Does size in banking bring economic efficiency, or merely market abuse?

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Introduction: Economies of scale, optimal size and competition in banking

It is worth looking at the last decennia in the banking sector to reflect on the relation between size and efficiency: are there efficiency gains and economies of scale in banking, and is there an optimal size, one that allows the best productivity[3]? It is a delicate, but very important question for the soundness and regulation of the banking sector, and its capacity to serve the economy, with a degree of competition sufficient to transmit productivity gains to end-users.

Measures of efficiency and optimal size in banking are always difficult to approach. Investment Banking is one segment of banking activities where size seems to bring superior profitability, in most years; this seems however to come not so much from superior efficiency but from the capacity of large Investment Banks to control some key segments of the capital markets to their advantage, and to the detriment of markets, taxpayers, shareholders…

In section 1, we will look at economies of scale in banking in general, to conclude they are very few. In section 2, we will examine globally how size can bring superior profitability in Investment Banking at the cost of economic transparency and efficiency. In section 3, we suggest some remedies.

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Section 1: Economies of scale in Banking

Cost efficiency

Size is claimed by many to bring economies of scale and cost reductions almost per definition. The supposed necessity to absorb fixed costs through large volumes is presented as self-evident: IT costs, branding costs, network costs —it has become fashionable lately to talk about the necessity to absorb regulatory costs.
The literature in this field[4] rather shows that unit costs of banks are U-shaped: they decrease until a certain size, then stabilize, and then rise with size, because some costs (IT integration, risk management...) can grow faster than revenue[5]. Moreover, larger banks seem to work with a heavier technology, and their potential for economies of scales is more limited[6]. Economies of scale can exist in standardised processes (checks, credit processing…) but many can be outsourced. For corporate credits, economies of scale exist in the monitoring done by the "house bank", but they are not limitless.
Size does not seem to bring a lower funding cost, with the exception of equity[7]: large banks work with a lower ratio of equity, but recent experience shows that the resulting risk is shouldered by the State and the taxpayer, who have to bailout large banks when their equity is insufficient, to avoid systemic risk since they are "too big too fail". This is not an efficiency gain brought by size but rather a subsidy. In practice, states give those large banks a tacit and very cheap guarantee, which represents a public subsidy whose level is inversely related to the equity ratio of banks. Large banks lobby intensely to resist any measure that States and regulators envisage to reduce this subsidy, for instance through a separation of activities or higher equity ratios[8].

Revenue efficiency

A bank network needs a certain size, but this is also a field where the advantages seem to reach a certain level and then diminish. Studies in this field are not very robust[9]. The figures are quite dispersed, meaning the efficiency is rather determined by bank specific factors or independent variables; size does not seem to be an important factor despite the propaganda-style assertions of many consultants and banking lobbies[10].

- It is said that large corporate clients request sizable credits to deal with a bank. This is not necessarily so, and very large corporates use bank of all size if they offer good services. Moreover large clients are not always the most profitable nor the most loyal.
- It is also said that large international networks allow superior services, but a good network of correspondents can offer services equivalent or even superior to a proprietary network whose foreign branches are often insignificant locally and of little added value.
- A better diversification of risk is also mentioned by the advocates of large banks[11], but risk diversification can be achieved in various ways, for instance through credit syndications or various credit insurance mechanisms.

[4] See Humphrey (1990), Akhavein and al. (1997), Amel and al. (2004)
[5] Various studies seem to indicate that quality of management is more important to bring efficiency than economies of scale or economies of range. See Berger and Humphrey (1991), Berger and Humphrey (1992), Berger and al. (1993), Malnero and Tulkens (1994)
[6] See Altunbas and al. (2001)
[7] See McAllister and McManus (1993), Mishkin (1999)
[8] See Moss (2010)
[9] See Berger and al. (1993)
[10] See Amel and al. (2004)
[11] See Diamond (1984), Ramakrishnan and Thakor (1984), Boyd and Prescott (1986), Williamson (1986), Allen (1990)

It has been fashionable since the 1980's to increase the scope in banking. In Europe, commercial banks have embraced capital market activities, often with little understanding of the risk involved. During a few years, this brought an apparent increase in revenue efficiency, but each crisis brought substantial losses, particularly the subprime crisis of 2007-2009.
Financial conglomeration was in fashion for a while in the 1990's, including some mergers of banking and insurance activities but this brought little evidence of efficiency gains and plenty of evidence of inefficiencies, and regulatory arbitrage. Many de-mergers of banks and insurance companies took place since.

Captivity "efficiency"

In their saving gathering activities, large continental banks aim at increasing their control of the distribution of financial products. They control their own UCITS, and produce or underwrite all kind of structured products, which they distribute, leaving little choice to the clients they claim to advise, and giving them also too little information to allow for a transparent competition, by-passing the "best execution" principle requested by European directives (MIfid). Size gives an advantage in this kind of abuse, and advertising and standardisation makes it appear normal. There is little likelihood though that this brings a superior efficiency.
This captive distribution system of UCITS in continental Europe means that many asset management companies can charge very high fees which leave them pretty high profits, with high reputation risks.

Concentration "efficiency"

Despite the lack of link between size and efficiency, or even between size and profitability, many bankers pursue size and announce a larger size as an objective. The reasons for that may be that size gives power[12], and that it justifies higher remunerations for managers[13]. Moreover, relative size within a market is useful[14], because market concentration is rather well correlated with higher profitability[15]. Banking sectors with a higher degree of concentration seem to allow banks to charge higher margins[16].
Finally, the way to achieve higher concentration is attractive for bank managers, because it often involves mergers & acquisitions, which acquirers regularly find "thrilling". Acquisitions also make CEOs popular with Investment Banks, which can be rewarding for them.

In commercial banking[17], studies show that in the case of bank mergers, when there are profitability gains, they come from the improvement in management, or an increase in market power[18] rather than efficiency gains[19]. The quality of services and client satisfaction do not seem to benefit from mergers[20].The increase in market power is rarely announced as an objective since it goes against competition regulations, and moreover is contrary to the interest of clients and of the market.
National competition authorities rarely seem to bother, only the European competition authorities are able to resist excessive bank concentration but they have to fight pretty strong

[12] See Ayadi and al. (2002)
[13] See Bliss and Rosen (2001)
[14] The traditional view held that a concentrated banking sector with limited competition would be more stable because high profits would limit risks. During the last years, in practice, unconstrained greed has had a destabilising effect and excessive size has made the sector unstable and vulnerable, and even difficult to bail out.
[15] See Berger and Hannan (1998)
[16] See Boyd and de Nicolo (2005)
[17] See Bain and al. (2000), Amel and al. (2004), Mueller and Yurtoglu (2007)
[18] See Hannan (1991), Rhoades (1998), Berger alii (1999)
[19] See Hannan and Prager (1995)
[20] See Berger alii (1999)

lobbies and "national champion" bias of EU governments which use political means to dilute the efforts of the European Commission.

If an optimal size exist in commercial banking, meaning commercial and wholesale banking, it would rather correspond to a bank of average size, with a balance sheet of 20 to 30 billion €, pretty modest compared to the large EU and US banks.

Section 2: Size and profitability in Investment Banking

Brokerage, the distribution of securities in the primary market, and order execution in the secondary markets are not part of the Investment Banking proper, but are mostly integrated into it today. Their dysfunctioning during the last decennia are largely the consequence of size and concentration, and worth a comment.

Advisers in securities activities

US and International securities activities suffer from the lack of independence of Analysts and Rating Agencies.

A. Since the 1980's, the securities distribution networks and brokers are often integrated within Investment Banks with a corporate finance entity that organize and underwrite market operations. The *Financial Analysts* working for brokers and advising investors in their investment decisions are supposed to honestly seek to identify the "true value" of shares, and to advise investors accordingly. But large Investment Banks, after they integrated brokers, have progressively changed the rules: the financial analysts became motivated (through bonuses and career plans) to adapt their recommendations to buy or sell specific securities in function of the market transactions organised by the corporate finance part of the Bank; this was one of the major causes for the problems linked to the internet and technology bubble of the years 1995-2002[21]. This situation has changed somewhat since 2002, but not everywhere and it still influences market activities. It also impacts the Merger and Acquisition activities, as many analysts seem biased in favour of Mergers and Acquisitions. The trading desks of integrated Investment Banks seem to routinely trade ahead of the publication of recommendations by their analysts, one aspect of a practice known as "front-running", which is utterly unethical, but not illegal in the US (it may become so in Europe, depending on the way Mifid rules are interpreted). A recent study even suggests suspect links between hedge funds behaviour and the buy or sells recommendation of financial analysts of large banks[22]. The superior profitability that large banks and some of their prime clients (those that bring in profitable business) are allowed to wield out of this share rating activity is a potent motive for them to seek all kind of "valuable" information. In their aggressive search of insider information, they often tend to disregard the basic rules of confidentiality which their various business lines, like corporate lending, corporate finance, or asset management, are supposed to apply. Whether these rules are ethical ("we abide by strict internal Chinese walls", they say), or legal, makes little difference, since enforcement is very difficult, leaving little hope for improvement, without outright separation[23], which banks will resist fiercely, has they did in 2001-2002.

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[21] See Eliot Spitzer, former New York State Attorney General, civil actions and criminal prosecutions relating to corporate white-collar crime. See also F. Rohatyn in New York Review of Books, (November 21, 2002). See also S. Tully in Fortune (Septembre 16, 2002)
[22] See Les Echos (December 27, 2010)
[23] See Le Monde (March 26, 2011)

B. These buy & sell recommendation for shares are more or less the equivalent of the ratings issued by *Rating Agencies* on bonds. These Agencies are also supposed to be independent, and give objective advice, but since the late years 1990 at least, their advice appear to have been influenced by pressure coming from their large clients (Enron seemed for instance to enjoy a privileged status, probably related to the large volume of business it created for rating agencies). The large Investment Banks that organise large number of securities issues had since become the main clients of rating agencies. The subprime and CDO scandal became so large because Rating Agencies were heavily influenced by large banks which promoted their securitisation.

Large Investment Banks can therefore exercise a major influence both on bond rating and on share ratings (we might as well give that name to the recommendation given on shares), largely thanks to their size.
Size thus brings an advantage to large Investment Banks, but one that does not benefit capital markets, which are through this mechanism polluted by a strong dose of centralisation and made more vulnerable to insider dealing, mistakes and corruption.

The responsibility of the lack of independence and ethics of the rating agencies in the recent economic crisis is now well identified but far from solved. The conflict of interest of financial analysts concerning share rating is also not solved, despite some progress made after the scandals and lawsuits of 2001-2003 in the US, and remains underestimated.

Corporate Finance and other capital markets activities

For banks with a large Investment Banking activity (the big Wall Street banks and some others), size seems to bring an advantage but rather in the form of a capacity to dominate markets and an impunity concerning dubious practices, rather than classical efficiency gains. The superior profitability of these Banks is particularly clear when profitability is measured before bonuses, and is the main reason why these bonuses are so high. This in itself creates problems not only within the banking sphere —bonuses often encourage a risky behaviour that is often detrimental to the stability of capital markets and banks— but in the economy at large, since the mercenary attitude induced by bonuses has contaminated other sectors. We shall consider that Investment Banking includes Corporate Finance on the one hand, and Capital Market transactions (whether related to the distribution of securities or generally to trading and market risk-taking on securities, commodities, currencies, derivatives on them, etc) on the other hand.

A. *Corporate finance*, the central part of Investment Banking, is a very specific activity where size and notoriety bring useful and profitable commercial advantages, at least when unhindered by ethical considerations. Corporate finance is centred on Mergers & Acquisitions and Initial Public Offerings (IPO's).

- Mergers & Acquisitions advice brings fat success fees, as well as privileged information, which is delicate or illegal to utilise, but which many banks and consultants do utilise either for their own accounts or to cement profitable relations with important clients, particularly privileged investors like hedge funds. Investment Banks and financial analysts promote M&A deals despite the obvious failure of many transactions. Not only are obliging CEO's spoiled by grateful banks, the others can be threatened with assessments like: "a lack of acquisitions could be interpreted by financial analysts as a lack of strategy, they will thus reduce their recommendations on your shares, your share price will drop and you will yourself be vulnerable to being acquired". For many Investment Bankers, companies are something to be acquired or to make acquisitions, which in both cases bring lucrative commissions, "success fees", and are a source of precious information.

- IPO's also create a worthy "currency", notably because allotments of "hot issues" can be very profitable for their beneficiaries, and Investment Banks can at their discretion offer them to good clients like CEO's and CFO's who award them profitable security transactions or fund managers that are (or are supposed to become) "loyal" securities transactions counterparts for them[24]. Information (inside or not) and IPO allotments are among the more potent "commercial arguments" of Investment Banks.

- Large Investment Banks have used their influence on Rating Agencies on the one hand and share analysts on the other, to consolidate their placement power with large fund managers. Banks use this placement power to attract the most profitable securities issues transactions and consolidate their market domination. Their practices can look pretty unethical, with the great advantage of not being strictly illegal. It is worth mentioning that when banks are caught doing something really illegal and are charged by regulators or taken to court, the eventual fines are usually much less than the money they earned.

These practices probably help explaining the resilience of pretty high commissions in IPO's —in New York, 7% of the issued amount, with very little risk— and the oligopolies that endure in various new issue activities[25]. As a matter of fact, companies seem to prefer to do their corporate finance deals with banks that are already the most active in the field, and not to bargain too hard on the commissions they pay, even though some studies indicate that the quality of service in Investment Banking is rather inversely related with the notoriety of banks (as measured by league tables for instance[26]). Because of this track record, some small specialised Investment Banks, "financial boutiques" can develop, but their market share remain quite limited, probably because they lack "commercial arguments".

B. In *Capital Markets* also, size can bring advantages, although not necessarily superior efficiency. As we have seen above, by linking origination and distribution of financial products through in-house brokers, Investment Banks have created an integrate model in which "placement power" and size bring a competitive advantage in Corporate Finance that is very profitable for banks, but of disputable interest for clients and in practice detrimental to markets. But it is not only in securities markets that large banks have developed abusive practices. The market for derivatives and in particular credit derivatives is also ripe with dominant positions, price manipulation and other dubious practices[27]. The concentration of these markets in the hand of a few large banks, and their opacity have given rise to some enquiries by some competition authorities and market regulators on both sides of the Atlantic. Worryingly, the required settlement of transactions through central clearinghouses, which could bring more transparency to the markets, could fall short of its objective if large banks succeed in controlling those clearinghouses[28]. Let us also mention that, in the field of derivatives, many individuals, companies, and public sector institutions are regularly seduced into doing transactions they neither need nor understand, their caution being sometimes overwhelmed by the commercial arguments of bankers and brokers.
These derivatives activities, as well as market making and speculating activities, can be very profitable, but are often very risky, and require easy and cheap funding. Large banks enjoy fully the explicit state guarantee stemming from the coexistence of those risky activities, with activities deemed "systematically important" like infrastructure management or deposit taking on a large scale. In fact some changes in the market

[24] See The Wall Street Journal (May 3, 2011)
[25] See Chen and Ritter (2000), De Keuleneer (2003)
[26] See Bao and Edmans (2009), Guner and al. (2004)
[27] See The Financial Times (May 9, 2011)
[28] See The New York Times (December 11, 2010);

architecture, like a greater use of central counterparties would probably allow to substantially improve equity ratios of large banks (by reducing the need of risk-taking within the system), and at the same time improve the liquidity and the transparency of markets, but of course at a cost of a reduced profitability for banks.

C. Some large Banks have also developed a discreet and very profitable activity of *securities borrowing and lending*; they borrow securities held by clients, who sometimes do not even know about it and lend them to others arbitrageurs and speculators who have to cover short positions[29].

D. The *bonuses* that are widely practiced in Investment Banking are claimed by them to be necessary to attract and motivate the rare talents active in those banks. These exorbitant remunerations are however not necessary in other economic sectors; they are an important reason for the lowering of ethical standards in finance, and the generalisation of abusive commercial practices. Moreover, this bonus culture creates a brain drain towards an activity, which often can be economically disruptive, and creates little economic value in the form of better goods, better services or solutions to the world's issues. It is sometimes argued by bankers that excessive remunerations in the banking sector should not be dealt with at legislative and regulatory levels, but should be left to the private sector and its market mechanism; this proves to be hopeless, most funds-managers regularly approve remuneration packages when they are submitted to shareholder meetings. This is not really surprising since a large number of fund managers are very much conflicted, and rather motivated to remain part of a system that tolerates abuses.

E. Let us stress that, so far, market concentrations have been tolerated by the various governments, in the US and in many European countries, because of a mix of : lobbying by and in the name of "sectors of excellence bringing invisible earnings", the illusions brought by "national champions", and above all, an excessive proximity of bankers and politicians.

To conclude, the superior profitability of large banks in Investment Banking rather seems to come from the fact that size brings the possibility to control markets, information and financial opinion, and the distribution of securities. Size provides large banks with plenty of commercial arguments which can amount to outright corrupting tools. The size and the concentration of institutions do not favour the efficient working of capital markets. They strongly reduce the number of competitors, and of independent decision–makers that are important for that efficiency; they reduce the possibility of natural correction, and the uniformity of bank's behaviour makes it look more "normal", even when it is abusive. The centralisation of power and of decision-making increases the consequences of mistakes. This system gathers many of the flaws of centralised systems rather than markets.

Section 3: What can be done?

To finish on a constructive note, one could suggest a few simple recommendations for policy-makers as a consequence of this analysis. They should:

- Promote competition in banking activities, and discourage mergers and acquisitions. Indeed, size does not bring efficiency, and market concentration presents lots of disadvantages for the market and the economy;
- Separate retail banking, and in particular deposit collecting activities, from wholesale and market activities. Support the advent of open, accessible and well capitalised

[29] See The New York Times (October 18, 2010)

clearing systems and clearing houses, where the financial system clearly pays for its own costs and risks;

- Separate corporate finance and new issues activities from brokerage and securities distribution activities. Strictly prohibit any bank (or other related parties) engaging in corporate finance and new issues activities to publish recommendations on bond or share investments at large;
- Prohibit any rating agency or other institution that is remunerated by security issuers to publish recommendation on those securities;
- In cases where regulators, Central Banks and other public institutions have to evaluate the quality of assets, prohibit the use of external ratings, and request them to evaluate it themselves, be it for regulatory or financing purposes;
- Establish IPO allotment mechanisms that are neutral and transparent;
- Bonuses and remuneration levels will remain a thorny issue: not only does it induce the wrong type of behaviour with bankers but the real disadvantages and costs of this system, and its incapacity to reform itself, are progressively becoming obvious for Main Street, who is getting tired of paying. It is such an important and difficult issue that it may require a sort of international capping or taxation system. Another measure that might be easy and logical to implement would be to require that in any bank, internal controllers would be the best-remunerated functions. Regulators should also be paid at least as much as those they regulate (and their cost should of course be borne entirely by banks). This may or may not put a cap on the remuneration of traders and CEO's, but at least it might bring better risk controls about. As a matter of fact if we believe the banking gospel that high remunerations and bonuses are necessary to attract real talent, one could say that for regulation to be really effective, it is necessary that controllers and regulators would enjoy at least the same remuneration levels as the bankers they regulate, and even bonuses for any risk reduction measure they identify.

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