n. 5, Cardiff, University of Wales Press.

Ricci, R. (1988), *La banca moderna. Aspetti gestionali e tendenze evolutive*, Turin, Utet.

Robinson, K.J., E.F.J. Ochel (1993), Banks and mutual funds: implications for banking and monetary policy, in “Financial Industry Studies”, Federal Reserve Bank of Dallas, December.

Santomero, A.M., D.F. Babbel (1997), *Financial markets, instruments, and institutions*, New York, McGraw-Hill.

Saunders, A., M.M. Cornett, (2008), *Financial institutions management. A risk management approach*, Boston, McGraw-Hill/ Irwin.

Sharpe, W. (1970), *Portfolio theory and capital markets*, New York, McGraw-Hill.

Shiller R.J.(2008), *The subprime solution. How today’s global financial crisis happened and what to do about it*, Princeton, Princeton University Press.

Sorkin A. R. (2009), *Too big to fail*, New York, Viking.

Spaventa L. (2010), Economists and economics: what does the crisis tell us?, in Paganetto L. (ed.), “Global crisis and long term growth: a new capitalism ahead”, Milan, McGraw-Hill.

Stiglitz J. E. (2010), *Freefall. America, free markets, and the sinking of the world economy*, New York, Norton.

Taggart, R.A., Jr., S.I. Greenbaum (1978), Bank capital and public regulation, in “Journal of Money, Credit and Banking”, May.

Tobin, J. (1963), Commercial banks as creators of money, in “Cowles Foundation Discussion Papers”, n. 159, Cowles Foundation, Yale University.

Tobin, J. (1965), The theory of portfolio selection, in Hahn, F.H., Brechling F.P.R. (eds), “The theory of interest rates, Proceedings of a conference held by the International Economic Association”, London, MacMillan.

Toevs, A.L., W.C. Haney (1986), Measuring and managing interest rate risk: a guide to asset/liability models used in banks and thrifts, in Platt R.B. (ed), “Controlling interest rate risk. New techniques and applications for money management”, New York, Wiley.

Wallace, N. (1996), Narrow banking meets the Diamond-Dybvig model, in “Quarterly Review”, Federal Reserve Bank of Minneapolis, Winter.

Williamson, S.D. (1987), Recent developments in modeling financial intermediation, in “Quarterly Review”, Federal Reserve Bank of Minneapolis, Summer.

Wolf M. (2014), *The shifts and the shocks. What we’ve learned – and have still to learn – from the financial crisis*, London, Penguin Books.

## Author

**Fabiano Colombini** is Full Professor of Economics of Financial Institutions and Markets, University of Pisa. E-mail: [fabiano.colombini@unipi.it](mailto:fabiano.colombini@unipi.it)

Advertisements

The image shows two identical placeholder advertisements arranged in a 2x2 grid. Each advertisement consists of a rectangular box. In the top-left corner of each box, there is a discount percentage: '- 59%' for the left column and '- 52%' for the right column. In the bottom-right corner of each box, there is a rounded rectangular button with the text 'Ordina ora' (Order now). The top-right corner of each advertisement box contains a small blue triangle icon pointing to the right.

This entry was posted on 26/04/2017 by [openreviewmanagementbankingandfinance](#) in [Banking](#) and tagged [balance sheet reports](#), [Banking](#), [modernism](#).

<http://wp.me/p5r4Oe-ed>

[Previous post](#)

[Next post](#)

[Blog at WordPress.com.](#)