THE ECONOMICS OF BANKING:
A NECESSARY UPDATING OF CONCEPTS

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Abstract: The bank, as an economic actor characterized by relatively *homogenous* activities of collecting deposits and granting credit, no longer exists. Today's bank is fundamentally *heterogeneous.* In order for the reexamination of banking activities to lead to a new definition of banking, we must begin by taking inventory of what a bank can be in a deregulated and globalized economy (Part I). From there, it is helpful to develop a critical judgment regarding the indicators that measure banking activity and performance as they are currently understood. In the same vein the importance of certain concepts (for example, economies of scale) should be put into question (Part II). On this basis, it seems possible for us to contribute, if modestly, to reformulating the economics of banking, attaching special importance to the problems of concentration and competition (Part III). Moreover, it appears necessary to focus more on concepts (for example X-efficiency or protectionism) on which insufficient research has been carried out (Part IV). Since each banking system has its own specificity, by reexamining the theoretical premises light can be shed on the specific characteristics of the European banking landscape (Part V). We then examine perspectives for European bank restructuring (Part VI) and the competitive stance of the main European banks (Part VII).

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Questions about the future of finance have never been so numerous, nor have answers from academic or professional ever been so few and far between. What is finance? What can be done with it? How? Our purpose here isn't to redefine the fundamentals of banking economics. It is, more modestly, to raise certain doubts, to ask "intellectually infuriating questions," and to pave the way for new research.

But before raising these questions, we must define what a bank is. After the blows of deregulation and disintermediation, the latter being accompanied, of course, by a certain form of disguised re-intermediation, the bank, as an economic actor characterized by relatively *homogenous* activities of collecting deposits and granting credit, no longer exists. Today's bank is fundamentally *heterogeneous.*

In order that the reexamination of banking activities may lead to a new definition of banking, we will begin by defining more precisely what a bank is today. Faced with the radical change in banking activities, we must begin by taking inventory of what a bank can be in a deregulated and globalized economy (Part I). From there, it is helpful to develop a critical judgment regarding the indicators that measure banking activity and performance as they are currently understood. In the same vein the importance of certain concepts should be questioned (for example, economies of scale) that have caused much, if not too much, ink to flow during the past few years (Part II). On this basis, it seems possible for us to contribute, if modestly, to a reformulation of the economics of banking, attaching special importance to the problems of concentration and competition. Within the framework of the liberalization and globalization of financial activities, a movement of consolidation in banking is starting to take place on a world scale. Within ten years the world banking industry will be structured in a significantly different way than it is structured today. It is therefore helpful to shed new light upon these problems of concentration and competition (Part III). Moreover, it seems to us that "new finance" needs to focus more on concepts (for example X-efficiency or protectionism) on which insufficient research has been carried out[1] (Part IV). Since each banking system has its own specificity, by re-examining the theoretical premises light can be shed on the specific characteristics of the European banking landscape (Part V). We then examine perspectives of European bank restructuring (Part VI) and the competitive stance of the main European banks (Part VII).

[1] D. T. Llewellyn : "The new economics of banking," *SUERF Study 5*, 1999

I – THE BANK NO LONGER EXISTS: BANKING ACTIVITIES TODAY.

What do Citigroup and the Banque Martin Maurel, a small but well-performing family-owned bank in the South of France, have in common? They are both called “banks”. That’s it. At first glance, the differences may appear to be due to size. But, if one considers banks of comparable size, the disparities remain. With this in mind, what is comparable between AIG, which has become a genuine investment bank, and Spain’s Caixa, which derives three quarters of its banking revenue from its retail activity? There was a time, not so long ago, when banks had essentially all the same activities. Consequently, analyzing their books (and therefore supervising their business) were relatively easy matters. But, though the trend of regulation, in the eighties and nineties was to render the status of banks more “ordinary”, banks today are less “ordinary” than ever! In an attempt to visualize the situation more clearly, it is necessary to “expose the underpinnings” of contemporary banks (section A) in order to redefine what a bank is today, at the outset of the third millennium. (section B). This outline of a new definition should, among other things, make it possible to grasp towards what type of banking regulation we need to move (section C), and what banking valuations may be estimated (section D).

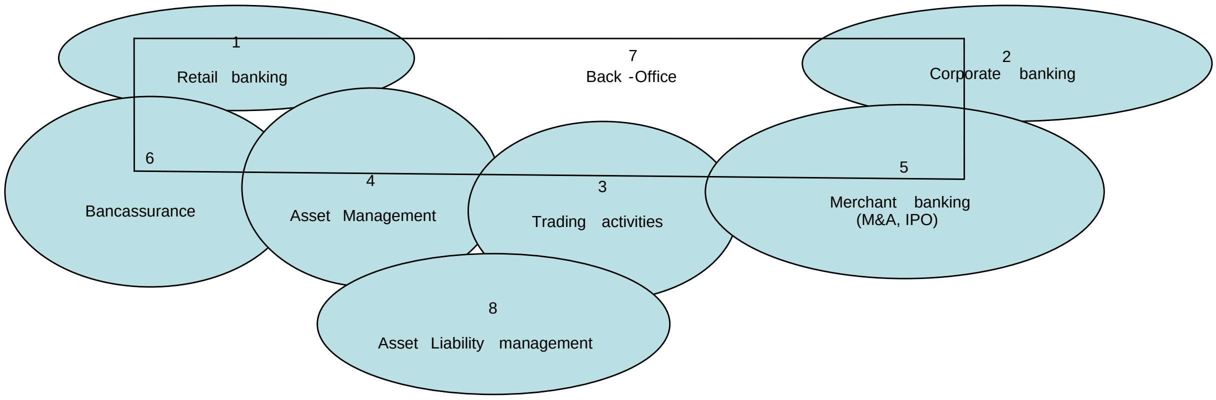
A – The intertwining of banking activities

Let us begin by defining the services that a bank is capable of offering today. By way of rough approximation, we recognize eight banking activities:

1. Retail banking
2. Corporate banking
3. Trading activities
4. Asset management
5. Merchant banking
6. “Bancassurance”
7. Back office
8. Asset liability management

First hurdle: certain of these activities overlap. Such is the case at least with activities 1 and 4, 2 and 5, 3 and 4, and 3 and 5.We have chosen to give a graphic representation, as imperfect as it may be, of this interlacing of bank services (Figure I). It will surely be possible to refine it later on, notably by defining more precisely the exact nature of each of these "pure" activities.

Figure I: LINKS BETWEEN BANKING ACTIVITIES



If we want to go one step further, it is helpful to sub-divide these banking activities. This can be done on at least six levels:

1. by clients (retail, corporate, or sovereign risk)
2. by geographical zone of activity (from national to international)
3. by how bank capital is employed (from counseling to venture capital)
4. by whether revenues are recurring (M&A, management of open–ended funds)
5. by the degree of proximity to clients (from the "back" to the "front" office)
6. by the degree of intermediation (the pure "account for oneself" or the perfect "third-party account").

Second difficulty: certain divisions are not clear, they tend to intermix with each other. This is the case at least with of 3 and 4 as well as with 3 and 6.

At this point, it must be restated what constitutes a bank. Here two questions arise:

1. Can two banks be compared (and, more importantly, evaluated in any statistical category)?

2. If one thinks it possible to group banking activities by categories (as we do), which categories would be the most relevant?

The simplest answer to the second question is categories of course, but why? This question in turn leads to the concept of bank typologies.

As for the European regulatory authorities, they appear to have thrown up their hands. Let us leave aside the official statistics that constitute "catch-alls," which are increasingly difficult to interpret and thus increasingly useless for anything other than producing statistics on this or that sector. But even in the operational arena regulators seem to no longer really know where to focus. The most telling example of this is the analysis of competition between European banks, a crucial subject for financing these countries' respective economies. Each country has its own definition of banking activities, a phenomenon to which the mergers or the attempts to merge of Lloyds TSB and Abbey National in England, of Fortis and Générale de Banque in Belgium or of UBS – SBS in Switzerland have borne witness.

The European Commission generally recognizes three large markets:

- retail banking services focused on individual customers and households
- banking services for businesses
- operations on financial markets

The Commission itself recognizes this classification is imperfect. In some of its decisions it has identified a fourth market: that of the investment bank (Decision M873 Bank Austria/Creditanstalt).

So how the bank may be accurately defined today?

B – A new "roadmap"

Let us begin by justifying the importance of a redefinition of banking activities.[2] There are at least three fields for which this redefinition constitutes an "urgent necessity." We have already suggested two. First, when considering the analysis of results and in particular where comparative analysis is concerned, one can no longer be satisfied with simple

[2] F. Allen & A.M. Santomero: "What do financial intermediaries do?," *Journal of Banking and Finance*, n° 25, 2001.

approximations. Who would think to compare General Electric and Alstom today which, barely twenty years ago, were entered in the same statistical category, not as the exact same types of companies, but at least as comparable? Similarly, when analyzing competition between players, precision is necessary. How can a critical threshold be defined in a certain market if the relevant market itself cannot even be defined? But there is a third reason for pushing the analysis further. Our hypothesis is that the banking profession will, in the years to come, undergo a dual evolution whose premises are already apparent:

- a movement towards externalizing all activities which are not strictly banking; or, more exactly, all segments of industrialized banking activities, which is to say, those that are sufficiently normalized to make it possible to treat them in a standardized manner (this externalization accompanies outsourcing abroad, a parallel process, which has already began);
- a movement related to the "invasion" of banking activities by operators who are not really banking operators. The pioneers in this domain were the large distributors. Then the computer engineering companies arrived. Then certain telecom operators. These two latter services have not said their final word. And why tomorrow would we not see the large engineering firms invade the banking market? Without even mentioning, of course, the insurance companies already present in four to seven "banking" activities.[3]

This dual evolution, whose scope and rhythm we must not underestimate, requires characterizing more precisely (in order to better survey and regulate it) the contours of the banking activities industry.

In this area, we would like to open up two paths of inquiry. First, it seems indispensable to us to begin by defining what characterizes a bank. Since we have defined the seven basic banking professions, we will take another step and define the eleven characteristics that make it possible to compare one bank to another (leaving aside workforce size and number of bank windows):

- solvency
- risk
- market share
- size of its competitors in each of its markets

[3] H. Blommestein (ed.): "The new financial landscape: forces shaping the revolution in banking," *OECD*, 2002.

- production costs and its net banking income per agent
- degree of recurring revenues
- richness and the breadth of its products
- extent to which its various products may be substituted for each other
- organization of its different activities
- degree of internationalization
- reputation

When using these eleven criteria, no two banks in the world should be identical.

It is on the basis of this "identity card" that we believe it possible to open a second field of inquiry, that of the characterization of banking activities. Here again, we take up the question of definitions. We also believe it possible to isolate seven principal characteristics of different banking activities and to classify them on the basis of a deliberately simplified system of criteria. These characterizations are reproduced in **Table 1** below.

Table I: Characterization of Banking Activities

	Geographical proximity with clientele	Risk	Degree of use of capital	Economies of scale	Barriers to entry	Recurrence of revenues	Degree of internationalization
Retail banking	5	2	2	3	5	4	1
Corporate banking	3	4	3	3	3	3	3
Trading activities	N.S.	5	4	4	2	2	4
Asset management	3	2	2	5	2	4	4
Merchant banking	2	3	2	2	2	2	4
"Bancassurance"	4	2	2	3	4	3	2
Back office	1	1	1	5	3	4	3
ALM	N.S.	3	4	3	N.S.	3	N.S.

1-5: very low to very high N.S.: not significant

These characterizations, which sketch out an extremely schematic profile, make it possible to illustrate:

- the extremely heterogeneous character of different banking activities
- the not uncomplimentary characteristics of these activities

It may already be noted that these indicators can be brought together into three big families:

- performance indicators (risk, capital and income)
- safety indicators (proximity and barriers to entry)
- potential development indicators (economies of scale and degree of internationalization).

If no two banks are strictly identical, it is nonetheless possible to compare in a sufficiently precise manner all banks with these criteria. One could even envision defining an indicator of "product mix," making it possible to evaluate a bank in function of its risk/yield factor.

To be completely precise, it would be necessary to gauge the relative weight of each of the seven criteria when explaining banking performance. This is not impossible to envision, but currently, with the exception of economies of scale, the data is unavailable. Let us therefore adopt the hypothesis that these seven criteria have the same weight (which, intuitively, seems to be a reasonable assumption). It would initially then "suffice" to calculate, for each of the seven adopted criteria, an overall indicator for each bank by taking into account the relative weight of the various businesses it is active in. Then, by combining the indicators thus obtained by family of criteria (performance, safety, and development potential), we would have at our disposal a synthetic indicator of the development potential and of the degree of risk inherent in the strategy of each bank. Another avenue of research would be to classify each of the seven characteristics in function of the duo risk/reward (for example, for retail banking: low risk and "above average" reward). Using that as a starting point, by taking into account the relative importance for each bank of each of the different banking professions, it should be possible to come up with an overall indicator of the fragility and of the potentiality of each banking strategy.

C – New rules of the road

All banks have one thing in common: they are subjected to a thorough evaluation by one, or many, “police” forces. The supervisory authorities of the banking profession have thus defined the perimeter of banking activities as accepting deposits and making loans. Regulating banks aims to protect, first of all, small savings holders and, secondly, all economic agents. To make a parallel with driving, the depositors are the passengers who may be in danger in their car, while the economic agents are the passers-by who may be endangered by reckless drivers. The authorities exert surveillance primarily on the larger vehicles, the over-sized SUV’s of the banking profession (the TBTF = too big to fail). The central bank acts as a mechanic, does all in its power to keep these vehicles on the road, because the damages incurred by accidents blocking the road are bad for the economy.

For close to two hundred and fifty years, banks have survived thanks to the confidence their depositors have placed in them. Protecting these deposits is the primary responsibility of protective mechanisms, and banks are closely watched over. This means that activities outside of the framework of banking imply more risk (no protection in the case of bankruptcy), but also more performance. The degree of access to these activities, occurring outside of the framework of banking (and, in certain cases, “off-shore”), vary significantly from zone to zone. It is true that the conditions for obtaining a drivers license (banking license) and the types of roads vary significantly from country to country.

The elaboration of prudential ratios by the BIS (Basel I in 1988 and Basel II to come in 2007) is the equivalent of creating an international drivers license that covers many kinds of banking vehicles. A more precise analysis of how capital is employed according to activity (security mechanisms vary according to the type of road and the kind of driving) causes management and shareholders to question the relevancy of certain banking activities as well as their possible industrialization. On the basis of initial projections, the enactment of Basel II will require radical adjustments in the needs of capital. In many activities, the required capital necessary will increase by 50%, or be reduced by 50% in comparison to the demands of Basel I. Bank management must rapidly incorporate these changes.

It is not surprising that the defense of diversification appears clearly in commentaries addressed by the European banking profession to the Basel Committee. European banks are calling the attention of regulators to the merits of diversification and “universal banking”. In fact, European banks quite often have a universal mission. Very specialized entities are rare, with the exception of the English market, as well as the American market (which is very concentrated and very diversified at the same time, at least for the "top of the line" clientele) and the French market (to the extent the public sector has survived).

The following observations on Basel II in terms of banking activities may be made:

- Basel II represents progress in terms of the differentiation of banking activities. For the first time, the regulators recognize that the safeguards for small cars and those for SUVs do not flow from the same logic and do not require the same rules.

- The differentiation of activities introduced by Basel II should be further refined. If we refer to the eight types of activities recognized today by the regulators, we are confronted with the risks of blurry areas (between commercial banks and business financing, notably) that were previously noted. The solution (suggested by Basel II in its technical annexes) may be to adopt a greater level of segmentation (19 sub-activities in the current draft).

- In its current state, the Basel II mechanism plays a role, not only of regulation, but also in helping to define banking strategies of the future. To take just one extreme example, it may be considered that, in its current version, Basel II severely penalizes "private equity" activities. It is true that these activities are more and more independent of banks and are therefore becoming even more industrialized. But in this case Basel II is not only influencing banking strategies, but also directly affecting the future modes of business financing, and in particular the financing of SMEs. This requires pause for reflection.

D – Market valuation of vehicles ([1])

It is worthwhile here to analyze how financial markets value the fragmentation of the banking concept.

The differences in valuations of European banks reflect more their national origins than differences between activity portfolios. Thus, German banks, whatever their strategies

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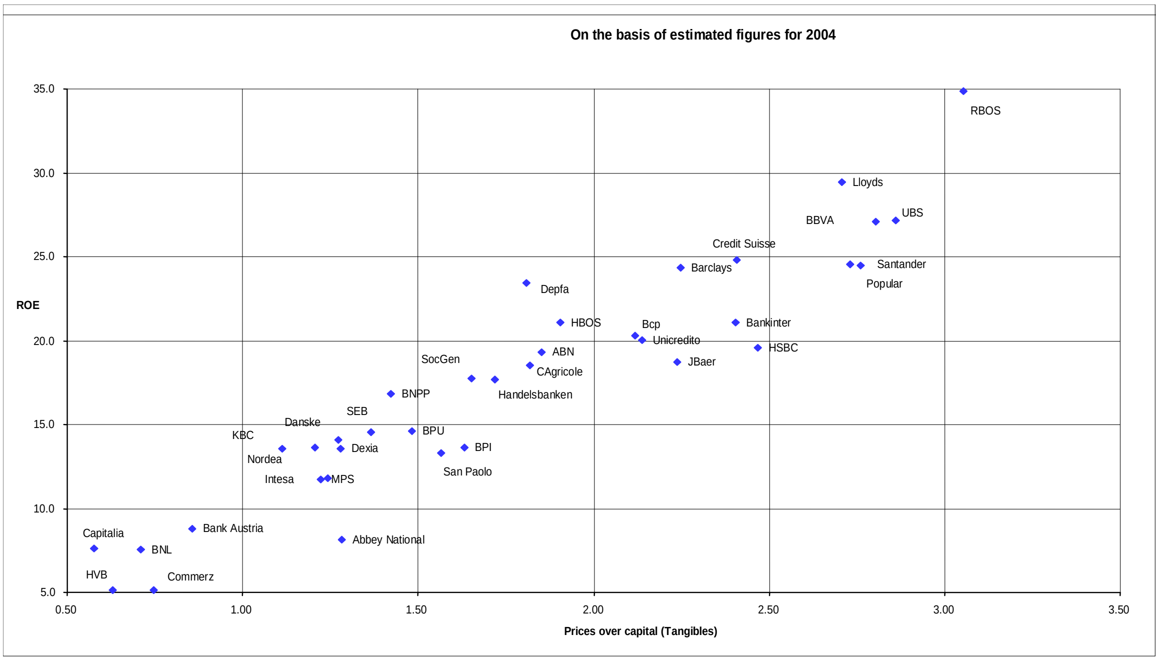
[1] A special thanks to J-B Bellon

may be, have a tendency to figure at the bottom of Figure II (weak profitability and weak valorization), while British banks are at the top of this graphic for symmetrical reasons.

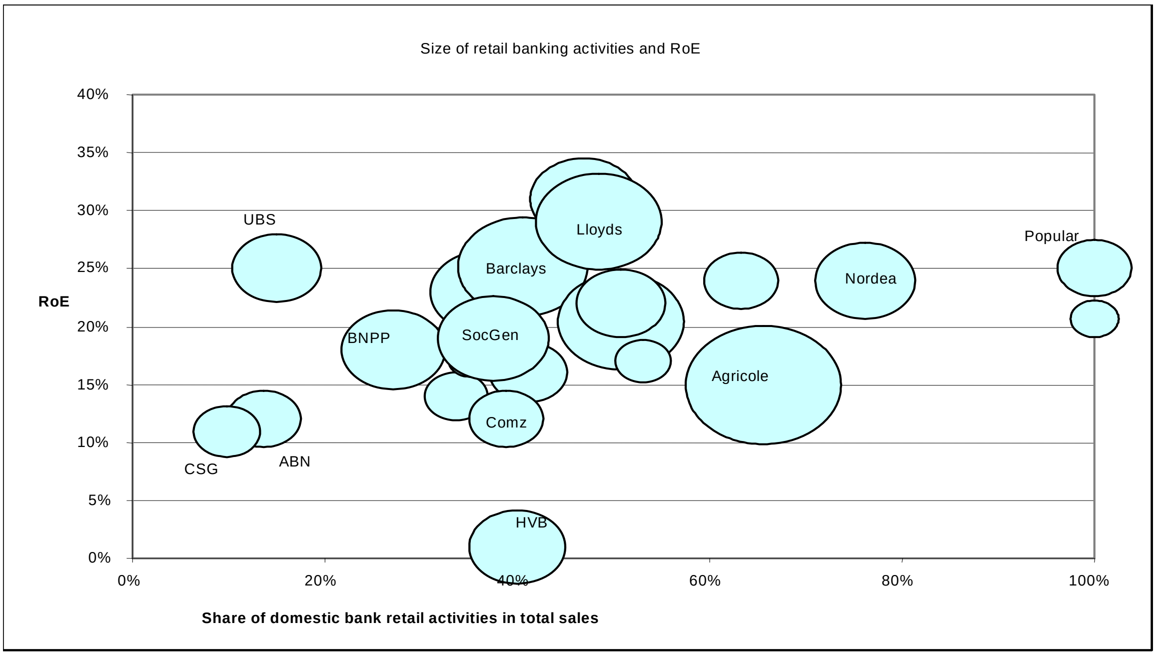
Figure II: P/BV and RoE of European banks



Source: Deutsche Bank

However, Figure III reveals that the profitability of certain activities for major players is roughly similar (the size of the ovals is proportional to the amount of retail bank revenue). These figures are based on 2004 earnings (which slightly improved on the performance of 2002-2003). They show a “reasonable” zone of RoE of between 15% and 25%.

Figure III: Valuation of the activities of retail banks



Source: Deutsche Bank

On the other hand, it should be noted that the market does clearly distinguish between "global" and "local" banking activities. It seems to us that this line of differentiation follows rather faithfully the lines of production/distribution (although trading activities do not fit this analytical perspective, since, in these activities, production and distribution are combined). Consolidation of the so-called "global" activities is fairly well advanced (fewer than 15 investment banks have captured two-thirds of the world market), which is not the case for retail banking. It remains fragmented and localized. Thus the share of Citigroup in the United States is not more than 3 to 4 per cent, and that of HSBC in the European Union is less than 5 per cent. The position of leader in the "global" professions is hard to come by. Banks considered to be fragile, marginal, or ordinary are less valued, which provides an incentive for them to merge together or to expand in order to attain a critical mass. For "local activities" markets use structural valuations, and the disparity between two competing banks is generally very limited. This picture, however, could change with the arrival of "non-banks" specialized in the distribution of financial products. The steep drop in the valuation of retail banks during the rise of the Internet "bubble" is a good example of such a rapid potential change.

It must be recognized that equity markets today are ahead of the regulatory agencies in taking into account the growing differentiation of banking activities.

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To conclude, banks are composite institutions coordinating various activities, along more and more heterogeneous patterns of organization, and oriented towards increasingly segmented markets. They are composite institutions, whose main business is risk management and whose efficiency depends on several factors — their ability to maximize X-efficiency and to implement performing corporate governance, as well as the existence of a protected domestic market and the growth of those foreign markets that are of strategic importance to them. This does not close the debate; on the contrary, it should open it further.

It is also imperative to develop as quickly as possible a deeper understanding of the exact nature of banking activities. Such an understanding must be both multinational and associative (associating professional, academics and banking supervisors). Some of the different typologies that we have outlined above may not survive further examination. But, more importantly, they may be prolonged by operational considerations, which are cruelly defective at this stage as much for the analyst as for the regulator.

On a concrete level, a complete overhaul of the statistical apparatus at the microeconomic level and also (and perhaps especially) at the sectoral level is an unavoidable necessity. Official and professional statistical bodies must undertake new missions.

II –OUTDATED ANALYTICAL INSTRUMENTS

Because banks no longer exist, banking economics must adapt and accept a reexamination of its theoretical contexts. This is true both for indexes of measure as well as for theoretical concepts.

A – Surrealistic indicators

The economy of banking must be dusted off at the entry level: that of indicators of activity and profitability. Inputs and outputs of the banking production process have become increasingly diversified. It was not long ago that economists were asking themselves whether deposits were inputs (in terms of intermediation theory) or outputs (production theory).

The indicators used today – the volume of deposits and loans or total assets – are, from this point of view, totally obsolete. First of all, using these indicators ignores that these variables are fundamentally heterogeneous, both in terms of their intrinsic characteristics (duration, nature of compensation…) as well as in terms of risk. But to rely on them is also, and especially, to forget that banking activity is no longer, and has not been for at least twenty years, identifiable as a single product. The use of Total Revenues as an indicator of activity fails to resolve the problem. It suffers from at least two major faults: it mixes the "apples" of the margin of intermediation with the "oranges" of commissions (the "universe" of commissions, itself, being particularly heterogeneous), and it erases the "risk" factor, whose importance has been highlighted in the course of the last ten years (see Part IV). Without being in a position at this stage to offer an alternative, one can at least recognize a gap, call for discussion and create new paths of research: isn't it possible to consider defining a synthetic activity indicator that would integrate not only one R (that of return on investment), but the three R's of the financial economy: risk, return and recurrence? This would prove a difficult task but we believe it worth the effort.

Turning to profitability, the challenge of developing useful indexes is even greater. Let us recall, prior to profitability indexes, the confusing debate on "fair value". It should be realized, and especially in Brussels, that "full fair value" principles cannot be applied to the European banking sector. To do so risks deeply and indefinitely fragilizing the operators of the Old Continent. The question to raise here is therefore simple, though, in reality, this simplicity poses the problem of political courage: is it necessary to purely and simply refuse the IAS norms of bank accounting (we do not see any reason not to)? This could be difficult to carry out. What would IAS be without Europe?

By confining ourselves to profitability indexes in the strictest sense, the first question for the banking sector is the same that has been asked of accounting norms in general, since the Enron scandal. In the phase of acceleration of external growth economics, does "pro forma" accounting make sense? In the phase of accentuating the leverage effect (a phase which is made possible by low interest rates), does EBITDA not constitute an "encouragement of crime" index that should be put into question? Added to this is a problem that is, if not significantly bank-related, then at least financial (let us not forget here the insurance agents). How can a measure of profitability be proposed that does not incorporate a measure of the risk taken in order to generate this profitability?

To conclude this quick review of measurement problems, let us recall that the majority of banking indexes today are calculated, by everyone except supervisors, on a non-consolidated basis. At a time when the breaking down of companies into subsidiaries constitutes a strategic instrument for risk segregation and when external growth economics appears, on the national level at least, to be the safest vector of development, does non-consolidation not seem to be a fraud, not only in the accounting world, but in the economic world as well?

B – Strange economies of scale

Let us now explain why certain indicators are used. The banking economy seems, in the course of the past ten years, to have focused on "concepts", whose capacity both to analyze as well as to predict appears, at best, limited. We will take two examples that seem to us to be particularly revealing.

Number one in this "hit parade" is, without question, the concept of economies of scale. Economies of scale do not exist in the banking industry, or if they do, they exist only marginally. They do not exist because today the bank as such does not exist and so, wanting to mix industrial activities (such as the "back office") with other unavoidably artisan activities (like certain merchant bank or even corporate commercial bank activities), cannot help but lead to disappointing results (besides the fact that the statistics are unconvincing). Except for a few activities, economies of scale are:

1) very limited;
2) confined to the category of medium-sized banks.[4]

Perhaps the only positive output of the research devoted to economies of scale in banks is demonstrating the existence of various size categories of banks, in which comparisons can be made. However, with the rapid evolution of banking, such categories are rapidly falling apart. Let us not abandon all consideration of the effects of bank size because:

1) the correlation between size (notably that attained by external growth) and risk seems to require a more precise definition;
2) the complex relationship between size and the possibility of industrialization appears, activity by activity, to have been quite poorly analyzed.

On economies of scale, therefore, we can continue the research but…let it be practical research!

[4] Allen N. Berger & Loretta J. Mester: "Inside the black box: what explains differences in the efficiencies of financial institutions," *Journal of Banking and Finance*, n° 21, 1997.

In the same vein, one could show that the concept of barriers to entry,[5] which saw its days of glory in the secondary sector, has very little validity as soon as it is applied to the financial sector. The only barriers to entry with a respectable reason for existing in this sector are regulatory (they are also effective, although less and less codified, following the trend of deregulation). Given the characteristics of their products and given the price-setting mechanisms, banks certainly have boundaries (see below), but very few barriers. Technological barriers and those linked to consumer inertia, which were impregnable in the past, are progressively weakening. Is this truly astonishing in a sector where licenses and copyrights have no meaning and where most products are joint products?

One could surely give other examples of ineffective "concepts" in the economics of banking. They are all flawed with the same error. Industrial economics' core concepts of spatial and functional unity are an empty, senseless dogma when applied to banks. Spatial unity is the easiest to criticize. An American bank has never been nor will ever be comparable in all respects to a European bank. Refusal to distinguish the countries of financial markets (i.e. Anglo-Saxon countries) from countries of banking intermediation (even if this model is not as "pure" as it was in the eighties) leads, in terms of financial economy, to a dead-end. The number of banks, the degree of concentration, the geographical influence, the functional capacities: everything differs between the United States (at least) and the rest of the world. And the recent repeal of the Mac Fadden Act and the Glass-Steagall Act will not be able to change anything about it, certainly not in the short term.

Now we come to functional unity. Let us recall our assertion that banks no longer exist, at least in the traditional sense. This is for at least two reasons. Banking activities are of a heterogeneous nature: not the same capacity of being "industrialized" (i.e. being produced on a mass scale), not the same risks, not the same needs in terms of financial or human capital, not the same clients, not the same possibilities with regard to internationalization. How is it possible today to use "ready-wear" concepts for an activity more akin to "high fashion"? The liberalization/globalization process in and of itself has also led to considerably transforming the boundary between the various financial activities. It is possible to discern what absolutely opposes the bank, creator of money, to other financial activities. But aside from this solid core of identity, during the past two decades everything else has been blurred over. When it is data operators who take care of the bulk of managing means of payment;

[5] Among others, see Allen N. Berger, Rebecca S. Demsetz, Philip E. Strahan: "The consolidation of the financial services industry: causes, consequences and implications for the future," *Journal of Banking and Finance*, 23, 1999.

when banks start handling more insurance (including property and casualty insurance) and the insurance industry (including mutual insurance companies) does more and more banking; when asset management is insured by more than ten categories of different operators, then there is a reason to question the existence or the usefulness of the concept of functional unity for banking.

If we accept to review the analytical approach of those companies that are banks, it is clear that there are new tools we will have to learn to master.

III – CIRCUMSTANCES AFFECTING COMPETITION

The debate that took place in France over the acquisition of Crédit Lyonnais by Crédit Agricole had at least one advantage: it caused people to become conscious of the importance of questions that are relative to banking concentration and, at the same time, of their technical nature. It has always been said that England and Holland were "over-banked", and that the German banking industry was insufficiently concentrated. But, now that there are widespread indications banking concentration has been significantly reinforced in national markets during the past few years[6] and that, in all probability, we find ourselves on the brink of a period of significant banking restructuring in Europe, it is time to further examine the details and decide what really constitutes competition in banking.

To help clarify this inquiry, it is indispensable to organize by distinguishing five levels of analysis:

- the relevance of activities,
- the relevance of markets,
- the concentration threshold,
- the economic impact of concentration,
- the regulatory measures with regard to competition

Our objective for each of these levels is to define the rare "shards" of certainty (a good number of which are based principally on identifying errors one must not make again) and, in the meantime, to classify the paths of research for which we must lay the groundwork.

[6] O. de Bandt & E. Philip Davis: "A cross-country comparison of market structures in European banking," *BCE Working paper Series*, September 1999.

This is because, and it is a major element of satisfaction, today there exist enough materials in order to begin to understand competition in the banking sector. These materials have two origins:

- the progress made during the past few years in many arenas, mostly industrial, concerning the theory of competition;
- some studies regarding banking economics (although almost all of this research is not French and is not all in the economic arena).

By drawing lessons from these studies, we can hope to shed light upon the future.

A – The "relevancy" of activities

Let us start at the beginning. The theme of the "relevant market" is, in terms of the industrial economy of banks, an unavoidable theme. But is it not necessary to start by defining "pertinent products"? For, once again,[7] it is necessary to consider that banks as such no longer exist in the traditional sense. Financial activities are increasingly numerous with a variety of different natures, which each bank, as a firm, articulates in function of its strategic objectives. Each financial activity has its own characteristics in terms of risk, of economies of scale, of barriers to entry, of revenue recurrence… and in terms of competitive stance.

Successfully carrying out an analysis of banking competition necessitates defining what kind of bank we are referring to. The "classic" distinctions of "Retail/Corporate" or "National/International" are unavoidable. But one must focus more precisely on details and take into account at least six factors:

1) The activities that are apparently the "purest" are really not so pure**.** To examine the most trivial example in banking, does "retail banking" really constitute a homogeneous category? To take a more extreme example, is there anything comparable, in retail banking, between basic banking services for low-income households and what is called "private banking"? They do not share the same networks, nor the same commercial policies, nor the same capacity for industrialization, nor the same "back office/front office" links, etc. The same thing goes for SME clientele: what relationship exists (and therefore what dynamic of

[7] O. Pastré : « L'économie bancaire: un nécessaire renouveau conceptuel, » *Revue d'Economie Financière*, April 2003.

competition) between a local business that will remain local and the next candidate for listing on the NASDAQ?

It is probably in England that the regulatory authorities have gone the furthest in terms of the definition of "relevant products". During the Lloyds TSB-Abbey[8] attempted merger (but not only at this time), the Competition Commission defined six distinct banking activity markets for individuals and four just for the SMEs (recognizing, of course, that in each one of these markets, certain products may be substituted for each other).

2) There are activities which are, by their nature, ambiguous as to how they are defined and therefore, as to how they stand against the competition. The best example is probably the activity with "professionals". How it is defined differs from one bank to another. It can just as easily be classified with retail client activity as with that of SME clients. But, according to the option chosen, its relation to the rest of the competition is completely transformed. The Italian regulatory authorities have run up against this difficulty in the Banca Intesa-Comit case.

3) There are products which must be analyzed as situated in two activity categories and which therefore must be treated as such with regard to the competition. This has been the case of life insurance products for sometime. To distinguish them from other savings products no longer makes sense today. Yet in France, until the ratification of the Financial Security Law in 2003, two different organizations, the DGCCRF and the CECEI,[9] were responsible for following these two categories to assure the existence of competition.

4) Is it necessary to create a distinction between activities that are "habitual" and those that are not, as the Bundeskartellamt of Germany did? The distinction seemed logical in terms of individual markets, notably in retail banking. It is far from certain that this distinction is functional on the level of the implementation of competitive policies, when is taken into account the difficulty involved in separating out "joint products."

5) Another approach: the definition of relevant products poses the problem of "relevant actors," does it not? Clearly, the definition of the analytical referential of

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[8] Lloyds TSB Group Plc and Abbey National Plc: A report on the proposed merger, Competition Commission, July 2001.

[9] DGCCRF stands for Direction Générale de la Concurrence, de la Consommation et de la Répression des Fraudes and the CECEI for Comité des Etablissements de Crédit et des Entreprises d'Investissement.

competition largely predetermines how the degree of concentration is evaluated. A widely discussed example in France is the debate over whether or not to integrate the national postal system in the reference sample that would make it possible to measure concentration in retail banking. We find this problem again in most European countries, since not all the public banking networks have disappeared nor do they exist in each of them, especially since liberalization has given a competitive advantage to banks against certain non-banking actors in numerous financial activities.

6) Shouldn't a dynamic measure of concentration take into account the external effects of any merger on how other players position themselves and thus on their probable reaction (to the extent this may be determined)?[10] How can Brussels evaluate any large-scale cross-border banking operation susceptible to be initiated on a European scale without taking into account the competitive shockwaves that it will not fail to provoke?[11] To take an extreme, hypothetical example, how could one imagine that the acquisition of the Italian Mediobanca by a foreign banking operator would fail to set off a crisis not only in Italy, but also in France, Germany, and Eastern Europe? For European banking competition, shouldn't this reaction be taken into account, even if it cannot be precisely measured?

B – The "relevancy" of markets

This theme is more traditional. It is unavoidable, but it presents fewer conceptual difficulties. All the literature (notably Anglo-Saxon literature) and almost all the jurisprudence insist upon the necessity of beginning by sizing up the pertinent geographic market(s) for each operation of concentration. Simplicity is only a facade. Obviously, for the retail bank, the market is largely local while for the issuance of sovereign debt, it is worldwide. But as soon as we get into details, the problems begin. It is also difficult to compare U.S. data (which is the most substantial) to the relevant data of other countries, bearing in mind the specificity of the banking industry. For more and more banking activities it is not always possible to identify the relevant market. This is the case for bank relations with SMEs. It is also the case for "private equity" activities. Is it always possible to identify for asset management? Even for those activities that are "easier" to identify, difficulties

[10] See K. Simons & J. Stavins, "Has antitrust policy in banking become obsolete?," *New England Economic Review*, 1998, pp 13-26.

[11] See E. Jeffers & V. Oheix, "Concurrence et Concentration bancaires en Europe", *Revue d'Economie Financière*, N° 72, 2003.

remain. This is the case, for example, in retail banking, apparently the easiest market to analyze.[12] The Italian authorities still hesitate between using the category of "provincia" (equivalent to French departments) or "regione" (equivalent to French regions), and the U.S. authorities distinguish only between rural and urban zones. For the urban zones, these authorities felt compelled to create an indicator to measure the "proximity of suburbs", whose usage is not obvious when one takes into account the many ways suburbs develop in the United States.[13]

The fact that these attempts at "fine tuning" exist is positive. It merely proves that conceptual difficulties have arisen that will be dealt with progressively. Compromises in this area will have to be made between conceptual precision and statistical availability. There is no point in being closer to reality if reality cannot be understood statistically. There is a need to adapt the statistical frameworks (both the French and European) to the needs of analysis and to the limitations of reality.

C – Thresholds of concentration

Currently the level of concentration deemed intolerable (or at least that functions as a tripwire setting off intense investigations by the supervisory authorities) is 30% (or, for some, such as the U.S. Department of Justice Merger Guidelines, 35%). This percentage is obviously based on analytical and regulatory experience not limited to the banking sector. It is to a large extent arbitrary and not very dynamic. Don't deregulation and the rapid spread of new technologies (which are known to be radically changing the banking industry) require a reexamination of this "law"? The complicated character of banking seems to necessitate at least initially lowering this "alert" threshold. What also must be defined is 30% of what?[14] Branches? But given the evolution of technology and of the commercial policies of banking managers, the number of branches no longer provides an accurate gauge of banking activity, even though this criteria is the one most frequently used, especially in Europe. Deposits and credits, then? This is the reference used in the United States. But for banks, with the increasing complexity of the products offered and the multiplication of possible "collaterals,"

[12] See Radecki: "The expanding geographic reach of retail banking markets," FRBNY *Economic Policy Review*, June 1988, pp. 15-34.
[13] Indicator calculated using Ranally Metro Areas (RMA).
[14] We limit ourselves to the concentration in banking, without taking up the problem, however fundamental, of the resulting concentration in other sectors. See N. Cetorelli: "Does bank concentration lead to concentration in industrial sectors?" FRB of Chicago, *WP 2001-01*, pp. 1-29.

the credit indicator has literally "imploded," as the Belgian regulatory authority was forced to admit in the Fortis-Générale de Banque case.[15]

As for the last stumbling block: using a threshold of 30% does not take into account the concentration of the rest of the market. The potential danger to competition coming from the concentration of some always depends on the degree of the concentration of others, although this relationship is difficult to evaluate.[16] The officially approved HHI indicator simply cannot provide any useful insights in appraising the ultimate competitive consequences of these different aspects of banking competition.

Faced with these difficulties, we draw the following conclusions:

- what constitutes an abusive level of concentration must be determined case by case;
- no specific threshold can be retained a priori; the impact of new technology as well as deregulation lead to a reduction in the acceptable threshold of concentration;
- a cartography of concentration ratios by activity must be set up, this leading to the definition of a synthetic indicator;
- an overall concentration indicator, much like the indicators by activity, must be evaluated in function of market share thresholds as well as in function of the absolute level of these market shares.

Generally speaking for this field, quantitative precision cannot be an objective in and of itself. The concentration ratio is nothing but a "guideline." It must remain as such. Statistical precision is rarely able to reveal the true picture in terms of the analysis of competition.

D – The economic impact of concentration

We arrive here at the heart of the subject. For concentration is not reprehensible unless its external effects are negative.[17] In this area, the non-price impact certainly has a role to

[15] Decision M 1172, June 1998.

[16] R. Prager and T. Hannan: "Do substantial horizontal mergers generate significant price effects?," *Journal of Industrial Economics*, Dec. 1998, pp. 433-453.

[17] E. Jeffers: "Concentration et Concurrence: le cas européen", *La Nouvelle Economie Bancaire*, Economica, 2005.

play. But it's a secondary role. The impact of a merger or an acquisition (or of any other links) on the efficiency of the consolidated businesses concerned (and, therefore, indirectly, on the welfare of consumers), which is relatively easy to measure, in many cases turns out to be weaker in reality than was predicted and comes into play more in the short term than in the long term (nothing really new in this area since the pioneering work of O. Williamson). [18]

The essential element therefore remains the impact of concentration on prices. It is here that the difference appears. But in this regard the literature, as well as the investigations by the regulatory authorities, is remarkably scanty. The few studies available do find for the most part[19] the existence of a negative effect of concentration on prices[20] (especially for households and SMEs),[21] but the majority of them are based on compiled sectoral data and are therefore difficult to compare.[22] Moreover, they almost always limit themselves to the impact on interest rates, leaving out commission revenues, which constitute a growing part of total revenues. Studies that integrate into their reasoning external effects (i.e. consequences linked to the reaction by a competitor) of mergers and acquisitions among big banks are very rare.[23]

But the most serious problem of all is that these studies, in the absence of appropriate statistics, do not take into account two phenomena that are becoming increasingly important to the prices set by banks. First, they leave aside how products belonging to two categories of activities are priced and, more generally, what we call "dynamic pricing," which aims to adapt pricing to the evolution of the banks commercial policies.

It is clear that the "modernization" of rate policies in the banking sector makes the link between concentration and price more difficult to establish. It is therefore becoming urgent to make progress in this area. It is also necessary to make available more precise and abundant

[18] O. Williamson: "Economies as an antitrust defense: the welfare trade-offs," *American Economic Review*, 1963, pp. 18-36.
[19] One of the rare exceptions is: I. Fuentes & T. Sastre: "Implications of restructuring in the banking industry: the case of Spain," *BIS Conference*, Vol. 7, pp. 98-120, 1999.
[20] See N. Berger & T.H. Hannan "The price-concentration relationship in banking," *Review of Economics and Statistics*, 1989, 71, pp. 291-299) and R. A. Prager & T. H. Hannan "Do substantial horizontal mergers generate significant price effects? Evidence from the banking industry," *Journal of Industrial Economics*, 1998, N°46, pp. 433-452.
[21] A. Berger & T. Hannan: "Using measure of firm efficiency to distinguish among alternative explanation of the structure-performance relationship," *Managerial Finance*, 1997, pp. 6-31.
[22] One exception is the study of D. Egli & Rime: "The UBS-SBC merger and competition in the Swiss retail banking sector," *Studien Zentrum Gerensee*, Working Paper, 2002.
[23] R. Prager & T. Hannan, op. cit.

microeconomic and sectoral data. In France, better data was available during the period of price controls.

E – Behavioral and structural measures to maintain competition

Paradoxically, although the impact of banking concentration is not well defined, it seems that we can see more clearly the measures recommended by the supervisory authorities aimed at eliminating what is considered to be excessive concentration.[24]

Generally, in the same way that the imbalance of information between those who are regulated and those who regulate pushes the regulators to be more demanding,[25] it seems that the measures deemed "structural" (such as divesting of subsidiaries or branches) are the only measures that can result in an effective, and above all lasting, limit on market power.[26] Measures labeled "behavioral" (commitments to "not-corrupt" clients or personnel, maintaining independent networks…) prove to be unreliable because of the difficulty of obtaining them and of putting them into effect in time. The superiority of structural measures should not mask the obstacles that exist to applying such measures. The difficulty is economic. To begin with, how does one take into account the risk of creating a new dominant position by another bank purchasing a divested subsidiary? But there are often also legal difficulties: divesting cannot always be carried out legally in the manner suggested by the economic diagnosis. An acquisition that would be structurally desirable might conflict with statutory or corporate charter requirements.[27] In both these cases, the same question arises: at the precise moment a decision is taken, how does one take into account the consequences of this decision later on? Is it possible to answer this question without developing various possible scenarios? We don't believe so.

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What operational conclusions follow this outline of the situation?

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[24] See P. Angelini and N. Citorelli "Bank competition and regulatory reform", FRB of Chicago, *Working Paper Series*, WP 99-32, 1999 and J. Gual "Deregulation, integration and market structure", *EIB Working Papers*, Vol. 4, N° 2, 1999.

[25] D. Besanko & D. Spulber "Contested mergers and equilibrium antitrust policy," *Journal of Law, Economics, and Organization*, 1993, pp. 1-29.

[26] Jim Burke "Divesture as an antitrust remedy in bank mergers," Federal Reserve Board, *Working Papers*, 1998

[27] In the UBS-SBS case, this led to the impossibility of applying some of the recommendations of the Swiss regulatory authorities (BRI).

1) During the past few years indisputable progress has been made in the analysis of banking competition. The most significant advances outside the field of economic science have been in the legal status of banking competition. As for industrial economics, the improvements should be credited more to the regulatory administrative authorities than to academic research. And the most substantial and successful work has been done in the U.S. banking sector. Year after year, Europe has been falling further and further behind in this field of research.[28]

2) The regulatory and academic objectives clearly identified are twofold: to measure the effects of an acceleration of banking concentration on a European scale and to reduce the possibility of limiting competition. Although the ways and means to achieve these goals are far from obvious, a few assertions may be stated:

- competition should be examined under a microscope. Global studies are no longer relevant.

- at the time of this writing, "upstream" analytical tools (measures of concentration) and "downstream" tools (antitrust policies) are, in most countries, relatively well "covered,"

- once the new structure of banking activities has been defined (certainly a difficult obstacle, but not insurmountable), the use of an indicator of concentration, market by market, constitutes a realistic goal in the relatively short term,

- outlining the forms taken by the evolution of competitive processes in the banking sector is an intellectually accessible goal.

3) Within this perspective, if economists want to make up for lost time, our work must be oriented in two directions:

- improving statistical information on the level of the firm (which poses problems of confidentiality), as well as on the sectoral level. Microeconomic studies must

[28] A. Berger, R. Demsetz, P. Strahan: "The consolidation of the financial services industry: causes, consequences and the implications for the future," *Journal of Banking and Finance*, 1999, pp. 135-194.

prioritize inquiries about the consumers of bank products, whoever they may be. On the sectoral level the problem appears even more vast since it requires the regulatory authorities, on both the national and European levels, adapting their statistical system to the evolution of banking activities. On the sectoral level as well as on the microeconomic level, it goes without saying that this improvement in statistics cannot be simply quantitative. It also must be qualitative and must integrate the evolution of banking activity.

- a very special effort to measure the effects of concentration (and in particular, the effects on prices), a real "weak link" of economic research on this strategically important theme. This involves both the statistical base, but also conducting extensive case studies that industrial economists in the banking sector tend to have abandoned too readily (E.S. Mason and J. M. Clark would roll over in their graves if they knew…).

The road is still long. We must react and quickly.

IV – FORGOTTEN TOOLS

There are five instruments of analysis, of various complexity and scope, that must be recognized as important and explored in depth in order to reestablish the meaning of the economics of banking. These five keys to understanding what banks have become today exhibit three distinct levels of economic analysis: micro, meso, and macroeconomic. The last but not least of these five keys that must be analyzed at each of the three levels is the concept of risk.

A – Banking risks

To say that the level of economic risk has had a tendency to rise during the past few years is a simple truism. To say that banks, as intermediaries, find themselves at the crossroads of all risks is theoretically commonplace. Despite unavoidable progress, the analysis of banking risk remains distinctly underdeveloped.

We do know better today how to identify banking risk in the general sense. To simplify, let us say that banking risks can be broken down into four principal types of risk:

compensation risk, market risk, transformation and illiquidity risk, and organizational risk. If we make a more detailed study, the real picture isn't as clear as it seems. First, because certain sub-categories of compensation risk are defined less clearly than others. To give a minor example, although risk for retail customers has been evaluated almost scientifically, this is not the case for "corporate" risk in general and SMEs in particular. More generally, organizational risk seems to be poorly and insufficiently defined. In view of numerous recent affairs (to simplify — from LTCM to Enron), the relative importance of this type of risk (which the McDonough ratio attempts to integrate) is growing with the boom in financial marketing instruments. But this type of risk is precisely the one that, to our knowledge, has been given the least attention and, hence, serious instruments of measure for it are lacking. To only give two examples, of two very different types, the risks linked to "back office" activities and the risks of notoriety seem to deserve greater weight than the rare scientific research conducted in these areas grant them.

We still believe that researchers are better today at classifying banking risks, although there remain at least two paths of research that lack theoretical clarification. First, a fundamental distinction must be made between the creation and the management of risk. It is no secret that the growing volatility of financial markets contributes to increasing the *level* of risk, but it contributes also, unfortunately, to clouding over the *structure* of risk.[29] Few believe that market risks are clearly defined today. Proof of need for such study is the research program that the AMF (Autorité des Marchés Financiers, the French market regulatory authorities) initiated on this subject in France. But more than the genesis of new risks, what appears to merit a deeper analysis, by banks and by regulatory authorities, is risk management, although risk management remains too imprecisely defined.

Risk management can be carried out on two levels: either by transferring the risk, or by insuring against its consequences. The most relevant example of risk transfer is through securitization. But who is the ultimate risk bearer in a securitization operation? The answer depends on the precise nature of the operation. Therefore, securitization operations are impossible to standardize and are also uninsurable and prudentially uncontrollable.

We should bear this in mind as we recall that risk transfer: 1) transforms the role of banks from that of intermediary to that of broker and 2) places the risk, or at least a part of it,

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[29] O. Pastré: "Les racines de la volatilité," in Cercle des Economistes – Euronext: *Les marchés financiers sont-ils rationnels ?* , Descartes, 2002.

with non-professionals.[30] Concerning insurance, the most relevant parallel seems to be credit derivatives. And there, too, who assumes the ultimate risk? We could also raise the question of risk, if not systemic risk, then at least collective, linked to the increase of exposure to these new financial products.[31] This leads to the problem, which comes up whenever we talk about risk, of the passage from micro- to macroeconomics. At what point does a risk assumed by a bank remain purely the bank's own concern, and when does this risk have implications for the equilibrium of the banking system in its entirety?[32] We will return to this problem.

There is another field in which risk needs to be better measured: this involves the implications of a bigger and more complex capacity to evaluate the degree of risk involved by the regulatory mechanisms of banking activity. There are at least two elements at the heart of this topic.[33]

First (and most generally), there is the problem of accounting norms. How can it be shown, faced with the tenacity of the IASC (the authority to which the European Commission transferred its accounting sovereignty), that "full fair value" is completely unsuited to the evaluation of a non-negligible part of the reality of European banking? One could certainly say that the proportion of fixed income credit instruments in their balance sheets would penalize European banks if the principles of "full fair value" were to be applied as are. More generally, by their very nature and without exception, "products of intermediation cannot be standardized on a market: therefore the market shows no value."[34] The preparatory work for European regulation of financial conglomerates needs to lead to conceptual progress on the exact nature of financial products.

The second problem is, of course, the problem of Basel II. There is absolutely no need to review once more the "offensive" character of this new battery of prudential ratios that saddles all banks with increased responsibilities. Let us turn rather to examining the danger that this new rating mechanism may lead to evicting the "little guy" — the "little guy" being small banks that are incapable of creating their own internal rating system (Basel II also grants a windfall for official rating agencies that didn't need this extra profit…) and also SMEs, a banking population that is more difficult to calibrate prudentially than households or big corporations.[35] It is clear that the capital standards accept a wider product line of

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[30] Committee on the Global Financial System: "Credit Risk Transfer," *BIS*, January 2003.
[31] H. Bernard & J. Bisignano: "Information, Liquidity and Risk," *BIS, Working paper n° 86*, March 2000.
[32] B.I.S.: "Implications of structural change on the nature of systemic risk," 1998.
[33] O. Pastré: "Macrofinancial consequences of banking risk transfers: myths and stakes of financial interdependence," *International Monetary Seminar, Banque de France,* May 2004.
[34] S. Mathérat: « Juste valeur et évaluation des actifs, » *Revue d'Economie Financière*, August 2003.
[35] V. Nguyen The: "Bâle II : quelles conséquences économiques ?", *Conjoncture*, BNP Paribas, December 2003.

guarantees — credit derivatives, repos.... Does that mean the Basel II regulators are approving the extent to which financial institutions now engage more and more in the transfer of risk?

B – X- Efficiency

To continue with research themes that could be of use in the restructuring of "the new economics of banking" let us begin at the microeconomic level. Although it has been demonstrated that economies of scale are limited in banking, it is necessary to clarify what the true origins of efficiency in this sector are. The concept of X-efficiency deserves to be scrupulously reviewed. X-efficiency can be defined as the fraction of productivity gains that cannot be imputed solely to one of the two factors of production, labor and capital. Going back to the pioneer work of H. Coase and, above all, of H. Leibenstein does not suffice; rather, this very general approach needs to be applied to the present banking context. Today it has been shown that X-efficiency has a significantly more predictable influence on the profitability of banks than all the economies of scale and barriers to entry combined.[36] Now we must determine precisely how. The debate on the supposed synergies generated by mergers between large banks (which have multiplied during the course of the past few years almost exclusively on the national level) bears witness to the progress that still must be made in this field:

1) on this subject, there exists almost no research worthy of the name;
2) the studies that do exist have been generated mostly by the banks themselves or by stock market analysts and:
3) for the most part, the calculations have been based on subtraction (much as Denison proceeded in deriving his "residue" on the macroeconomic level), not on any direct measure.[37]

If there is one aspect of banking economics of universal interest it is certainly the probable effects of the banking concentration movement that is yet to come. This is especially true in terms of international operations. At a time when the world banking industry in general, and the European banking industry in particular, appears to be on the verge of restructuring on the base of national oligopolies, for the most part created during the course of the current decade and at a time when all the players in this industry, faced with this

[36] R. de Young: "Bank mergers, X-efficiency and the market for corporate control," *Managerial Finance*, n° 23, 1997.
[37] P.H. Mc Allister & A.M. Douglas: "Resolving the scale efficiency puzzle in banking," *Journal of Banking and Finance*, n° 17, 1993.

challenge, seem now to hesitate, lacking conviction, from adopting an offensive strategy, the theoretical stakes are high. Without judging in advance what must be done with the details in this field of research, there are at least two areas that must be explored. The first deals with how to measure X-efficiency.[38] The analysis of banking productivity has not been advanced far enough. In a sector in which labor intensity (more qualitative today than quantitative, it is here where a problem of measurement arises) has not diminished but has in fact increased, the least one can say is that we still have our work cut out for us. The second consideration is that if we accept the idea that banks no longer exist in their traditionally general sense, then a result is that, at least initially, X-efficiency must be analyzed for each banking activity[39]. And the organization of work in each activity will, eventually, require analyzing possible "cross-fertilization" among banking activities. In this fashion we may be in a better position to measure X-efficiency in the banking sector.

C – Corporate governance

To simplify, one could say that, before the Worldcom and Enron scandals, corporate governance constituted a theme of official reports that were both passionate (the English Cadbury report constituting a model in this regard), and "cosmetic" inasmuch as their recommendations were not very likely to be put into effect. For about a year Europe, and especially the United States, have seemed to be discovering multiple deviations in the field of corporate governance and have seemed willing to act in this field. This is a positive initial development.[40] Banks are doubly affected, both as individual firms and as cogs in the machine of economic financing. In terms of corporate governance, the four areas most needing research today are presented here in increasing order of importance.

First, we have the generalization of the "compliance officer's" function, the field in which large banks have moved ahead of their pairs in other sectors (insurers and fund managers included); this effort must still be generalized through training and adaptating it to small banks. The composition of boards of directors seems to us a more serious problem. The question of directors' roles is not, in itself, a simple problem. But it is particularly complicated for large banks in which directors are rarely independent. A professional ethics code for bank directors might gradually emerge. The problem lies in the existence of conflicts

[38] European Central Bank: "Mergers and acquisitions involving the EU banking industry," 2000.
[39] See E. Jeffers & V. Oheix, "Concurrence et Concentration bancaires en Europe", *Revue d'Economie Financière*, N° 72, 2003.
[40] O. Pastré & M. Vigier, *Le Capitalisme Déboussolé*, La Découverte, 2003.

of interest. Paradoxically, it is the client himself who, in search of a "global" banking service, stimulates conflicts of interest. It is in this area that banks must reform their procedure, because conflicts of interest can take on many forms: between managing funds for their own account and managing funds for a third party account, between activity on the primary market and activity on the secondary market, between "buy-side" and "sell-side" analysts, between the role of a bank as shareholder and its role as lender, between investment banks and commercial banks, between sellers and "traders," between trading rooms and the "rest of the world"…. The list is not comprehensive and cannot be countered by arguing that certain conflicts of interest listed here overlap (and therefore should cancel each other out) for this overlapping is, at least partially, precisely the problem banks have today. Through the pressure exerted by the savings holders (directly, but also through their fund managers) and by diverse and varied state authorities (on both the national or international level, and either the judicial or regulatory level…), it's the concept of the universal bank that must be questioned. No one believes that the principle of the Glass Steagall Act (repealed just as conflicts of interest were increasing) is still a model, but it is still necessary, in order to avoid any regulatory gaps, "to take the bull by the horns" (theoretically, of course).

In this respect there are two simple rules that must not be forgotten:

1) beware of formal solutions: it should be recalled that Enron had the most appealing board of directors, full of "independent" directors, and comprised of committees that were supposed to check all questionable accounting practices…
2) corporate governance reform cannot be reduced, as the Bouton report from France implies, to reforming boards of directors. Such reforms make no sense unless one considers the entire corporate governance structure in the company and its environment (auditors cannot be singled out as sacrificial victims).

There is yet another problem that cannot quite be defined as a problem of corporate governance in the strictest sense of the term but which is worth touching on briefly: it has to do with banks as shareholders.

Do banks constitute a specific category of shareholders?[41] Is being a shareholder an "advantage" for a bank? Does this "advantage" have "external effects" (the eternal question when talking about banks), and is it shared with the firms that have the bank as a shareholder?

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[41] O. Pastré : « La banque actionnaire : un actionnaire pas comme les autres, » *la Revue du Financier*, September 2004.

To respond, at least partially, to these questions, we still must know what institution we are discussing. What is a shareholding bank?

Corporate governance is an affair of relativity.[42] A shareholding bank is not an exception to this rule. Relativity in this area begins with history and geography. Historic relativity is tied to the existence of “cycles” of banking activism. The power of shareholding banks comes and goes. Omnipresent in the second half of the nineteenth century in Europe because they financed the infrastructures required by the Industrial Revolution, very active at the beginning of the twentieth century in the colonies in order to finance international trade and also “indigenous” industries, banks as shareholders practically disappeared from 1914 until 1945, the wars and crises leading to little, or no, risk-taking. The period of postwar expansion known as “the thirty glorious years” (1945-1975) inspired the banks to participate in the construction of a new Europe, but the expanding role of financial markets in the eighties and nineties drove them to seek out other financial activities. It is useless to try to swim against the current of history and to try to force banks to play a role that is not now suited for them. Today, banks are perhaps on the edge of a new era of pro-active shareholding. The compression of margins in traditional activities and the intensification of risk taking in financial market activities may encourage them to strike out in this direction.

So much for historic relativity. But there’s also geographic relativity. German banking and the Japanese industrial-financial complex have nothing to do with the American Glass Steagall Act, which stood for a basic principle — the necessary separation of commercial from investment banking activities – until the mid–nineties. Each country has its own banking particularities and a shareholding bank cannot mean the same thing in New York as it does in Tokyo. Certainly, there is pressure in favor of the convergence of corporate governance models. Certainly, the porous nature of the barriers between different banking activities has been accentuated during the past ten years in the United States. Certainly, the German and Japanese models have lost some of their luster and some of their “purity” following the crises in Japan and imposition of new fiscal regulations in Germany. No matter: controlling 10% of shares in any company never meant the same thing for a German bank as it did for an English bank, and will never mean the same thing, at least not in the near future. In this regard, there are traditionally three categories of countries: those with financial markets (Great Britain and the United States), countries with mature banking intermediation (Continental Europe and Japan), and emerging countries (without even mentioning “submerged” countries…). These

[42] O. Pastré: “Le gouvernement d’entreprise: questions de méthodes et enjeux théoriques,” *Revue d’Economie financière*, N°. 31, Winter 1994.

three categories will never be comparable in terms of banking shareholder activism. We must deal with these differences.

Apart from these two fundamental elements of relativity, there are two other elements that must be taken into account in order to have an objective view of the problem. The first has to do with the direct or indirect character of a bank's participation. Depending on whether the bank is a direct shareholder or a shareholder for a third-party account, its objectives and its means diverge. In the first case, the bank, which is an investment bank, manages a direct participation portfolio, whose sectoral coherence it tries to assure; in the other case, the bank is nothing more than a service supplier aiming to maximize the satisfaction of its investor clients. In the first case, the bank might see itself as the "pilot of the plane"; in the other case, it might see itself as a simple (but is it so simple?) manager of assets with risks (which are also, in certain cases, non-liquid). This makes a difference, a difference to which we will return.

Another element of relativity (linked to the first element) has to do with the percentage of capital owned by the bank. To put it simply, there are three possibilities:

- if the bank holds 51% of the target's capital, the project is an industrial project, the search for synergy being the ultimate terrain for a strategy of long-term valorization;
- at the opposite extreme, if the bank holds less than 10% of capital, the project is a "capital development" project, the goal being to find the maximum liquidity at the best price (or, more realistically, the best price for the least bad liquidity…);
- the last case – participation between 10 and 51% of the capital – reminds one of the famous aphorisms of a certain American investment banker: "little minority shareholder = little idiot; big minority shareholder = big idiot." The validity of this "golden rule" certainly depends on the capitalistic configuration of the target company, but has unfortunately turned out to be "unavoidably" true in many cases.

Two points should be made to conclude this methodical application that puts the corporate governance problem into perspective. First, it goes without saying that the two elements of relativity that we have just described go hand in hand. The more the banking strategy takes on an industrial nature, the more taking a 51% control will reveal itself as the means to this end. Moreover, taking into account the historical perspective, it seems clear that in general banks tend less and less to intervene directly and more and more to move into asset management. The fear of risk, as well as a search for alternative sources of revenue, accounts for this evolution, which, at this stage, might be either irreversible or cyclic.

Whatever the responses to these questions may be, the role of the shareholding bank remains an unavoidable field of theoretical exploration. It is through shareholding that the external effects of the banking industry are likely to play out. Rudolf Hilferding's theory on "FinanzKapital" at the beginning of the twentieth century was based on shareholding, and therefore on the concentration of power, and can be used again or, on the contrary, abandoned forever. It is through shareholding that the most general role of institutional investors in corporate governance can be advanced and eventually redefined. Many theoretical debates in perspective…

D – Mutual banking

Let us first state that the mutualist structure seems to us, in and of itself, to be perfectly efficient, because it is operational at both ends of the spectrum of banking value: for the consumer and the shareholder. The structure of mutualism is, by definition and also by historical culture (having been developed in the "interstices of capitalism") close to its client-members, and therefore protected from numerous risks, brutal shifts of clientele, and price dumping policies. At the other end, mutualist shareholding is structurally impermeable to the fluctuations of financial markets, and is therefore protected from any hostile raids in periods of "low tide" PER. Can these apparent comparative advantages (notably in the epoch of "big time" banking) constitute the base of a real "business model" or, on the contrary, do they impair the capacity of this type of bank to adapt and to grow?[43]

Theories on what the real foundation of mutualism specificity is seem unjustly, and against all logic under-developed. This explains the difficulty of responding to a question that seems simple to us. What makes up the foundation of the specificity of mutualism? Today this no longer consists in fiscal advantages. Since the beginning of the eighties budget-tightening has taken away these advantages. Is it then its style of corporate governance (the "one share-one vote" principle), which draws the admiration and envy of every stock market regulator? Is it the rule against distributing profits, which seems like a particularly salutatory rampart when faced with increased risk? Is it the historical tendency to do what others are not doing, which avoids succumbing to the most popular fashions? Is it the long-term relationship that makes up the foundation of its link with society, which best minimizes inadequate information? Is it,

[43] S. Delmaz: « Les banques coopératives européennes : bilan et perspectives, » *Revue d'Economie Financière*, August 2002.

finally, the principle of solidarity, which fosters a long-term protective relationship? As long as we are not aware of what defines mutualism, any effort to attempt to help banking mutualism develop will be destined to fail. What seems even more difficult is that mutualism, like the bank when considered broadly, doesn't constitute a homogenous whole. Are the pros and the cons of mutual insurance the same as the pros and the cons of cooperative banking? Does a mutual model really exist? This effort to define seems intuitively all the more indispensable, since intrinsically the professed ideals of the mutual sphere appears to conflict with the irrepressible expansion of financial markets.

To fail to respond to such questions would be unforgivable, since the responses to these questions lead to a whole new line of questions: why are we not seeing any new mutual networks being created? What, in this area, was true yesterday but is no longer true today? Moreover, how does one explain that mutualism, which was associated in the past with risk-taking in markets that were judged to be insufficiently liquid, is today synonymous with managerial prudence?

This confusion is compounded by factual confusion. Isn't Europe experiencing a process of de-mutualization? Certainly in England the reality of this trend cannot be doubted. In that country, at least in the banking sector, it is the joint stock company that is spreading. But this English trend (the size of which is reduced as newly demutualized banks file for bankruptcy) must not obscure the opposite process taking place in continental Europe. Not only are mutual banks not losing their status on the continent, but their economic weight has a tendency to grow (a phenomenon to which CIC, Natexis, and Suez bear witness in France). To be on the safe side, we could conclude that for now the status quo will be maintained, proof that mutualism isn't swept away like so many dead leaves, as some are saying, by the strong wind of deregulation.

Let us now shine some light on the future. Given its apparent resistance to risk, should mutual banking be advocated?[44] Will the conditions that could lead to a return to industrial "Proudhonism" (inspiration for the Banque du Peuple in France in 1849) manifest themselves again? Without overstating the point, it seems possible to outline, in the short run, two scenarios that will have to be evaluated for their relative pertinence in the future. First scenario: mutual banks, which are handicapped by the limits of their own funds, bogged down in their internal contradictions and asphyxiated by their quest for consensus, will see

[44] J.J. Surzur: « Le secteur mutualiste et coopératif financier : quel devenir ?, » *Revue d'Economie Financière*, August 2002.

themselves marginalized by the new needs of their clientele. The opposing scenario involves a metamorphosis of mutual banks, notably via their "listed vehicles," which allow them to satisfy their needs for external growth and international development without having to sell their soul. Between these two extremes there is a third scenario that, more than the previous scenarios, seems to tie together the loose ends of the history of mutualism. Why don't these banks find their true roots by putting into place a strategy of internationalization (for it's there that the most important competition between banks is taking place), developing activities that other banks have ignored? If the future of mutual banks doesn't depend on a buyout of an Anglo-Saxon merchant bank, could it perhaps follow the road of internationalization and, in particular, of Europeanization, taking advantage of these banks' considerable savoir-faire in making loans to professionals, in granting housing loans or perhaps in distributing casualty insurance products? Couldn't mutual banks, given their specialization in "alternative" risks, play the role of "automatic stabilizer" of the banking industry?

E – Protectionism

Let us conclude with a purely macroeconomic question. What is banking protectionism today? Does the absence of new entries into any given national market signal the presence of a protectionist strategy? Does the passage, in terms of protectionism, from "active" strategies to "passive" strategies, significantly modify the situation for competition? It is clear that the United States is not concerned about being too protectionist (for example, the special tariffs slapped on steel imports few years ago and the Sarbanes Oxley law). What about Japan, Germany, Italy (the Fazio syndrom) and France in this area? Does the WTO take fully into account banking protectionism and, if it does not (which is our guess), why? Unfortunately, this review of the problems in banking research concludes with a series of interrogations. While direct forms of protectionism are being eradicated, this indirect instrument of competition is taking new forms, profiting from the unevenness of the deregulatory environment.

V – EUROPEAN BANKING LANDSCAPE

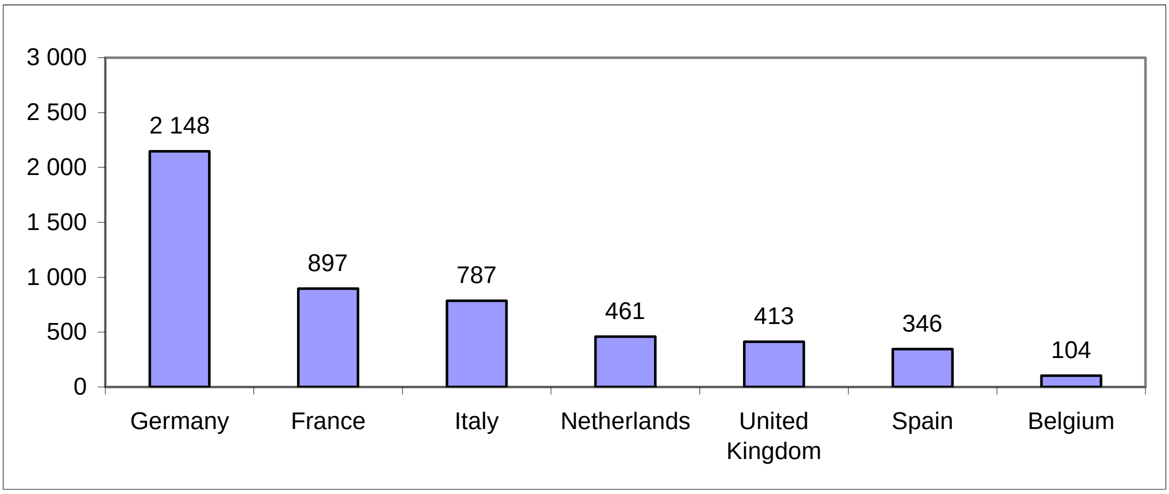
The adoption of a common currency, the euro, has unquestionably begun the reconstruction of Europe, but all the areas affected by this reconstruction will not advance at the same pace. European defense policy will require at least a dozen years to be restructured, while the perspective of a European social policy is even farther away. This isn't the case for European banking. Moved by microeconomic engines that are not slowed down by the necessity of a consensus in Brussels, economic European banking will be reshaped, at least in big chunks, in the four or five years to come.

A – The major trends

To describe the state of the European banking industry, it may be stated in general that:

1) There has been a decrease in the number of European banks over the past twenty years (through bankruptcies or, more often, through absorption), reaching today a figure that seems, with the exception of Germany, to be in harmony with the needs of their clients.

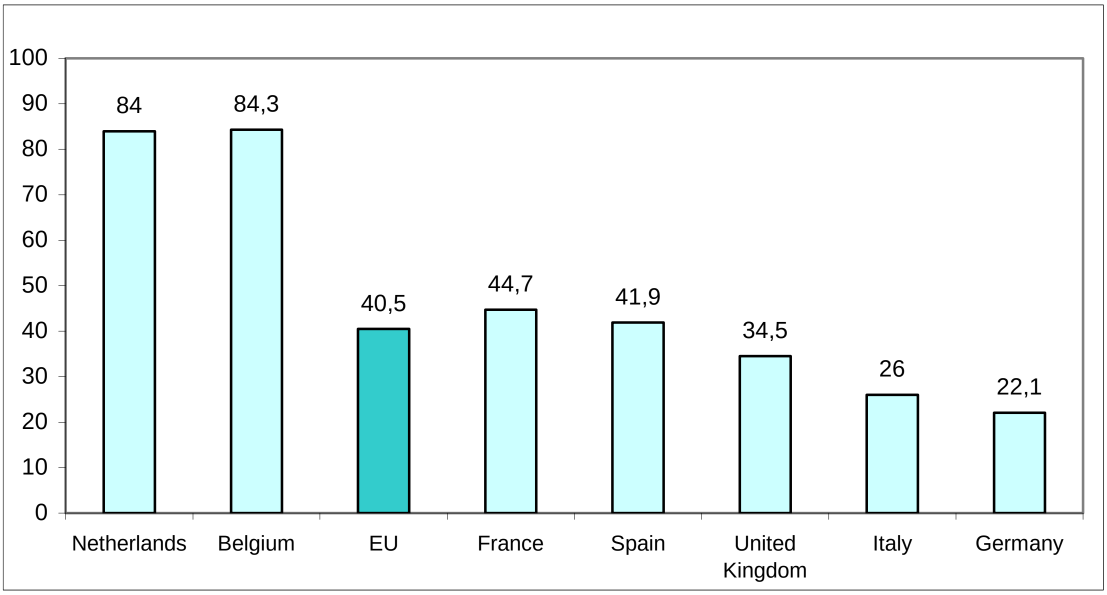
Figure IV*: Number of credit institutions in 2004*



Source : BCE (2005)

2) Following a relatively rapid movement of consolidation country by country, the level of banking concentration also seems to be average for developed countries.

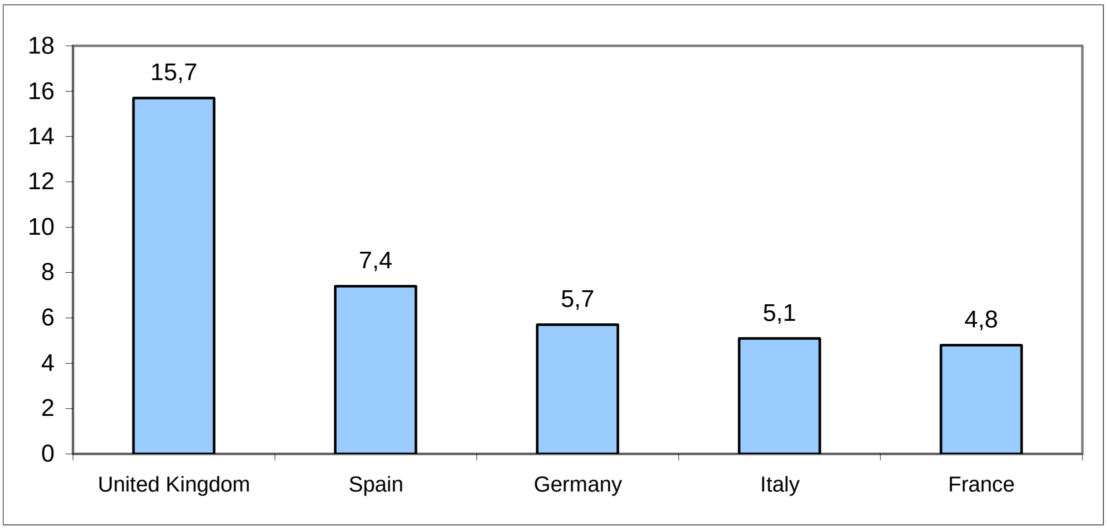
Figure V: **Banking concentration according to the CR5 in 2004**



Source : BCE (2005)

3) The profitability of European banks has improved considerably over the last ten years, reaching rather enviable ratios..

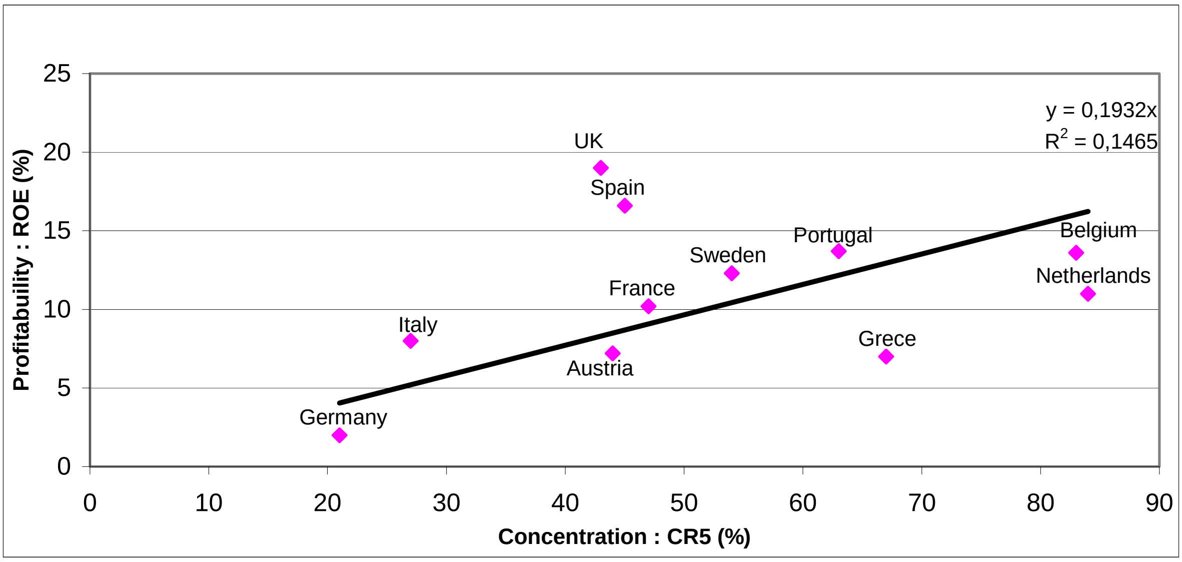
Figure VI: Average profitability of European banks for the period 1992-2001 (ROE in %)



Source : Deutsche Bank Research

4) Clearly on a European level there is a fairly strong correlation between rate of concentration and rate of profitability, the degree of which of course varies according to the indicators employed.

Figure VII: Concentration and profitability of the banking sectors for the main European countries in 2003.



Source : BCE, FMI (2004)

B- Multiple questions

Up to this point, nothing highly unusual. But if we go into the details, many questions remain.

On an international level the financial services industry remained fragmented until the beginning of the nineties, when it experienced a period of frenetic restructuring, during which the number of mergers and acquisitions grew spectacularly both in Europe and in the United States. This wave culminated at the end of the nineties, and then declined significantly, giving the impression that the sector had completed its consolidation. But was that really the case?

No, first of all because the banking sector remains clearly less concentrated than other industries, while both regional integration and financial globalization favor a different type of evolution. Secondly, because numerous signs both in the United States and in Europe have since demonstrated that this was not the case. If we look at what happened in the United States, the number of banks there dropped over ten years from 14,000 to less than 7,000 after the repeal first of the McFadden Act, and then of the Glass Steagall Act (1999). Today the 37 largest U.S. banks are consolidated into seven financial poles, giving them significant power on a world scale. Other signs in Europe, such as the bid of SCH for Abbey in July 2004, prove that the movement is not over.

At the current stage, the reconstruction of the European banking landscape calls for interrogations rather than certainties cast in stone. These questions can be categorized around six axes:

a) Why do cross borders acquisitions occur in some countries and not in others?

Until 1999 M&A operations in Europe were primarily domestic. Since then a second phase, more open to cross-border acquisitions, seems to have begun. Thus, if it is estimated that such a development will be extended, particularly in Europe, then the first question that arises is: where will such operations occur? The level of consolidation is far from being the same from country to country and activity to activity. Why do mergers and cross-border acquisitions occur in certain countries and not in others? Why certain activities are largely dominated on an international level by a few big groups? Are there necessary preconditions for international expansion? Must "national champions" first be consolidated, which are only then capable of facing off with the other "national champions"?

b) What is the optimal degree of concentration for a given banking industry?

There is nothing but uncertainty in this area.[45] In particular, we are realizing that the most concentrated banking industries in Europe (especially Spain and England) are the most profitable, and therefore enjoy the highest stock market valuations, are the most difficult to attack, and the best prepared to themselves attack. But this leaves many unanswered questions.[46] Is the pressure towards concentration the same in all banking activities? Is what is true in this field on the national level still true on the European level? Can the existence of one or two national "major" players compensate for a limited **sectoral** concentration (as in Holland, for example)?

c) Which banking markets are going to play a strategic role?

Here again a certainty: "banks" don't exist; that is to say they don't exist any more. Each bank is a "market mix" of activities with very different characteristics, and this articulation of activities varies from country to country. The regulatory constraints, economies of scale, and profitability (to take only three variables among many others) vary considerably from one

[45] J. Dermine: "The economics of bank mergers in the European Union," *INSEAD*, 1999.
[46] W. White: "The coming transformation of continental European banking," *BIS working paper*, 1998.

activity to another. Where must a bank begin with its European strategy?[47] Is it possible to be a banking operator in Europe in just one of these activities? Can we imagine a European "leader" of financial logistics ("back office," means of payment…)? Is the analysis modified if we include insurance activities within banking activities?

d) What legal forms must be focused on for European alliances?

Perhaps this is the most conceptually simple question. Apparently, the strategy of legal integration (by absorption or by mergers) seems to be preferred by operators and markets. Don't alliances such as BNP-Dresdner present any interest? And what about networks, notably those that are mutual, which cannot either purchase or exchange shares? Are the constraints the same for each banking activity?

e) Which countries constitute the "strong links" in a European strategy?

This is a field for which an analysis differentiated by activity may be the most necessary. Must a bank be present in all countries? If not, which countries must it be present in? Does German protectionism (which, although not of a regulatory nature, is no less effective) justify that a bank not enters this market? Do "relay markets" exist (such as Spain for South America)? If so, which? On the outer fringes of Europe, does the priority given to Eastern Europe justify abandoning North African countries? There is no doubt that European bankers and insurers are asking themselves these questions. But wouldn't a study on the scale of the entire financial industry, which doesn't exist today, be useful?

f) What role should European economic restructuring play in the public banking sector?

The role of the public banking sector is the object of much discussion and of little action in France. Isn't it part of a directly European perspective? Should the European strategy of French public banks be offensive or not? Doesn't a European strategy for these groups necessitate links with the private sector?

C - What the literature teaches us?

In this section we shall explore certain theoretical aspects of the internationalization of banking in order to better comprehend the underlying logical processes

[47] A. W. A. Boot: "European lessons on consolidation in banking," *Journal of Banking and Finance*, N° 23, 1999.

Although the studies examining the obstacles and factors favoring banking consolidation on a national level are legion, it is a fact that few of them deal with the international dimension of this phenomenon. Between the "first generation" explanations (1980-1990) and those of today, what a difference (even though the latter may seem still insufficient)! Perhaps this was due to the fact that the initial studies considered the internationalization of banking to be a subsidiary question, essentially part of foreign direct investment (FDI) and international trade, whereas today internationalization has acquired a certain autonomy and logic of its own. Doubtlessly also, the reasons behind it have changed over time. The context has changed and banking activities are no longer exactly the same. Today each bank is a "market mix" of business units with distinct characteristics. And this combination of activities varies from one country to another, just as the constraints concerning internationalization are not the same for each banking activity. Thus, it is hardly surprising that some of the explanations used today seem to us a bit outdated (the markets of the home countries), others more interesting (the difference between small and large operations, between creation and acquisition), and finally still others (microeconomic dimension and internationalization) indispensable, because they were totally absent from the studies of the seventies and the eighties!

The factors traditionally referred to in the literature to explain banking internationalization may be placed in three broad categories:

The first studies **the degree of integration between the home country and the host country**. Here it is primarily a question of international trade and FDI, the idea being that banks follow their clients to foreign markets.

- Thus, Grubel (1977) attempts to explain what advantage the banks may enjoy through locating to a foreign country. He estimates that the reason cannot be the differentiation of the products offered, because banking products can be copied. However, being familiar with the needs of clients from the home country is a comparative advantage, and banks follow their clients abroad in order that banks of the host countries don't have the opportunity to acquire such knowledge.

- Goldberg and Saunders (1980) study the factors affecting the expansion of U.S. banks in the United Kingdom and conclude that U.S. trade is highly correlated to the growth of U.S. banks in the U.K., whereas exchange and interest rates do not significantly help to explain such growth.

- Gray and Gray (1981) note in their study that multinational banks enjoy a comparative advantage by utilizing the imperfections of the market. Thus, when their clients expand abroad, banks want to follow them in order to provide them with the services they need.

- Brealey and Kaplanis (1996) interpret the spectacular growth of international banking activity from 1960 to 1985 as linked to the growth of trade and FDI.

The second category of arguments concerns the factors linked to **institutional and regulatory obstacles**. There is a large consensus in the literature to date that they play an important role in the form taken by cross-border activities.

- Goldberg and Johnson (1990) study the factors determining U.S. banking activity abroad. They conclude that the factors explaining which countries are chosen for expansion are a less regulated environment, a relatively large amount of international trade, and a relatively low level of domestic deposits.

- Berger, DeYoung, Genay, and Udell (2000) show that when cross-border M&A transactions have taken place, deregulation seems to have played an important role.

- Buch (2003) finds that regulation, the cost of information, as well as a common language and legal system encourage banks to go ahead and make international investments. The importance of each one of these factors varies according to the home country, and the model of internationalization differs from one country to the next. Thus, the banks of some countries, such as Spain, may prefer markets similar to their domestic market, while others may seek markets with fewer obstacles to entry.

The third category contains the factors linked to the banking conditions of the host country and the opportunity for **making profits**. As institutions seeking to maximize their profit, banks go where they may expect large future cash flows. Here it is the **local banking conditions** that are the factors of attraction.

- Thus, in his study of the choices of international expansion by Japanese financial institutions, Yamori (1998) obtains results that agree with the preceding research and that confirm the hypothesis that banks follow "the international business in the process of internationalization." But he also finds in the case of Japan, and contrary to the conclusions of Nigh, Cho, and Krishnan (1986) in their work on U.S. banks, that Japanese financial institutions at least partly determine their expansion on the basis of local opportunities provided by the host country.

- Focarelli and Pozzolo (2000) study the factors determining the internationalization of banks and their choices of where they expand. They study a sample of 260 banks from OECD countries and evaluate their work in the other OECD countries. They conclude that the potential profits in the host countries are a determining factor in the banks' decisions on where to go. In particular, banks expand to countries where the economic growth forecast is stronger and where the banking system on the whole is considered to be less efficient. The regulatory environment and the level of competitiveness of the banking sector in the host country also play an important role—banks prefer penetrating less concentrated markets and those where the regulatory restrictions are less constraining. The countries' degree of economic integration seems to them to be a factor that is relatively less important in the choices made by banks.

Table II: Summarizing the literature concerning the internationalization of banks

Authors	Date Published	Countries, Periods, and Banks Examined	Explications Put Forward Concerning Reasons for and Obstacles
Goldberg and Saunders	1980	U.S. banks in the U.K.	International trade
Gray and Gray	1981	Multinational banks	Comparative advantage linked to market imperfections
Nigh, Cho, and Krishman	1986	U.S. banks in 30 developed and developing countries	FDI
Sabi	1988	U.S. banks in developing countries	FDI
Goldberg and Johnson	1990	U.S. banks in 22 countries	FDI International trade Less regulated environment
Brealy and Kaplanis	1996	1000 first banks internationally,1960 to 1985	International trade FDI, conditions in home country
Yamori	1998	Japanese banks in 44 countries from 1965 to 1994	International trade Opportunities offered by host countries.
Focarelli and Pozzolo	2000	260 banks from OECD countries	Potential profits in host countries Regulatory environment
Berger, DeYoung, Genay, and Udell	2000	Banks in developed countries	Regulatory environment Managerial reasons
Focarelli and Pozzolo	2001	2500 banks in 29 OECD countries	Asymmetrical information Regulatory restrictions Difficulty of evaluating the value of international transactions Bank size is a decisive factor in decisions on cross-border growth
Buch	2001	German banks from 1978 to 2000	Regulatory environment Information cost
Boot	2003	Strategical considerations for the consolidation of the banking industry and its implications for European banks	Strong position on the domestic market European banks must be present abroad in certain activities, especially investment banking, in order to not abandon these activities on their domestic market

De Félice and Revoltella	2003	Period: 1995 à 2000 External growth strategies of European banks	High degree of national concentration, competition and narrowness of domestic market. Existence of strategies of "following the client" at the beginning of the period studied, whereas the narrowness of the national base and the potential for growth in other European markets become more important in 2000
Buch and Delong	2004	144 countries, differentiating developed and developing countries	Information costs Regulation Significant differences between developed and developing countries

From this "survey" of the literature it may be seen that, for a long time, the factors cited to explain the internationalization of banks were essentially tied to international trade, FDI, regulation, and the size of capital markets in the home countries. It should be noted that in the more recent studies these arguments have been relegated in favor of explanations more linked to the opportunities provided by banking conditions in the host country. Above all, some of these studies, although still few in number, seek to draw the lessons from the M&A banking operations that have taken place in the last 15 years and to combine both macro- and microeconomic approaches. Do the processes of domestic and international consolidation occur in function of the same necessities? Are the big national establishments looking to attain a critical size on an international level? Does international financial globalization make this goal of critical size obligatory in order to be competitive and successful? Are domestic merger-acquisitions effective, but not cross-border operations, which would explain and justify both the breadth of the movement of national consolidation and the dearth of cross-border transactions?

Traditionally, concentration in the banking industry is justified by the virtuous character of economies of scale. Generally, these economies of scale flow from the ability to combine similar units in order to benefit from reduced costs, by spreading the fixed costs out over a larger level of production. Notions of critical size and economies of scale are directly linked to the hypothesis of increasing returns. A key function of banks, as intermediaries, is both to reduce the asymmetry of information between lenders and borrowers and to manage the means of payment. The result is two possible economies of scale—one linked to collecting information and reducing asymmetry, and the other to risk management. Are these arguments, which have been put forward to explain mergers and acquisitions on a national scale, pertinent in the case of international transactions? And shouldn't we be looking at this in function of the activity involved? Is size just as important in business activities such as asset management and specialized financing, which require visibility on a world scale, as in other banking activities? Why, from this point of view, has investment banking, along with asset management, been the sector in which transatlantic operations have been the most numerous?

Studies dealing with the international dimension per se are scarce compared with the literature on mergers and acquisitions in a national framework, doubtlessly because the mechanisms justifying M&A on the domestic level cited above are more difficult to apply and evaluate on an international basis. Structural reorganization is more difficult to accomplish due to geographical dispersion. Disparities in the conditions in which banking activities take place further complicate the problem. How activities are linked together varies from one country to another, as well as the constraints, as these are not the same for all banking activities.

It would thus seem that cross-border mergers bring with them more risks when being executed and may lead to fewer cost reductions than national mergers. On the other hand, economies of scope can probably be expected thanks to "cross-selling" and the use of different trade names and distribution circuits.

However, economic factors tied to the narrowness of national bases for players of a certain size are speeding up the reconfiguration of banking, particularly European banking, and are helping to push some players beyond their national framework. For example, this is the case with the large British banks, as it is with their Spanish colleagues, who know that the time for national mergers is now past for them. To these banks, cross-border mergers appear to be the next logical stage of development. The question is all the more urgent in that the mega-mergers in the United States (Bank of America - FleetBoston or JP Morgan Chase - Bank One) will give birth to giants who will necessarily reach out, one day or another, to the European market. In addition, diversification can be seen as another motor force behind the process of cross-border mergers and acquisitions. Thus a good national base and highly profitable domestic activities may authorize and even incite a bank to explore how to geographically diversify, seek new revenues, and to a lesser degree, become less dependent on the domestic market.

Berger et al (2001) suggest that the efficiency obstacles particular to international mergers, such as geographical distances, cultural and linguistic differences, as well as hierarchical and regulatory structure differences cancel out part of the gains resulting from cross-border consolidation.

Vennet (2002) evaluates the ability of European cross-border mergers and acquisitions between 1990 and 2001 to reduce inefficiency. He calculates the efficiency cost and efficiency profit resulting from these operations. He establishes that there was no improvement in efficiency cost in the sample of target banks. There may be various explanations for this—difficulties encountered by executives to adequately link up differing structures, difficulties in reducing salary costs in continental Europe, or geographical dispersion which, contrary to domestic mergers and acquisitions, limits the possibility of improving efficiency cost through restructuring and eliminating redundant units. However, results are quite different concerning the efficiency profit of the target, which often increases because of economies of scope.

As for De Félice and Revoltella (2003), they identify several variables upon which international growth strategies are founded. They distinguish between intra- and extra-European Union investments. They establish that investments outside the European Union essentially concern countries that are closest culturally and that have well developed commercial relations with the home country of the bank that is buying. The latter may also obtain gains in efficiency through the transfer of technology and competence.

Buch and Delong (2004) seek to better understand where and why cross-border mergers take place. Their study is centered on the importance of information costs ("cultural proximity") and regulation costs. Their results suggest that information costs are significant obstacles to cross-border banking mergers. Another important aspect of their study is their investigation into the effects of regulatory initiatives in Europe (the Common Market) and in North America (NAFTA) on banking mergers. Deregulation measures seem to have had little effect on cross-border banking activities.

We may thus establish that the studies on the cross-border aspect of banking activity have evolved considerably, both in the dimensions envisioned and in the variables utilized. Today we can no longer be satisfied with simple criteria linked to international trade and the specific characteristics of the firm. The intense M&A activity in Europe through 2000 and the striking absence of any Pan-European operation, as well as the pursuit of a primarily national logic of consolidation, seem to indicate the emergence of a new geography of banking.

Whereas since 2000 European banks have essentially endeavored to digest previous acquisitions, to re-orient towards domestic retail banking, and to clean up their balance sheets rather than strike out with international growth strategies, U.S. banks seem, on the contrary, to be experiencing a period of intense restructuring, with numerous acquisitions of medium-sized banks, as well as large-scale operations, such as the acquisition of FleetBoston by Bank of America, and Bank One by JP Morgan Chase.

In order to better grasp this new banking geography, it is necessary to conceive new instruments of measure, or at least attempt to do that. The point is to find indicators that make it possible to better describe reality and the various possible scenarios.

VII – EUROPEAN BANKING PERSPECTIVES

A - Indicator and data problems

Comparing and interpreting banking operations on an international scale turns out to be an extremely difficult task, because it is hard to compare the data and the indicators are unsatisfactory. The first difficulty that arises is to define what a bank is—to take just one example is Salomon Brothers a bank in Frankfort but not in London? A second difficulty concerns the nationality and the home country—is CCF, subsidiary of HSBC, now English or a French bank? Finally, a third difficulty arises with indicators. How can banking activity abroad be measured? Should we count the number of offices or agencies open? Should it be done independently of the number of employees in these agencies (data concerning personnel is rare and subject to interpretation)? Should we then study the volume of banking assets abroad? Or rather the product of banking activities abroad?

To measure the profit opportunities on a foreign market, often total GNP and per capita GNP are used as indicators. This leads to problems, because these indicators are higher on the average in the more developed countries, precisely where competition in the banking sector is more intense and where opportunities for external growth are scarcer. By the same token, in recent empirical literature countries with a low rate of inflation, a high percentage of children in school, and developed financial markets are supposed to have a higher rate of economic growth in the years to come. Can we be satisfied with such an indicator?

Clearly it is urgent to invent new indicators, which, to be sure, do not yet exist, but which force us to think on three levels—micro, meso, and macroeconomic—and make it possible to distinguish the trends in a given banking industry that turn one country's banks into potential predators, and others into targets.

Indicators selected

We have chosen three categories of indicators:

On a microeconomic level we have defined indicators of financial health, which also defines the greater or lesser capacity of a given bank to resist an offensive. Capitalization, profitability, the degree of internationalization, as well as equity capital seem to us to be key indicators. They are calculated in relative values in order to reflect the disparities between the different banks studied and to make comparisons possible on a national as well as on a European level. Capitalization is certainly not a criterion in itself; it does, however, indicate the "league" in which the "game" is played. It may be completed by the PER (price/earnings ratio), which may indicate how relatively "expensive" a bank is. The profitability of a credit institution demonstrates its capacity to derive profits from its operations sufficient to allow it to pursue and develop its activity on a long-term basis. In function of the goal pursued, the indicator used to measure profitability will not be the same. The return on equity (ROE) shows the investment return for shareholders. In order to complete this indicator and to make up for its limitations (it uses a total, net earnings, that can include non-recurring or heterogeneous profits or charges, which can mask the actual structure of bank profitability), we use the cost to income ratio, calculated by comparing operating costs to net income. This ratio makes it possible to evaluate the impact costs of functioning have on the level of profitability. Poor cost control goes hand in hand with a low level of profitability (example of the German banks). The cost to income ratio constitutes an indicator of the level of bank efficiency and productivity. Finally, the equity capital indicator measures, in relative terms, the solidity or fragility of the bank’s financial base. It thus completes the financial health indicators.

The degree of internationalization, as well as the international portion of net income, must also be included as indicators. It should be noted that the market clearly separates out global and local activities. On a world level, the consolidation of so-called “global” activities is fairly important (fewer than 15 investment banks share two thirds of the world market), whereas distribution remains fragmented and local. Thus, in the United States, the market share of Citigroup does not measure more than three or four percent, and that of Crédit Agricole in the European Union is less than five percent. The position of “leader” in global activities is expensive, and banks the market feels to be fragile, marginal, or ordinary often lead to lower valuations. This represents an incentive to merge or grow in order to attain a critical mass. For local activities, banks use more structural valuations and the gap between two competing banks is generally slight.

The differences in valuations of European banks reflect just as much discrepancies in geographical location as differences in portfolios of activities. Thus German banks, whatever their strategies, have a low level of profitability and a low valuation, whereas the contrary is true for British banks.

On the macroeconomic level we have chosen indicators expressing the state of the domestic banking industry and making it possible to define an offensive or non-offensive profile for each of the national banking industries. In order to achieve this we have calculated the degree of **concentration** (the share held by the largest institutions of total assets). Elements such as the **weight of the banking sector** in the GNP (the relation between total assets of credit institutions and GNP), the degree of **saturation** of the national market (measured by the number of agencies per 100,000 inhabitants) for retail banking, for example, as well as the degree of **impermeability** (1 – the share of all assets of the subsidiaries of foreign institutions in the GNP) have been calculated.

Finally, an analysis of **positioning by activity** has seemed indispensable to us. The bank as an economic player, recognizable through a relatively homogenous activity of collecting deposits and granting loans, is no more. Banking today is fundamentally heterogeneous. If a bank today is to be defined as an institution linking up various financial activities along organizational lines that are increasingly differentiated and aimed at increasingly segmented markets, then, when analyzing earnings, and particularly when it is a question of comparative analysis, we must take into account the positioning of the activities of each bank. The composition of the portfolio of activities (the share of earnings from intermediation and commissions in net income, for example), whether a range of products can be developed from those existing or not, and the strengths and weaknesses in the scope of products are all elements that must be taken into account. Banking products (interest received, commissions received, and profits made on financial operations) generated by various banking activities (including service and off balance sheet activities) constitute the primary factor determining profitability, but not all of them contribute to the same extent. The share and the evolution of the share of each of these products out of the total may explain variations in profitability. Indeed, the profitability of banks strongly oriented towards retail banking activity decreases with the lowering of interest rates, whereas the profitability of banks in which market activities dominate decreases with the decline of financial markets (the most representative example is that of the private German banks). Thus all the Euro-zone banks were affected by the lowering of interest rates but, when faced with this loss of margins, for the most part they reacted by increasing commissions on the financial services they propose to their clients.

Using those indicators, we proceed to analyze the strengths and weaknesses of the main European banking industries in order to describe how they are positioned in relation to the competition. On the basis of these studies we then characterize the main European banking systems as either aggressive (a factor of internationalization) or, on the contrary, as "porous" (a factor accepting the aggressiveness of others). The goal here is to determine which countries are the most likely to be at the origin of moves that recompose the European banking landscape. Starting with the definition of homogenous macro and micro measurements and internationalization, and with an analysis based on banking activities, we have attempted to estimate the ability of the main banking groups in Europe to "Europeanize" their operations. In this way we have sought to highlight the strategy of the European banks most likely in our view to be motor forces in the new configuration of European banking.

B- A comparaison of the positioning of European banking industries

To start, we attempt to measure for the whole of the banking industry the “degree of saturation” of the national markets and hence the potential “aggressiveness” of each country. It should be noted that the saturation of the various national markets increased between 1998 and 2003 (the last year for which we dispose of reliable, and specially, comparable statistics), except for the Belgian, Dutch, and to a lesser extent, German markets.

Table III : Degree of market saturation –Synthetic Indicator

	Germany	**Belgium**	**Spain**	**France**	**Italy**	**Netherlands**	**United-Kingdom**
2003	3 718,0	5 187,0	5 979,9	4 329,3	3 247,5	5 278,2	3 091,7
1998	3 859,5	5 753,6	4 916,2	4 153,6	2 790,3	7 148,8	2 936,2

Source : Compiled by the authors on the basis of data from the ECB

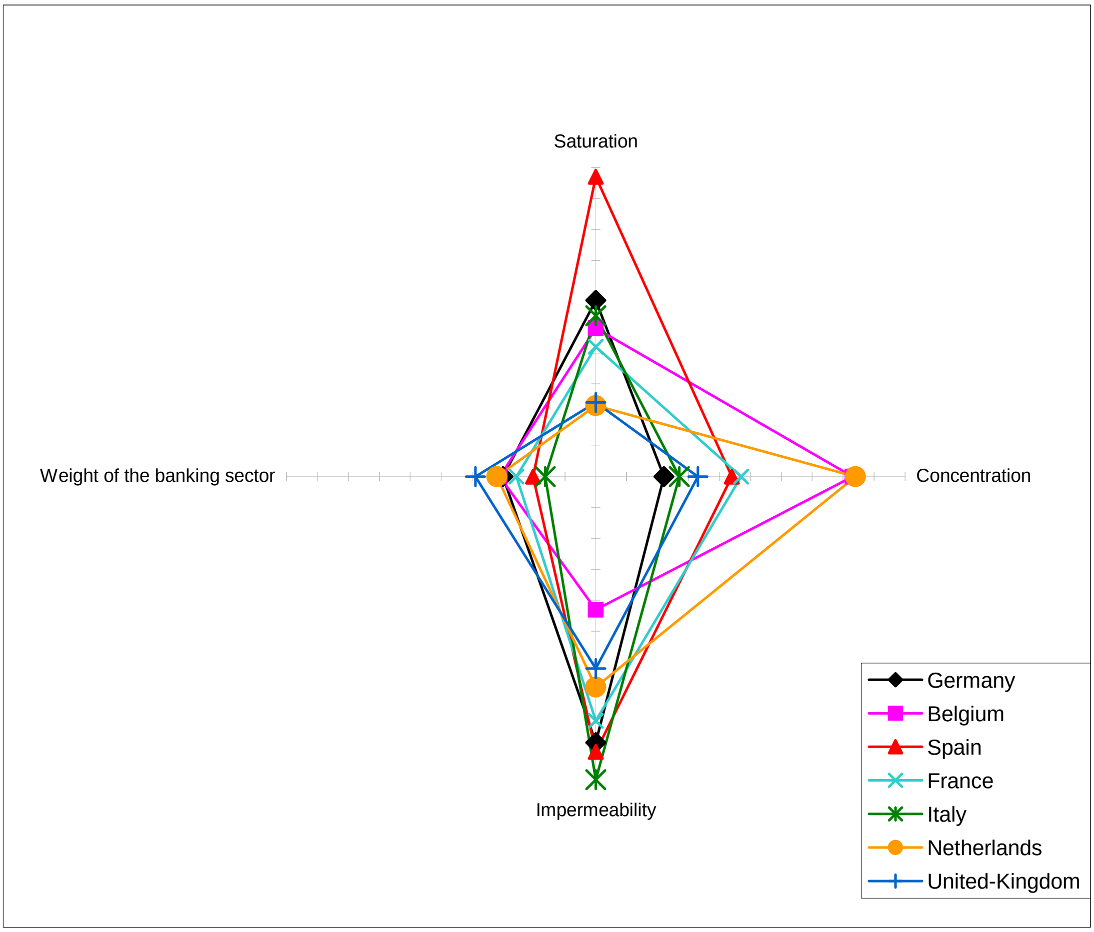
Otherwise, comparing country to country leads to the following conclusions :

1) It is the Dutch, Spanish, and Belgian banking industries that feel "tightest" in their national markets. Therefore they are the ones who should be feeling the greatest pressure to internationalize.

2) On the other hand, the Italian and German banking industries seem to be the ones least in a hurry to diversify geographically, at least as long as their process of national recomposition has not run its course.

3) Between these two extremes, although they do not enjoy a lot of room to maneuver, the French and English banking systems still seem to benefit from a limited potential of national development, which justifies their relative wait-and-see attitude towards international development.

Figure VIII: Compared positioning of European banking industries (2003)



Source : The authors on the basis of data from the ECB

C - Strengths and weaknesses of European banks

On the basis of our empirical studies we have analyzed the strong points of the national banking industries, as well as of European credit institution, in order to highlight a certain number of common characteristics. Summaries are presented in the following tables. Although this is certainly not the only manner in which it can be done, we have structured the criteria for evaluating the banks around two poles:

1. Forces dealing primarily with the environment in which the banks function (macroeconomic criteria).
2. Advantages or particularities peculiar to banks (meso and microeconomic criteria).

1. Criteria tied to the banking environment

Our first category of criteria concerns the banking environment. There do exist several factors in this domain likely to encourage new cross-border groupings—the existence of the euro as a common currency, the considerable development of new information technologies, the financialization of the economy, which broadens the scope of services requested both by companies as well as by individuals, and finally globalization and deregulation. In the latter case this has meant fewer obstacles to entering the market of banking and financial services, hence more competition in all activities, leading to a reduction of unit margins. Clearly, many institutions seek to compensate the lowering of unit margins by increasing market share. Until now, concentration has concerned above all national markets and bank investment outside domestic markets remains at a low level. But when domestic concentration reaches a certain level and there is a lack of prospective growth on the national market, banks are impelled to "look beyond their borders". Thus **banking sector concentration** seems to us to be a good criterion in the sense that it gives us an idea of the base of the big banks in their national market, but also of the extent to which they are pushed to look abroad.

We have calculated that this is the case of the banking industries of several European countries—the United Kingdom, the Benelux countries, and, to a certain extent, Spain. On the other hand, banking concentration has remained at a moderate level, despite recent combinations, in both Germany and Italy, countries where regional and local banks continue to play a significant role. These two countries are behind in the process of national consolidation and this low level of concentration in their banking industries makes their banks vulnerable to takeover operations. The German case is a bit more complicated. The degree of concentration in commercial banking and financial and investment banking is rather high, but retail banking remains largely fragmented.

Deregulation in Europe has forced governments to lift regulatory barriers and has opened the road to M&A transactions, yet protectionism is clearly not dead and some governments continue to intervene heavily. The difficulty in modifying the Italian banking scene, which is largely chaperoned by government authorities, illustrates this point well. The failure of Dexia and Sanpaolo Imi to draw closer together and the declarations of Sylvio Berlusconi on the "*Italianity*" of the banks are good examples.

Thus, although they have moved ahead with deregulation, some national banking industries remain strongly protected, especially retail banking, where in addition to legal and fiscal differences there are linguistic and cultural differences that help them to maintain control of these markets. But how long will this delay the process of consolidation on an intra-European level? And doesn't this failure to create several major European banking players risk leaving the field open to takeovers by much wealthier U.S. banks?

- Our second criterion concerns **intermediation margins**, a criterion somewhat linked to the preceding criterion, but also to the regulatory environment of banking. British and Spanish banks take advantage of higher margins, whereas in Germany and Italy there has been a significant erosion of margins in recent years.

- Finally, our third criterion consists of **statutory and regulatory particularities**. We use this expression to characterize certain particularities that are linked to the status of banks and their legal environment, and that procure them an advantage in their development. We are thinking especially of cooperative banks or, more globally, of all those whose status (or for whom the composition of their capital) places them out of the reach of hostile takeovers. Practically all countries offer examples of these particularities. However, clearly the phenomenon is much more widespread in France (mutual banking sector), Germany (public and cooperative banks) and Italy (the foundations). They are much less present in Spain -- but do exist (the *cajas*) and in the Netherlands (Rabobank). Last, we may say that in the United Kingdom, with the demise of the big building societies, the role of protected status institutions is fairly marginal. We should nonetheless note that the statutory and regulatory particularities there are fairly ambiguous, and in some cases may also be interpreted as weaknesses.

2. Bank specific criteria

We distinguish four categories concerning the banks themselves:

-The first includes criteria that furnish a **financial analysis** of the bank's management. Thus we have selected **financial profitability**. Of course, insufficient profitability makes the bank in question an ideal target for a takeover. Shareholders of this institution are quick to bail out. In this type of situation, banking restructuring is the answer to certain individual weaknesses. Situations are fairly uneven concerning this criterion. On the one hand we have industries with a relatively high degree of profitability (United Kingdom, Spain, Benelux countries), and on the other hand countries suffering from chronically low profitability (Germany and Italy). The weak level of ROE characterizes all the German and Italian banks, with the exception of UniCredito. In 2003 four of the eight largest German banks even registered a negative ROE. The intensification of competition has wiped out margins on these domestic markets, which have a low degree of concentration.

In this same category we have included **cost control**. If we proceed to analyze the performance more in detail we find a situation similar to the preceding one, although not as stark. The United Kingdom and Spain are the unquestionable leaders in cost control. In general, cost to income ratios are very high for German banks (nearly 98% for HVB in 2003) and, to a lesser extent, for Italian and Dutch banks. In both Holland and Belgium the situations are slightly improving. In Italy and Germany, with one or two exceptions, all the banks are pursuing cost reduction programs.

Finally, the last criterion in this category is **management risk**. In this field the United Kingdom is the outstanding leader. Spain and the Benelux countries possess similar risk levels. In Italy, despite exposure being essentially limited to the domestic market, the quality of bank assets has declined considerably. It has been strongly affected by recent financial scandals. And, according to this criterion, Germany is dead last.

-The second category associates criteria linked to **financial solidity**. From this point of view, **equity capital** is a rare and expensive resource for banks. It is used both to respect prudential ratios (Cooke ratio and the McDonough ratio), and to finance external growth. Once again, two countries are clearly ahead—Spain and the U.K. The Benelux countries occupy an intermediary position. Finally, the weakest observed are Germany and Italy.

We also add to this category **market valuation**, which is the weakness *par excellence* of European banks. The only ones to at least partially escape this rule are the British banks.

- The third category concerns the **distribution of activities**. We attempt to join together two criteria dealing with the distribution of activities, one geographical, and the other concerning the lines of business themselves.

The **geographical** distribution of the activity portfolio is examined under two angles. The Netherlands, and to a lesser extent Belgium and the U.K., have the best profiles of geographical diversification of activities. Concerning the analysis of external growth policies, the hierarchy is basically the same, with, however, a slight advantage for the British banks, which seem to have conducted policies of external growth that are most appreciated by the market, despite being more conservative.

How activities are linked together may be examined under two different angles. It may be felt that the strongest profile is one that best balances various activities. In this case it is generally the Netherlands, Belgium, and Spain that lead the pack. Or it may be preferable for banks to specialize, and in this latter case we should highlight the expertise of German banks in wholesale banking, of Italian banks in asset management, and of Dutch banks in bancassurance.

- Finally, our last category concerns commercial strategy. This last criterion naturally somewhat fuzzy, tries to evaluate the effectiveness and innovative character of the commercial policy of the banks. But comparisons in this realm are difficult. With that proviso in mind, the U.K. and Spain seem to hold the inside track here.

Examining the situation of European banks reveals a certain number of current and structural weaknesses that characterize them. Schematically, we can define two broad categories of weaknesses—operational and financial weaknesses (low profitability, insufficient cost control, low quality of assets, insufficient equity capital, and low market valuation) and the strategic weaknesses (little geographical diversification, weaknesses in some activities, lack of opportunities for external growth on the domestic market, overexposure to certain markets or segments, risk of a housing bubble and delays in the process of national consolidation).

Far from being perfect, this attempt at classification has nonetheless the advantage of putting a finger on the differences between the weaknesses characterizing the European banking industries.

Table IV: Summarizing the strengths of the main European banking industries

Germany
• Significant efforts of restructuring that are beginning to bear fruit. • Good expertise in corporate risk.
Benelux countries
• Profitability of Dutch banks has strongly improved in recent years—now sometimes reaches levels comparable to British banks. • Clearly dominate their domestic market. • Narrowness of their domestic market has pushed these banks to seek growth both beyond the borders of this market (successful geographical diversification for most of them—even the cooperative groups) and through non-traditional activities (successful model of bancassurance). • Growing improvement of their productivity—continuing drop in cost to income ratio. • Financial solidity.
Spain
• Good profitability—expressed in high return on equity ratios—higher than the European average; this holds for all the banks studied. Improvement in these indicators over the period 2001-2003. • Effective cost management; cost to income ratio is considerably lower than the average level observed in our sample of banks. Moreover, continuous efforts to manage costs more effectively. • Good level of equity capital—strong solvency ratios.
Italy
• Well established in the Italian market. • Improvement in the quality of their assets. • Successful establishment in Central and Eastern Europe. • Italian banks prefer certain low-risk activities that require little equity capital—AM, bancassurance, etc. • Development centered on retail banking. • Banking regulation in Italy as well as certain statutory particularities allow Italian banks to develop sheltered from the competition of foreign banks and the threat of hostile takeovers.
United Kingdom
• Good cost control—low cost to income ratios. • High level of financial profitability (one of the highest among European banks). • High level of market valuation of British credit institutions—the national leaders (HSBC, RBoS) are also first among European banks. • Whereas British banks face international competition on the wholesale market, they hold a strong position on the retail market in the U.K. • Relative financial solidity—capital ratios improving. • Development of competence in several sub-sections of their market—mortgages, small businesses, consumer credits, asset management.
France
• Strong presence of mutualist networks, whose status is an obstacle to takeover bids. • Most banks studied are unquestionably financially sound (high equity capital levels). • Banking industry relatively concentrated and mature. The opportunities for further consolidation within the domestic market seem basically exhausted. • French banks seem to be fairly internationalized, without, however, attaining the level of the Netherlands or Belgium. • Good base from the domestic market—especially in retail banking. • Most of the major banking networks have opted today, whether judiciously or not, for a universal bank profile.

Table V: Summarizing the weaknesses of the main European banking industries

Germany
• Very low, even negative profitability. • Very high cost to income ratios. • Fragile financial basis with solvency ratios lower than the European average. • Low market valuation (Deutsche Bank is the fourth European bank by total results, but only the eighth by valuation). • Low degree of concentration, particularly within the savings and loan sector and among regional banks. • Margins wiped out by intense competition from categories of institutions that benefit from government guarantees.
Benelux countries
• Lack of opportunities for external growth on the domestic market. • A corporate governance model (foundations and structure) that limits non-friendly combinations. • Weaknesses in activities other than retail banking. • Market valuation relatively moderate compared with the big European groups (ABN AMRO is only the 14th European bank by valuation, according to the 2004 rankings of *The Banker*). • Significantly higher cost to income ratios than those of British banks.
Spain
• Risk of housing bubble. • Persistence of the risk linked to the volatility of Latin America currently for Santander and BBVA. • Saturation of the domestic retail market. • Insufficient presence in Europe. • Revenue structure dominated by the importance of intermediation revenues. • Little expertise in wholesale, private, and asset management banking (except for Santander, and, to a lesser extent, BBVA).
Italy
• Low market valuation. • Too little presence abroad. • Low level of solvency ratios (with the exception of Mediobanca). • Delay in the process of national consolidation, which makes Italian banks vulnerable. • Insufficient expertise in activities other than retail.
United Kingdom
• Relatively low level of presence abroad (with the exception of HSBC). • Lack of opportunities for external growth on the domestic market and for domestic M&A transactions.
France
• A significant drop in interest margins, a trend which has continued despite an end to the regulation of some banking products. • Fairly high cost to income ratio (especially for the mutual institutions). • Absence of remuneration for checking accounts. • Problems of collusion raised by some consumer groups.

VII – COMPETITIVE STANCE OF THE MAIN EUROPEAN BANKS

A - Business segments of the main European banks

It seems indispensable to us to complete our survey of the European banking industry by examining it from the point of view of business segments. Once again, let us insist on the necessity of no longer considering the bank as a whole centered on collecting deposits and granting loans, but rather as a structure built around business segments with often complementary, but always distinct characteristics.[48]

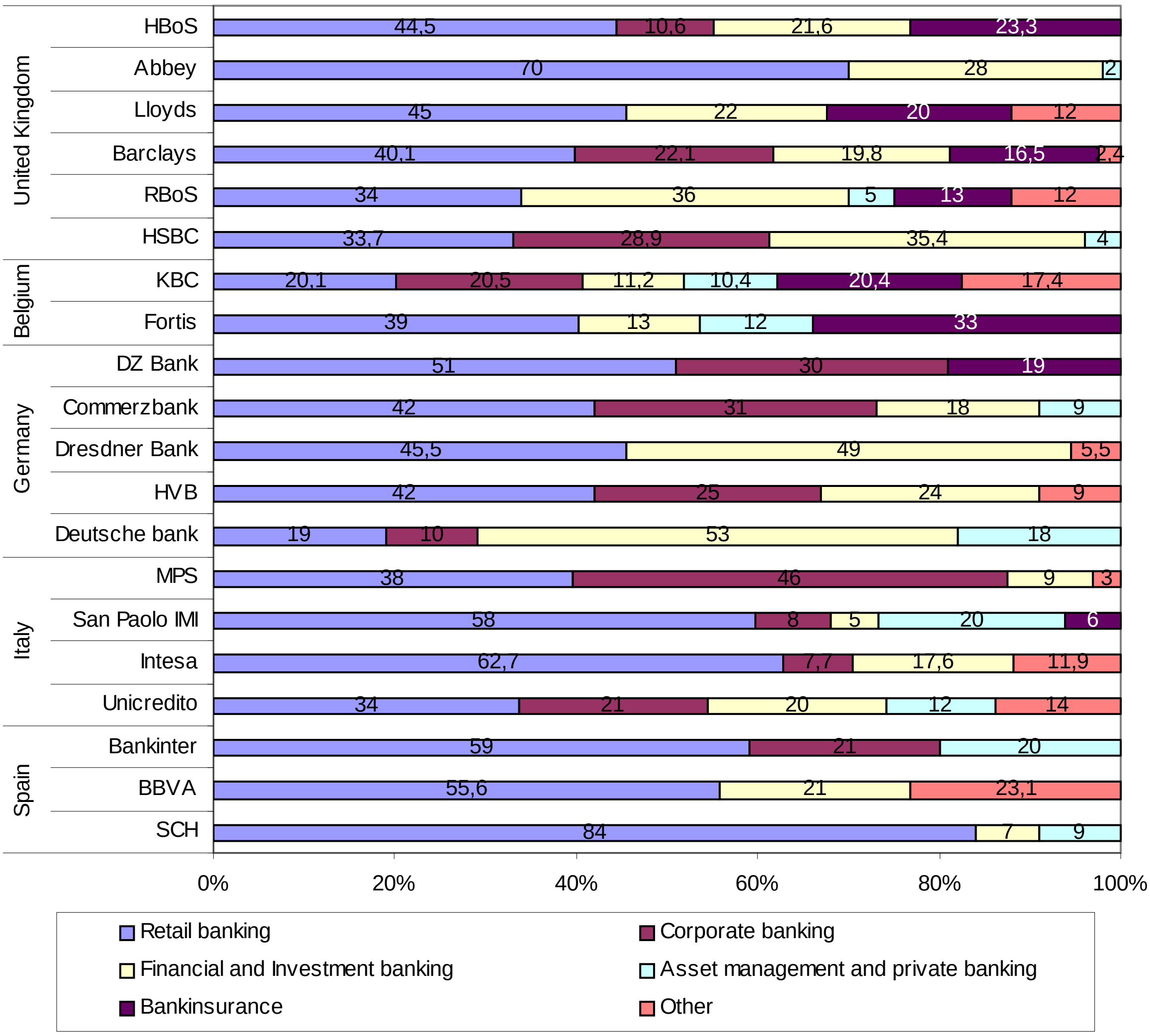
In order to measure the weight of each business segment in the activity of each of these banks, we have chosen as indicator the share of revenue obtained through each business segment, compared to total bank revenues. Since some banks (BBVA, Unicredito, HSBC, HboS, and DZ Bank) do not break down their revenue by business segment, we have chosen as indicator the contribution of each segment to bank profits. Subsequently we grouped the data concerning the activities of each bank into five main segments:

- Individual and retail banking: checking accounts, granting of loans to individuals for the short and medium term, consumer credit, real estate loans, credit cards.... This segment also includes the financing services for SMEs.
- Corporate banking: business or commercial banking: designates all the services involved in financing businesses (primarily medium-sized), and in financing trade.
- Investment and financial banking: getting listed on stock exchanges, mergers and acquisitions, structuring financing.
- Managing assets for third parties and private banking: managing investments and advisory services for a high-net-worth clientele.[49]
- Bankinsurance: insurance products commercialized through a banking network.[50]

We have grouped together the remaining poles of activity, which do not indicate the segment in which they may be situated, into the segment "Other."

[48] *La Nouvelle Economie Bancaire*, Economica, 2005, op. cit.
[49] For some banks – HVB, Dresdner Bank, DZ Bank, and Intesa – the activities of asset management and private banking are included in the retail business segment.
[50] For both the British bank HSBC and the Italian bank Intesa the activity of bankinsurance is included in the retail business segment.

Figure IX: The business segments of the main European banks



Source: the authors, according to the banks' financial statements
Data as of Dec. 31, 2003, except for British banks (Dec. 31, 2002)

By analyzing the strategies in terms of business segments by country we can establish that the German and British banks are those that most often practice the business of investment and financial banking. However, contrary to German banks, some British banks such as Barclays have turned away from this business in order to progressively focus most of their activities on retail banking, their most profitable business on the domestic market. German banks, at least those that are private, therefore remain the banks that, for the last few years, have concentrated most on the business of investment and financial banking. This strategy has cost them their profitability, following the drop in the financial markets. They are thus attempting today (except for the Deutsche Bank) to shift their focus to retail banking.

However, the possibilities for these banks to expand in this business are currently handicapped by the competition of the public sector.

Italian banks are essentially retail banks. Individual banking and financing SMEs provide a much higher proportion of the revenues for these banks than is the case of the other European banks. It is true that some Italian banks draw a growing part of their revenues from asset management, particularly UniCredito, San Paolo IMI, and Intesa. Moreover, Italy is one of the European countries in which the business of investment and financial banking is the least developed, with the exception of UniCredito. Also, concerning bankinsurance, Italy seems to be somewhat behind. This can be at least partly explained by the underdeveloped insurance sector in Italy.

Contrary to the Italian banks, the Belgian banks are at the forefront of the development of the concept of bankinsurance. During the last decade Belgian financial institutions have indeed sought to exploit what is complementary between banking and insurance. The Belgian financial sector has been characterized by significant mergers between banks and insurance companies, leading to the formation of genuine financial conglomerates.

As for the Spanish banks, they offer certain similarities with Italian banks to the extent that the retail banking business takes on a preponderate role for them. Moreover, the business of investment and financial banking has not yet expanded significantly in Spain at the present time, except through the implantation of Spanish banks in Latin America.

Through figure IX we have established that, in general, European banks are essentially retail banks. The revenues from this business represent over 45% of the revenues of a majority of the banks from this sample. The business of investment and financial bank also plays a large role, particularly for German and British banks. The businesses of asset management and private banking are the least developed for the banks under study, with the exception of the Swiss banks. This constitutes an attractive factor for institutions specialized in these businesses, which are looking for opportunities to expand on the European market. Thus, an offensive of the largest U.S. banks, which are the best performers in the world in this business, is perfectly conceivable in the relatively short term.

B- Principal Components Analysis

We turn next to Principal Components Analysis, applying it to the main European banks.

Principal Components Analysis (PCA)

Principal Components Analysis (PCA) is a factorial based method. It's a way of identifying patterns in data, and expressing the data in such a way as to highlight their similarities and differences.

We take *n* individuals (in our case, 37 banks) and their values taken from *a* quantitative statistical variables (here there are four variables: valuation, equity capital, ROE, and internationalization). We obtain a cloud of points (the banks), N (I) of R^4 (each bank is located by four numbers, the values of four variables).

The PCA consists in projecting a cloud of points *N* (I) on the planes. Of course, with this projection there is a loss of information, but the process makes it possible to better exploit the data. PCA optimizes the projection, because it calculates the planes on which the least amount of information possible is lost. Thus according to the histogram of the following values, on a plane determined by axes 1 and 2 (each axis is a linear combination of variables, and the axes are orthogonal two by two, that is, non correlated), we obtain 84.23% of the information.

From the correlation table with factors (that is, the axes), we conclude that the C4 and C5 variables are indeed correlated positively with axis 1 and the C6 variable is indeed negatively correlated with axis 2.

The table of contributions from individuals in the construction of each axis allows us to make groups of individuals among the 37 banks that are similar (in relation to the data) and that are linked to the two groups of variables that we have just defined.

On this basis we project our 37 banks into a cloud of points (figure X).

We then group the banks into potential predators and targets (figure XI).

Figure X: The table of data by applying the PCA

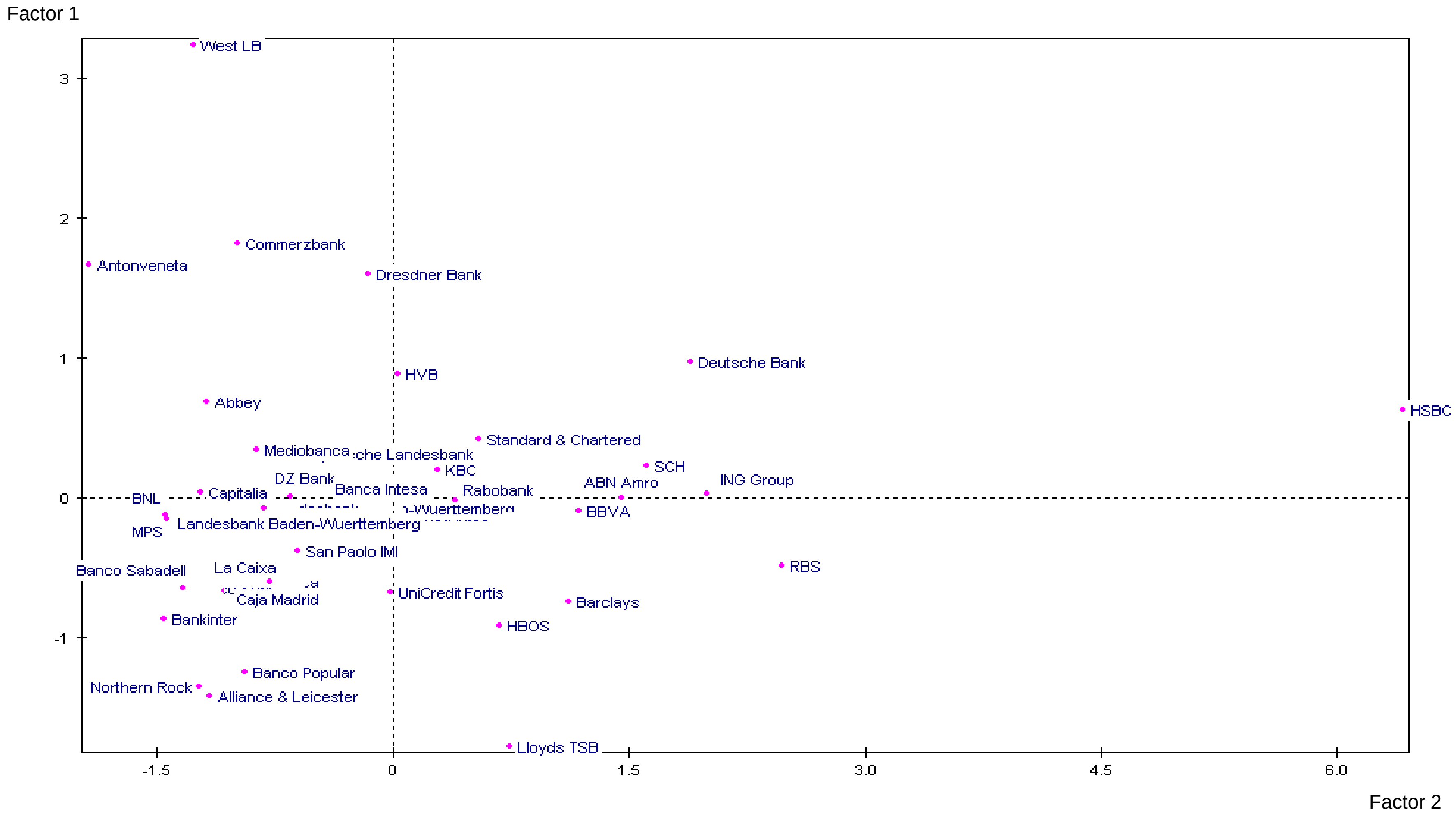
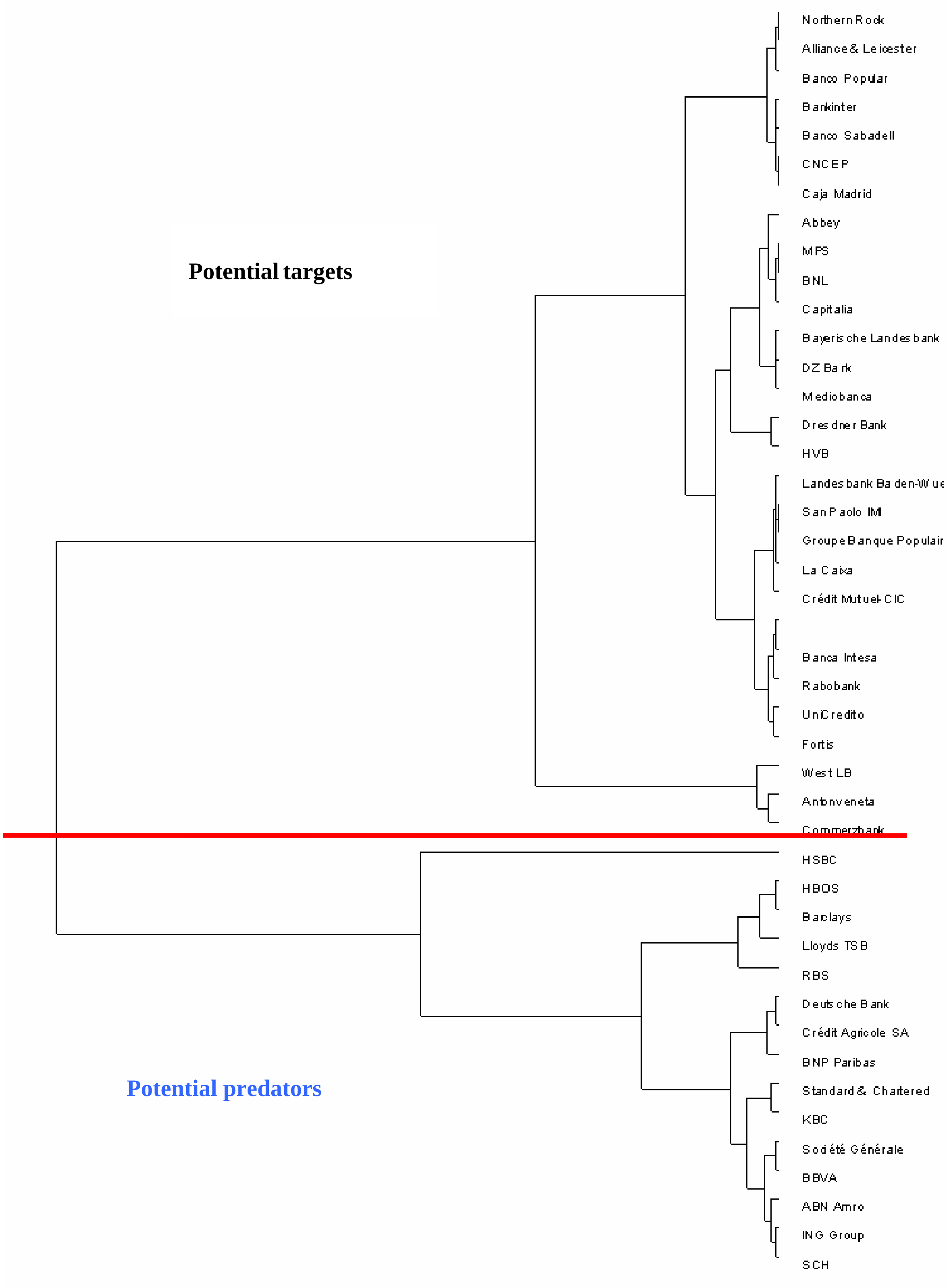


Figure XI: Groups of potential predators and targets



As we finish this part of our study, we must observe that there is no European banking industry as such, rather there are national banking industries. European banking remains fragmented and characterized by national particularities. Yet it cannot escape trends toward concentration in progress on an international scale in banking, which is relatively less concentrated than other industries. The very heterogeneous character of the industry, demonstrated by the strengths and weaknesses we have highlighted, demonstrates the complexity of the situation from the point of view of the restructuring to come.

Figures X and XI show that the British and Spanish banks are the strongest and therefore best placed to go outside their own borders. The banks of these two countries have the means. But will they act?[51]

[51] E. Jeffers: "Quel rôle pour les banques britanniques dans les restructurations bancaires européennes", *Revue d'Economie Financière*, N°78, 2005.

CONCLUSION

The observation and analysis of recent banking restructuring on a European scale allows us to draw certain conclusions on two levels:

a) By updating a certain number of beliefs, which seem paradoxical or counter-intuitive in some cases, and which constitute “stepping stones” on the road to a better comprehension of European banking restructuring.
b) By putting into perspective and clarifying some *questions* which cannot yet be given definitive answers but which seem better defined today.

<u>Six beliefs</u>:

1) Banking restructuring has, in the past, been mainly defensive. Faced with opportunities, but also with threats from the combined movement of deregulation/globalization, European banks made the choice to consolidate within their national market. The vast majority of M&A operations (more that four fifths according to our estimation) took place within national borders.[52]
2) This consolidation on national markets could be considered as completed in all European countries except Germany and Italy. For most European countries, whose banking industries have now attained a size where they risk antitrust actions, the future of banking lies in internationalization. As for Germany and Italy, both targets for foreign banks and areas of imperfect national consolidation, they constitute ideal countries to study in the coming years.
3) The internationalization strategy of European banks has, paradoxically, been oriented towards zones other than the European Union. This internationalization either aims at the global banking market, e.g. the United States, or emerging zones that are historically linked to certain European countries (such as Latin America for Spanish banks), or judged to have a strong potential (such as Southeast Asia). Thus, there is no European bank that can be truly defined as… European. What’s worse, there are no banks in Europe that, by

[52] D. Focarelli & A.F Pozzolo: “The determinants of cross-border shareholdings,” *Banca d’Italia*, 2000.

their financial and stock valuation strength, seem "major" on a regional scale. The only candidate at the beginning of the nineties, Deutsche Bank, seems handicapped today as much by its internal difficulties as by the insufficient modernization of the German banking system, and has not been replaced by any "successor to the throne."

4) The only true European bank is… American. We are talking about Citibank, which has both a genuinely "global strategy" and bases itself on the diversity of its banking activities in order to "raid" numerous European countries.
5) European authorities are largely responsible for the absence of European banking. The delay in banking and financial harmonization as well as the absence of a truly European set of regulations for banking (as well as for financial markets) have left European banks faced with a regulatory mess that would dampen anyone's enthusiasm. Simply put, a bank desiring to be present in all European countries (even before the expansion of the European Union to 25 member states) would have been subjected to at least thirty different national sets of legislation…. This is particularly true in the case of retail banking for which regulations are especially extensive.
6) More generally, an analysis of European banking makes no sense unless it is undertaken activity by activity. The reader of the preceding pages will not be surprised by this conclusion…. In this respect, a new paradox should be highlighted:
   - even though, for technical as well as regulatory reasons, European economic integration is easier to realize in the corporate banking field, no real "major" has emerged in this sector, and
   - even though, in retail banking, there are more obstacles to contend with, there are still many candidates wanting to form a true European banking oligopoly in this field.

The explanation of this paradox lies in both the regulatory barriers which various countries have established against the construction of a European retail banking industry (with the passive complicity of Brussels) and the insufficient ambition of certain mutual banking networks.

Four questions:

1) The comprehension of financial risk in general and banking risk in particular constitutes the principle challenge faced by economists in the years to come. There is too much uncertainty today in this area to be able to measure the capacity of the financial system to stand up, at least for the ten years ahead. The question of systemic risk, thanks to the combined efforts of banking operators and their supervisory authorities, has today lost some of its status as the main theoretical question. But this question might well return to the forefront. In this area, there are just as many questions surrounding the source of risks as there are surrounding the emission of risks. Risk is like gas: eminently volatile. Without more successful research on how bank risk spreads, it is quite likely that we are building and stockpiling more and more real "weapons of mass financial destruction"…
2) No archetypical model of the twenty-first century European bank seems to exist today.[53] If we take into account categories that were, or still are, popular, we still do not see any "universal," "fragmented," or "global" banks. In the same vein, "bankindustry," "bankinsurance," and "e-bank" models do not seem to have really proven themselves. Research must be pursued in order to better define, at least for these last three "concepts," the limits of current strategies as well as the ways and the means of newer, more advanced strategies.
3) Another question concerns the legal aspects of bank growth. The partnerships of the 1990's seem to have lasted a long time, as shown by the fruitless effort of the BNP and Dresdner Bank. The path of M&A does not seem any more convincing. So what will be the "royal path" from a legal standpoint (if a "royal path" exists) of European bank restructuring? One point to be noted: the importance of mutual banking in Europe (at least in continental Europe) means that partnerships (perhaps new forms of partnerships that will be invented) represent one possibility.[54]
4) Fourth and final series of questions: for what reason should Europe continue to control its banking sector? That only makes sense if such a course makes it possible to better finance the European economy. Better financing means less costly financing for clients and for a

[53] B. Casu & P. Molyneux: "Efficiency and structural issues in European banking," *Revue de la Banque*, N°6, 2000.
[54] C.M. Buch: "Why do banks go abroad? Evidence from German data," *Kiel Institute*, 1999.

regularly growing number of banking clients, without setting off a crowding out mechanism (which we sense arising) for regulatory or other reasons.

Looking toward the future, let us outline some perspectives on the subject of European bank restructuring.

1) As European banks are sensitive to economic and market fluctuations, the coming months probably won't see a major evolution in M&A activity in the banking arena. "Everybody is talking to everybody," as Daniel Bouton, the CEO of the French Société Générale, declared recently, but… no one is acting. In terms of the stock market, banks are certainly less expensive than they were in 2000 but they are also… less rich. On the macroeconomic level, the short and medium-term perspectives of "old Europe" barely consider expansionist banking strategies.
2) Beyond the individual strategies, which designate a dozen potential predators and almost as many targets (Table VI), the countries that seem the most likely to profit from European economic integration are France and United-Kingdom, and the countries that seem the most subject to foreign incursions are Germany and Italy. Once again we find protectionism in these latter countries –whatever forms this may take. There is also need for more detailed research concerning them.

   Given the macroeconomic context, in the short term the main operations should concern primarily either mid-sized or small banks (particularly in Germany), or operations that target a specific activity (particularly asset management).

Table VI: Predators and potential targets on the European banking market

Capitalization in billions of euros as of 9/23/2004

	Potential predators	Capitalization	Potential targets	Capitalization
ITALY	Unicredito	26	Intesa	18
			SPIMI	11
			Mediobanca	8
			MPS	6
			Capitalia	6
			Antoveneta	5
			BNL	4
			CARIGE	3
SPAIN	SCH	37	BBVA	37
	CAIXA	Assets 115	Banco Popular	10
	BBVA	37	Banco Sabadell	5
			Bankinter	2
UNITED-KINGDOM	HSBC	144	Barclays	46
	RBS	72	Lloyds	35
	Barclays	47	Standard Chartered	15
	HBOS	44	Abbey	10
GERMANY	Deutsche Bank	32	Deutsche Bank	32
			HVB	11
			Commerzbank	9
SWITSERLAND	UBS	60	Crédit Suisse	35
FRANCE	BNP	46	SG	32
	CA	32		
NETHERLANDS	ING	44	ABN	30
	ABN	30		
	Rabobank	Assets:403		
BELGIUM	DEXIA	16	Fortis	25
			DEXIA	16
			KBC	15
USA	Citigroup	229		
	Bank of America	178		
	JP Morgan	141		

Source : E. Jeffers & O. Pastré: “Les restructurations bancaires européennes,” CEPN, 2004.

3) A major imponderable is linked to the future of the mutual sector. Contrary to what was predicted by some, mutual banking is not on the decline in Europe, much to the contrary. Mutual banks may thus be listed both among the potential predators (in some cases via their “listed vehicle”) and among the targets (especially in Italy). Hence, their future

depends on themselves and on clearly identifying what mutual banking really is (which hasn't yet been done).

4) It is clear that in two distinct but nonetheless linked registers, the IAS and Basel II disputes will have major implications on European bank restructuring. These new economic "rules of the game," will impact individual strategies.
5) In both of these negotiations, the alarm signals that were sent up, particularly by Michel Pébereau in France, were necessary. Everything leads us to believe that, indeed, the mechanisms created by the IAS and the Basel Committee do not sufficiently take into account the specificities of European banking. To take only the case of the IAS, certain norms currently being adopted (IAS 32 and IAS 39) are clearly unsuitable for countries that remain countries of banking intermediation and for banks that have preferred fixed rate loans. Moreover, there is every reason to believe that not everything is already set in stone; there is still room for maneuver (what would the IAS be without Europe?), which must, at all costs, be utilized in the coming months.
6) History must be "accelerated" concerning European banking regulations. That means, above all, the process of harmonization and especially the Lamfalussy process, which must be significantly accelerated, particularly through establishing a stricter timetable. But that should also concern the national regulations, whose protectionist character should be softened. It is not by defending their regulatory specificities, some of which are of another age, that the German and Italian banking systems will improve their banking and hence their economic competitiveness. There is no question here of an overpowering liberalization current irremediably sweeping away banking structures that have been (and still are) quite useful (particularly as regards the financing of small and medium-sized companies). It is not a question of speeding the reforms up. Because time is growing short…

European banking is still in the process of being structured. It is important to clarify the stakes of this regional integration, the risks that this integration presents for financing the European economy and the measures that must be taken, notably on the European level, to create a "win-win" situation for Europe.

Nothing is less well adapted than the term “conclusion” to the definition of the following lines that form the synthesis of our thought. In fact, it isn’t possible to define a global and coherent theoretical approach, given the ever-changing character of banking activities. One thing that is sure (and that in and of itself is a conclusion): the liberalization/privatization/globalization movement has radically modified the nature and the organization of banking activities. The bank no longer exists. What do exist are banking activities that are articulated in a very differentiated manner and that we continue to call, by default, “banks.” It could be tempting, if one wanted to blaze a new trail, to speak of the “exploded bank.” But nothing is less well adapted to the current situation in a period when banks have achieved, better than at any other period, the integration of their different activities. The idea of a “global bank” is not any better adapted, for this characterizes only a small part of the banking universe and, also, constitutes more of an objective than a current reality.

Second conclusion, the advent of a “multi-form bank” requires reexamining a not insignificant part of banking theory such as it is practiced and taught today. This mutation, initiated in the mid-eighties, logically means “shelving” a good number of instruments of measure and of banking activity analysis. It also requires that we review certain concepts, such as competition, so that we can better adapt them to the new reality. Finally, it leads to revitalizing instruments of analysis and theoretical approaches that allow us to better understand structures, behaviors, and contemporary banking performances.

These are the only definitive conclusions. For the rest, we are quite far today from a situation in which assertions can be made in a preemptory manner. In any case, we can glean two lessons from the preceding remarks.

First, it is useful to reaffirm the importance of the banking economy. The movement of dis-intermediation, which has not yet completely played out, has shown some of its limits. The accelerated and, in our opinion, insufficiently “structured” development of financial markets has had the effect of increasing certain risks, but above all of endangering the financing of growth itself, at least in certain circumstances and for certain agents. To simplify, one could say that banking financing has rarely had as much importance as it has had since the bankruptcy of Enron and similar crises that have followed (Tyco, Worldcom… in the United States, but also Vivendi, France Télécom, Marconi and various Parmalat in Europe). It seems like we are just rediscovering both the virtues and the constraints of banking financing. In this context, Europe clearly has a role to play. Europe or continental Europe at least, remains a zone in which banking intermediation continues to play, directly or indirectly, a preponderant role in the financing of the economy. So now it is up to Europe to participate actively in the definition of the role that banks must play in the economy. It may seem paradoxal that the vast majority of the studies on the economics of banking in the past has been produced in the United States, a country with perfectly atypical banking structures. It would be perfectly indecent for Europe not to lead other countries in thinking about the intermediation-banking model of the future. Continental Europe, in our opinion, has a historical role to play in this area.

The second lesson that can be drawn is that a vast program of research must be carried out in order to shed light on the many theoretical grey areas that the advent of the "multi-form bank" has caused. We believe we have identified a certain number of these grey areas in this paper. There are surely others. These grey areas must be explored. In order to do that, two forces must be mobilized. Mobilizing the academic world is one place to start. How many theses are being written and how much research is being carried out to shed light on contemporary banking strategies? Our feeling in this area is future research should give priority:

- to microeconomic studies. To theoretical microeconomics, of course, but also, and perhaps especially, to a return to the good old monographic studies that, in the early days of industrial economics, founded the originality and the effectiveness of the work of both E.S. Mason and the Harvard School;
- to multidisciplinary work. Industrial economics cannot live separated from the rest of the world. If we want to participate in redefining the foundations of banking economics, it will be necessary to take into account behavioral science, whether it consists of psychology or sociology. In an era in which the behavior of consumers (corporate as well as household) plays a large role in determining business strategies, this detour into disciplines other than economic science seems unavoidable.

But the mobilization of academia will not suffice if it remains isolated. An institutional mobilization must accompany it. Without the implication of professional federations, central banks, and statistical institutes, on the national as well as the European level, no significant progress will be recorded. If banking economy research has so much difficulty modernizing, it's largely because of the lack of access to information. Individual data that statistical institutes use as well as regulatory bodies must be, (in all confidentiality, of course) easier to access. After all, better access to this information being the surest guarantee of better research, it is also the best means of assuring the effectiveness of the institutions that are in charge of this sector of economic activity. A better comprehension–and, therefore, better regulation–of what a bank is today requires paying this price. A price which, bearing the stakes in mind, seems quite reasonable….

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