

FINANCIAL MARKET EFFECTS OF DIVERGING BANKING STRUCTURES: THE DICHOTOMY BETWEEN UNIVERSAL AND SPECIALIZED BANKING SYSTEMS

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ABSTRACT

A literature review on comparative banking structures shows that universal banking is supported basically by the advantages of (i) *delegation of an insider as a monitor of corporate behavior of the corresponding borrower*, which reduces the costs associated with the “*asset-substitution*” and the “*free cash flow*” problems; (ii) increments in the “signal value” of bank decisions about firm finances, (iii) reductions in the costs of corporate crisis if borrowers are deprived from financing channels, and (iv) the possibility of carrying out intertemporal transfers. In contrast, it is argued also that universal banking systems are conducive to concentration of the relevant market and to

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correlative augments in the probability of abuse of market power. In addition, it is raised that universal structures breed higher risk-taking and conflicts of interest by banking institutions *vis-à-vis* specialized entities. Given this dichotomy, through this paper it is shown that even though from a theoretical standpoint the universal banking system is not a standardized valid proposition to optimize credit availability system, empirical evidence regarding such system reflects its proclivity to contribute to configure relatively efficient credit markets.

JEL Classification: Financial markets (E-440), Financing policy, capital and ownership structure (G-30), Financial Institutions (G-280).

Keywords: Universal Banks, Specialized Banks, Hausbanks, insider, asset-substitution problem, free cash flow problem, signal value, market power, abuse of market power.

***EFECTOS DE LAS ESTRUCTURAS BANCARIAS
DIVERGENTES EN EL MERCADO FINANCIERO:
DE LA DICOTOMÍA ENTRE LOS MODELOS
DE BANCA UNIVERSAL Y ESPECIALIZADA***

RESUMEN

Una revisión de la literatura sobre estructuras bancarias a nivel comparado muestra que el sistema de banca universal está soportado básicamente por las siguientes ventajas: (i) delegación de un “insider” que monitorea el comportamiento corporativo del correspondiente prestatario, lo cual reduce los costos asociados con los denominados “asset-substitution problem” y “free cash flor problem”; (ii) incrementa el

denominado “valor señal” de las decisiones del banco sobre las finanzas del prestatario; (iii) genera reducciones en los costos asociados a las crisis corporativas de los prestatarios cuando éstos encuentran restricciones a los canales de financiación en dichas crisis, y (iv) posibilita la realización de transferencias intertemporales de recursos con relación a determinado prestatario. En contraste, se argumenta que las estructuras bancarias universales inducen mayores actividades riesgosas, conflictos de interés y abuso de la posición de dominio en comparación con las instituciones especializadas. Dada esta dicotomía, en este documento se muestra que aunque desde un punto de vista teórico el sistema de banca universal no constituye un sistema estandarizado válido para optimizar la disponibilidad de recursos crediticios y su correspondiente uso, la evidencia empírica con relación a dicho modelo refleja la proclividad del mismo a contribuir a la configuración de mercados bancarios relativamente eficientes.

Palabras clave: bancos universales, bancos especializados, hausbanks, insider, problema de sustitución de activos, problema de flujo de caja, valor señal, poder de mercado, abuso de la posición de dominio.

INTRODUCTION

Banking structures can be basically divided into two systems: *universal* and *specialized banking systems*. Roughly, the universal system, whose prototypical cases are Germany and Switzerland, consists of large-scale banking institutions that function through extensive networks of branches, provide diverse types of financial services, hold several claims on firms (including not only debt, but also equity) and participate directly in the corporate governance of the firms that rely on such financial institutions as sources of funding or as securities underwriters. On the contrary, specialized banks are those that can only operate a set

of activities previously determined by banking authorities and/or with specific time limits, where commercial and investment activities remain polarized as long as banking institutions are not allowed to hold equity on firms and, as a consequence, can not participate directly in their corporate governance¹.

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- 1 Cfr. CALOMIRIS CHARLES, *Universal banking and the financing of industrial development*. World Bank working paper, n° 1533, Washington D.C., 1995, pg. 1. It is to be underscored, though, that, according to FOHLIN, the concept of *universal banking* has to be distinguished from *relationship banking*, provided that the former refers to “the joint provision of a wide range of financial services by the same institutions, thus combining standard commercial banking functions (short-term credit, deposit taking, payments clearing and bill discounting) with investment services (underwriting and placing equities and bonds) and securities brokerage; on the contrary, the term *relationship banking* allude to holding equity stakes, voting shares in proxy for customers and sitting on the boards of directors or supervisory boards of client firms. From this viewpoint, not all universal banks perform the complete range of relationship banking functions and not all financial institutions that engage in *relationship lending* are universal banks. FOHLIN CATERINE, *Banking industry structure, competition and performance: does universality matter?*, California Institute of Technology, working paper, n° 1078, Pasadena, 2000, pg. 4. Nevertheless, notwithstanding such distinction, both categories are taken as synonyms for the purposes of this text. Besides, drawing on the particular case of the United States (which is the paradigmatic case of specialized banking, along with the United Kingdom), CALOMIRIS holds that specialization derives fundamentally from two kinds of restrictions: the first one consists of *prohibitions of centralized bank control over board of directors* (like that established by the Clayton Act of 1914), and the *prohibitions on equity holding by banks or bank holding companies*, which was explicitly viewed as *ultra vires* in state and national bank charters due to the Glass Steagall Banking Act of 1933. The second type of restrictions on firm-bank relationships are *prohibitions implied by limitations on branching and consolidation*. More specifically, in the case of the United States, the advantages of branching arose from the increasing scale, scope and geographic range of industrial enterprises during the second industrial revolution, which encouraged banks to match the attributes of their customers: larger industrial borrowers operating over widespread geographic areas required larger-sized loans, which (for reasons of the desirability of diversification) was only feasible for large banks. For these entities to become large, they had to raise funds from deposits, which required a branching network. In addition, a branching network would allow bankers to better monitor the actions of their customers, who operated nationwide production and distribution networks. Likewise, for banks (or their affiliates) to be able to underwrite *non-preferential* securities and place them at a low cost in trust accounts, a nationwide branching network was essential. Finally, placing securities in trust accounts facilitated bank supervision over firms through bank control of proxies. During this

Nevertheless, it is worth emphasizing that universal banks do not have a uniform form. In Germany and Switzerland it is possible to identify, according to RICH and WALTER, the following types of institutions: in Germany, the so called “*big banks*”, *regional banks*, *government*

epoch, hence, commercial banks, notably in New England, were the primary source of funds for industrial firms. Nevertheless, the prohibition of branching within states as well as across them, particularly since 1880, implied a mismatch between the scale and scope of firms and those of their bankers. As a result of this set of restrictions, *the American financial system was divided into investment and commercial banks* (which lacked the wherewithal to finance large-scale industrial enterprises, and so concentrated almost exclusively on financing commerce). After 1880, as a consequence, investment banks took over the role of industrial financiers, underwriting industrial credit during this period almost exclusively through long-term debt issues, distributed through syndicates involving multiple local distributors. This market was restricted mainly to large, mature industrial firms. Incipient and growing industrial firms, by their side, were forced to rely on retained earnings or small accounts of local bank credit to finance their investment needs. The rise of investment banking affiliates of commercial banks in the nineteen twenties was associated with a widespread consolidation and branching movement, which resulted from primary commodity price decline and consequent unit bank distress. Consistent with the above argument that economies of scope in universal banking depended on the ability to branch and consolidate the banking system, industrial finance by commercial banks flourished as their scale and geographical range expanded. From 1922 to 1929, the number of *investment banking affiliates* of commercial banks rose from 277 to 591. During this same period, 3.408 banks merged (triple the rate of the previous seven years), while the number of branching affiliates rose from 2.411 to 4.117. Nonetheless, given the ensuing market concentration, these progressive trends in commercial banks' involvement in industrial finance were halted in the nineteen thirties, wherein, as already pointed, affiliates were outlawed in 1933. At that point, the model of specialized banking was consolidated. CALOMIRIS CHARLES, *Corporate finance benefits from universal banking: Germany and the United States, 1870-1914*. National Bureau of Economic Research working paper n° 4408, 1993, pgs. 9-11. It must be emphasized, however, that, in words of FOHLIN, not all specialized systems result from prohibitions on universality: British commercial banks, for example, have always been permitted to engage in universal and relationship banking, but have just traditionally refrained. Therefore, even though legal restrictions clearly imply a transcendental role in molding the banking scheme of a given financial system, not only normative phenomena, but also exogenous economic factors, possesses the capacity to determine the type of banking model that operates within a specific market. FOHLIN CATHERINE, “Economic, political and legal factors in the development of financial systems: international patterns in historical perspective”, Social Science working paper n° 1089, California Institute of Technology, Pasadena, 2000, pgs. 3 and ss.

owned savings banks, cooperative banks, private banks, branches of foreign banks and other financial institutions; on the other hand, in Switzerland, “big banks”, regional and savings banks, Cantonal banks, cooperative banks, private banks, branches of foreign banks, finance companies and other banks.

The group of *big banks* comprises institutions with nationwide branch networks and a significant international business, which are involved in all aspects of banking, insofar as they play a leading role in financing foreign trade and industry through loans, are heavily engaged in investment and trust banking, and work as portfolio managers (a notable function in the case of Switzerland).

Regional banks normally confine their activities to specific regions. Such group tends to be more specialized than “big institutions”; however, the largest German regional banks have turned into truly universal entities, as they have spread along the country and penetrated foreign markets, functioning now through nationwide branch networks. Nonetheless, they remain “regional” in the sense that they continue to focus their business on their region of origin. In addition, these banks do not play a significant role in investment banking.

In both Germany and Switzerland government-owned banks account for a substantial share of total assets. The purpose on these banks was (and continues to be) to encourage saving by the local population, whereupon, in contrast to private-sector savings institutions, they must accept specific public-service functions, such as promoting the development of the local economy through particular forms of lending or assisting disadvantaged groups. In Germany, these banks are chartered by the *Länder* (states) and can only operate within their *Land* of origin. Although the individual German government-owned banks can hardly be regarded as universal establishments, they operate central institutions (*Landesbanken*) placed at the level of the *Länder* and at the federal level. These central institutions initially were set up to provide payments services to their members, but later evolved into universal institutions. However, among the Swiss cantonal banks, cooperation is less common, as long as only the largest cantonal banks come close to resembling universal institutions. They do perform a limited role in

underwriting domestic securities and portfolio management, but are legally constrained to engage in foreign activities.

Cooperative banks, like government-owned savings banks, are institutions focusing on the savings business. Although initially conceived as self-help organizations, which mainly accepted deposits from and lent funds to members of the cooperative, they gradually evolved into universal banks when they set up central institutions, as was done in Germany.

The remaining banking groups largely consist of specialized institutions involved in diverse lines of activity. In both Germany and Switzerland, private banks are active in portfolio management. Branches of foreign banks, though regularly part of a universal institution, tend to specialize, focusing on underwriting and portfolio management. Finally, in Germany, the category “other financial institutions” includes building companies, mortgage establishments and a residual category for *other specialized financial establishments*. In Switzerland, the groups of “other banks” and “finance companies” (which comprises the subsidiaries of banks) cover institutions particularly involved in commercial banking, underwriting, securities trading and portfolio management.

Therefore, the term *universal bank* encompasses not only institutions endowed with a set of branches or subsidiaries aimed at carrying out dissimilar financial services, but also public entities working through cooperation agreements, cooperatives and institutions that although hold widespread networks, remain “regional” as regards their concentration area².

The purpose of this paper is to describe the potential effects involved in the implementation of a universal banking system. Thus, the remainder of this paper is organized as follows: Section two depicts the theoretical and empirical arguments aimed at supporting the system of universal banking; section three displays the arguments and evidence through which has been rejected the notion according to which universal banking increases the performance of the financial sector; Section four sketches

2 Cfr. RICH GEORG and WALTER CHRISTIAN, The future of universal banking, *Cato Journal*, vol. 3, n° 2, 289-313, 1993, pgs. 290-294.

out alternative postures that reflect a non-polar stance; finally, Section five concludes.

1. THEORETICAL AND EMPIRICAL ARGUMENTS AIMED AT SUPPORTING THE SYSTEM OF UNIVERSAL BANKING

As pointed above, universal banking differs from financial systems like those of the United States or the United Kingdom in that in the former model financial institutions are allowed to take direct equity stakes, are normally represented on the supervisory board of industrial firms, possess additional influence via proxy-voting rights and hold and/or control large amounts of non-preferential claims on firms. In contrast, in the United States and the United Kingdom, banks are not directly involved in governing firms and banks claims on firms tend to be the most preferential claims in the economy³.

The first benefit that derives from universal banking is that delegating an insider bank as the primary monitor and governor of corporate behavior can reduce costs associated with the “asset-substitution problem”, or, alternatively, the “free cash flow” problem. The former refers to firms’ incentives to transfer wealth from creditors to stockholders by adding risk after negotiating debt contracts. The latter refers to management’s incentives to transfer resources from stockholders to managers when stockholders cannot directly control management’s behavior. Nevertheless, banks with knowledge and incentive to govern firms appropriately will make sure that management’s investments decisions are aligned with the interest of the firm’s claimants,

3 CALOMIRIS CHARLES. *Corporate finance benefits from universal banking: Germany and the United States, 1870-1914*, cit., pgs. 6-7. According to CALOMIRIS, this preference is achieved in four basic ways: first, banks secure their debt with collateral; second, banks keep the maturity of the loan short relative to that of bonds or private placements, which effectively makes their loans *senior or preferential*; third, banks underwrite detailed loan covenants restricting the actions of borrowers, allowing the lender to claim accelerated payment of a loan to a firm potentially going into insolvency; fourth, when banks accelerate loans, they can use the right of *offset* to recover their loans (that is, seize the customer’s deposit funds immediately).

therefore banks that hold both debt and equity in the firm will tend to protect both types of claimants by monitoring and controlling the investment and risk-taking behavior of management⁴. This argument is supported by empirical evidence from Germany, Japan and the United States, which confirms that the discipline of an influential delegated monitor with appropriate incentives can contribute to reduce firms' costs of external finance and their reliance on internally generated funds to undertake investment⁵.

Second, the long-term banking relationship with the intervention of an *insider* increases the "signal value" of bank decisions about entrepreneurial accounting. Specifically, if a bank is a firm insider and if the bank is willing to hold non-preferential claims on the firm, increased bank financing denotes a strong message to other investors in respect of the firm's creditworthiness because the bank is known to be privy to special information about the firm's prospects⁶. This argument is backed up from an empirical stance, which shows that outside holders of equity and debt respond to bank decisions when pricing firms' claims and that such response is larger when banks hold relatively non-preferential claims⁷.

4 Ibidem, pg. 6.

5 DE LONG J. BRADFORD. "Did Morgan's Men add value?", in *Inside the Business Enterprise: historical perspectives on the use of information*, Chicago University Press, Chicago, 1991. Pgs. 205-236; HOSHI TAKEO, KASHYAP ANIL and SCHARFSTEIN DAVID, "The role of banks in reducing the costs of financial distress", *Journal of Financial Economics*, 27: 67-88, 1990; RAMÍREZ CARLOS, *Did J.P. Morgan's men add liquidity?*, Harvard University Press, Cambridge, 1993.

6 CALOMIRIS CHARLES, *Corporate finance benefits from universal banking: Germany and the United States, 1870-1914*, cit., pg. 7.

7 JAMES CRISTOPHER, "Some evidence on the uniqueness of bank loans", *Journal of Financial Economics*, 19:217-235, 1987; LUMMER SCOTT and MCCONELL JOHN, "Further evidence on the bank lending process and the capital-market response to bank loan agreements", *Journal of Financial Economics*, 25: 99-122, 1989; BROWN DAVID, JAMES CHRISTOPHER and MOORADIAN ROBERT, "The information content of exchange offers made my distressed firms", *Journal of Financial Economics*, 33: 93-118, 1993.

Third, it is stressed that this sort of insider relationship brings about reductions in the costs of corporate crisis if and when borrowers are deprived from financing channels. In Japan, they show that main banking relationships help to resolve corporate distress at a relatively cost, partly because banks will be more willing and able to help firms to absorb some of the adverse shock, which is a direct result of their status as insiders and their holdings of *non-preferential claims*⁸. Furthermore, the main and universal banking systems tend to concentrate ownership of claims on the firm, which greatly facilitates re-negotiation⁹.

Fourth, there is an “infant-industry” argument for long-term relationships between banking institutions and firms through the intervention of an insider. Specifically, Mayer suggests that in the early stages of the investing firm’s life cycle, banks spend substantial resources collecting information and establishing and enforcing behavioral guidelines in firms. The costs of designing and enforcing covenants are *front-loaded* within the firm-bank relationship, that is, initial costs to the bank are large compared to the subsequent costs. At the same time, an investing firm’s ability to pay for these costs is *back-loaded*. The shadow cost to the firm of paying for monitoring by the bank falls over time as it matures and there is greater information available relative to initial stages (along with enforcement of behavioral guidelines). Therefore, one of the benefits of establishing from the outset a long-term relationship between a firm and its banker is that the bank can be reimbursed for *front-loaded* monitoring costs with *back-loaded fees*. One way this can be accomplished is for banks to charge less than marginal cost for their services in the early stage of the relationship, and more than marginal cost in the later stage. The advantage of such arrangement is that it increases the number of viable investment projects by incipient firms, as long as in the absence of credible long-term relationships, financial

8 SHEARD PAUL, “The main bank system and corporate monitoring and control in Japan”, *Journal of Economic Behavior and Organization*, 11:399-422, 1985; HOSHI TAKEO, KASHYAP ANIL and SCHARFSTEIN DAVID, “The role of banks in reducing the costs of financial distress”, *Journal of Financial Economics*, 27: 67-88, 1990.

9 GILSON STUART, JHON KOSE and LANG LARRY, “Trouble debt restructurings”, *Journal of Financial Economics*, 27: 315-353, 1990, pgs. 317 and ss.

institutions will hardly be able to recoup their initial costs, being therefore unwilling to finance “infant industries”. In turn, the *bank insider* contributes to enforce beneficial long-term contracting by increasing bank control over the firm’s management¹⁰. Moreover, according to CALOMIRIS, corporations’ reliance on outside placement of debt and equity in securities markets increases over time thus allowing banks to engage in both lending and underwriting further encourages long-term relationships between firms and their banks, as well as the back-loading of firm payments for monitoring costs¹¹.

Analogously, CALOMIRIS holds that in accordance with the sketched arguments in favor of universal banking, lower costs of monitoring and controlling firms, and hence of convincing individuals to hold corporate claims, imply that corporate finance costs should have been lower in Germany than in the United States during the second industrial revolution (roughly, 1870-1913)¹². In particular, the costs of issuing securities, especially *non-preferential securities*, like equity, should have been

10 Cfr. MAYER COLIN, “New issues in Corporate Finance”, *European Economic Review*, 1167-1189, 1988, pgs. 1183-1186.

11 CALOMIRIS CHARLES, *Corporate finance benefits from universal banking: Germany and the United States, 1870-1914*, cit., pg. 9.

12 The importance of examining such period is given by two facts: first, the second industrial revolution involved large-scale production and distribution activities, which brought about a new objective for financial markets (the rapid financing of very large minimum-efficient scale industries), and, as long as large-scale production is distinctive of current industrial practice, conclusions from the period under exam are broadly applicable to contemporary developing countries. Second, this industrial revolution involved a variety of new products and technologies, particularly in the machinery, electricity and chemical industries. The novelty of these production processes posed severe information asymmetries for external sources of finance. In fact, firms producing electrical machinery, chemical products and power plants were producing new goods in ways of an unprecedented scale. Then, the need for quick access to large quantities of external finance was accompanied by greater information and control costs because of the difficulty of evaluating proposed projects and controlling the use of funds. CALOMIRIS CHARLES, *Universal banking and the financing of industrial development*, World bank working paper n° 1533, Washington, DC, 1995, pgs. 1-2.

lower, at the same time that German firms should have issued relatively more equity than bonds.

In fact, he provides evidence of a greater reliance by German firms on equity issues, and a lower cost of bringing equity to market. Concretely, from 1900 to 1913, the volume of net bond issues in the United States was roughly the same as stock issues. During the same period, in Germany gross bond issues were broadly half the volume of equity issues. From the stance of balance sheets of non-financial corporations in the two countries in 1912, bonds and notes accounted for more than half of the book value of corporate equity in the United States, but only ten percent in Germany.

On the other hand, the relative high cost of issuing equity in the United States explains its relative dearth, and is specifically reflected, as shown in tables 1 and 2, in investment banker's spreads for *common stock issues* (defined as the difference between the market value of securities issued and the value received for them by the issuing firm)¹³.

13 CALOMIRIS CHARLES, *Corporate finance benefits from universal banking: Germany and the United States, 1870-1914*, cit., pgs. 14-19. It is relevant to underline at this point that, for the United States, only after 1936 are detailed and comprehensive data available of securities issuers. On the other hand, data on commissions for *common stock issues* earned by German banks were located for an earlier stage of the second industrial revolution, namely, from 1893 to 1913. The sample of firms in this case includes all firms in the electrical industry and firms in the metal manufacturing industry, which were both central for the second industrial revolution as important producers of unprecedented products. The metal manufacturing firms includes several comparatively small firms, while the electrical industry is dominated by large firms. It must be observed that the difference between average spreads and average total costs is 1.41 percent for the electrical industry and 1.40 percent for metal manufacturing. Bankers' commissions averaged 3.67 percent for the electrical industry and 3.90 percent for the metal manufacturing industry. Commissions on small and large issues are essentially the same. Although small manufacturers' issues show lower average costs, the difference is not statistically significant for this sample. Metal manufacturing firms with low total capital had average commissions of 4.11 percent, compared to 3.90 percent for the industry as a whole. Again, this difference is not statistically significant. Hence, these data support the view that commissions on common stock were broadly three to five percent, and that they did not vary significantly by industry, firm size or size of issue.

TABLE 1. Banks' spreads and total issuing costs for German common stock issues, 1893-1913 (percent of issue).

	Mean bank spread	Mean total cost
All issues		
Electricity	3.67	5.08
Number of firms	13	12
Number of obs.	21	20
Manufacturers	3.90	5.30
Number of firms	19	15
Number of obs.	30	20
Issues less than one million.		
Electricity	3.94	5.24
Number of firms	4	3
Number of obs.	7	3
Manufacturers	3.45	5.29
Number of firms	10	10
Number of obs.	18	15
Firms with 1913 capital less than two million.		
Manufacturers	4.11	5.93
Number of firms	3	5
Number of obs.	6	5
<p>Definitions: Percent banks' spreads are defined as the difference between the amount paid for an issue by purchasers and the amount paid by the bank to the issuing firm divided by the total amount paid for the issue. Total costs include taxes and commissions.</p> <p>Source: CALOMIRIS, 1993.</p>		

TABLE 2. Banks' spreads in the United States before World War II (percent of issue)

	Common	Preferred	Bonds
Issues < \$5 million	1935-1938	1935-1938	1935-1938
Total costs	18	10	5
Compensation	16	9	4
Other expenses	2	1	1
# of issues	241	206	210
All to public, IBs	1938	1938	1940
Total costs	22	12	3
Compensation	20	11	2
Other expenses	2	1	1
# of issues	68	37	76
All to public, IBs	1938	1938	1940
TC, Underw. Issues	23	4	3
TC, Best-Efforts	21	14	16
Definitions: "All to public, IBs" refers to all issues of securities to the public transacted through investment bankers. "TC" refers to total cost. Best-effort issues are placed by investment bankers without price guarantees.			
Source: CALOMIRIS, 1993.			

Furthermore, the comparison between the United States and Germany also indicates that rent extraction is an unlikely explanation of high underwriting costs in the former country, as long as German banking was at least as concentrated as that of the United States and yet its spreads were comparatively small. In this respect, there is additional evidence from time series and cross-sectional analysis of bankers' spreads in the United States that suggests that spreads were more a function of information cost than rent. In effect, as shown in table 3, common stock spreads fell most severely from the nineteen thirties to the early sixties, but this was not associated with increased competition¹⁴.

14 *Ibidem*, pgs. 18-19.

In fact, Friend finds that the only reduction in concentration of investment banking over this period occurred in the bond market, in which spreads fell least¹⁵. Analogously, MENDELSON finds substantial evidence linking variation in spreads to *quality* or information related variables. For instance, bond spreads increase with bond yields, whereas stock spreads are higher for issues that include “extra inducements”, and for issues with lower-quality underwriters. According to MENDELSON, the most plausible explanation for the technological change that lowered spreads over time was the increase in bulk sales to institutional investors, which reduced the signaling and marketing costs of appealing to a widely dispersed group of investors¹⁶.

Finally, in terms of CALOMIRIS, the fact that spreads for small firms and small issues in Germany were the same as for large firms results also relevant. As shown in table 3, in the United States smaller firms suffered significantly larger spreads. Thus, the lower cost of equity issues in Germany relative to the United States affected the financing cost of small firms even more than shown by comparisons of average commissions. This grants credence to the perspective that “infant-industry” advantages and lower information and governance costs (which are most relevant for small, growing firms) are a central part of the explanation of why German commissions were lower during the second industrial revolution¹⁷.

15 FRIEND IRWIN, “Over-all view of investment banking and the new issues market”, in: FRIEND IRWIN, LONGSTREET JAMES, MENDELSON MORRIS, MILLER ERVIN and HESS ARLEIGH (eds.), *Investment banking and the new issues market*, The World Publishing Company, New York, 1967, pgs. 1-79.

16 MENDELSON MORRIS, “Underwriting compensation”, in: FRIEND IRWIN, LONGSTREET JAMES, MENDELSON MORRIS, MILLER ERVIN and HESS ARLEIGH (eds.), *Investment banking and the new issues market*, The World Publishing Company, New York, 1967, pgs. 413-419, 445, 474.

17 CALOMIRIS CHARLES, *Corporate finance benefits from universal banking: Germany and the United States, 1870-1914*, cit., pg. 18.

TABLE 3. Flotation costs of primary common stock offered through dealers (percentage).

Dates	Size of issue	Number of issues	Average cost
1935-1938	Issue < %5 million.	241	18
1945-1949	Issue < %5 million.	208	15
1951-1955	Issue < %5 million.	178	15
1963-1965	Issue < %5 million.	369	12
1940	Issue > %5 million.	11	12
1945-1949	Issue > %5 million.	49	8
1951-1955	Issue > %5 million.	52	6
1963-1965	Issue > %5 million.	107	7

Source: CALOMIRIS, 1993.

2. ARGUMENTS AGAINST UNIVERSAL BANKING

2.1. CONCENTRATION AND ANTICOMPETITIVE BEHAVIOR

Pursuant to this argument as long as universal banking permits the consolidation of several services in one institution, which in turn fosters concentration of the relevant market, such model increases the potential for abuse of market power¹⁸.

However, as shown by FOHLIN, such argument lacks a consistent support, provided that though theoretically universality of corporate banking institutions could be associated with market domination of the financial system, there is no quantitative evidence for such association historically: the U.S. and U.K. commercial banks held much larger percentage of financial institutions assets than did the German universal banks in both 1880 and 1913¹⁹.

18 Cfr. GRIMES WARREN and SULLIVAN LAWRENCE, *The Law of Antitrust: an integrated handbook*, West Group, Boston, 2000, pgs. 596-599.

19 FOHLIN CATERINE, *Banking industry structure, competition and performance: does universality matter?* California Institute of Technology working paper n° 1078, Pasadena, 2000, pgs. 3, 5.

Moreover, according to Dielt, it could be raised that universal institutions unavoidably lead to market concentration and, correlatively, a high likelihood of anticompetitive behavior, insofar as such banking system is the direct repercussion of an underdeveloped capitals market. In other words, banks are supposed to subsume market functions, thus universality is said to stem from markets underdevelopment. In this way, the supposed dichotomy between banks and markets is equated with a second dichotomy between universal banking and specialized banking²⁰.

Nevertheless, in accordance with FOHLIN, such argument has no support. The available data on stock market size (market capitalization as a share of GDP) suggests that prior to World War I, the German stock exchanges, though much smaller than their British counterparts, were much larger than the American exchanges. Further, the American commercial banks' assets amounted to a much higher percentage of stock market capitalization than did German universal bank²¹.

RICH and WALTER support the FOHLIN's view from the standpoint of the contrast between the United States, the United Kingdom and Switzerland. In particular, according to table 4, nonfinancial corporations in the United States raised over 50% of their capital in the form of equity during the sampled period. Loans from banks and other financial institutions, by contrast, only account for roughly 10% of total capital. Table 5 exhibits analogous data on German nonfinancial corporations, which reveals the central role played by German banks in lending to nonfinancial firms. Bank loans account for over 40% of total capital. Conversely, only about 25% of capital consists of equity, while bonds and short-term securities represent an insignificant source of finance.

20 Cfr. DIELT HELMUT, *Capital Markets and Corporate Governance in Japan, Germany, and the United States: Organizational Response to Market Inefficiencies*, Routledge, New York, 1998, pgs. 26-93.

21 FOHLIN CATERINE, *Banking industry structure, competition and performance: does universality matter?*, cit., pg. 5.

TABLE 4. Capital structure of nonfinancial corporations in the United States* (percent, end of year).

	1975	1991
Equity**	67.5	53.4
Bonds	10.8	15.7
Open-market papers	0.4	1.3
Mortgages	4.9	2.9
Bank loans***	6.3	7.5
Other loans****	1.0	3.2
Trade debt	7.3	9.2
Other	2.0	6.9
Notes:		
* Only nonfarm nonfinancial corporations are taken into account in the sample.		
** Equity computed as the net worth of nonfarm nonfinancial business		
*** The figure for bank loans includes acceptance liabilities to banks.		
**** Includes foreign loans, nonblank financial loans and U.S. government loans.		
Source: RICH and WALTER, 1993.		

TABLE 5. Capital structure of nonfinancial corporations in Germany, excluding the construction sector* (percent, end of year).

Equity in bank portfolios	27.0	26.3
Equity in bank portfolios	n.a.	2.6
Bonds	3.5	2.4
Short terms securities	0.5	-
Bank loans	46.2	42.9
Short-term bank loans	18.9	15.4
Long-term loans	27.3	27.5
Loans from building companies and insurance companies	3.8	2.8
Other**	19.0	26.6
Notes:		
* Excluding the former East Germany.		
** The category "other" covers liabilities vis-à-vis corporations, public authorities, social security funds and foreigners.		
Source: RICH and WALTER, 1993.		

The patterns revealed by tables 4 and 5 are mirrored by the equally evident differences in the composition of financial assets held by the ultimate lenders to nonfinancial corporations (private households, pension funds and insurance companies). Table 6 shows that private households allocate 25% to 33% of their financial assets to deposits (including currency) and securities respectively, while the institutional investors favor securities.

TABLE 6. Composition of financial assets of private households, pension funds and insurance companies in the United States (percent, end of year).

	Private households*		Pension funds and insurance companies
	1975	1991	1991
Stocks**	25.1	23.8	30.3
Corporate bonds	2.9	1.5	22.8
Securities of U.S. Government, U.S. Agencies and State and Local Government	7.4	9.8	20.9
Open-market papers	0.3	1.3	2.5
Loans	2.2	1.8	10.2
Currency and deposits	36.0	26.0	5.5
Insurance and pension reserves	24.0	33.3	-
Other	1.7	2.4	7.9
Notes:			
* Households include both personal trusts and nonprofit institutions. Equity in noncorporate business is excluded.			
** Includes mutual funds shares.			
Source: RICH and WALTER, 1993.			

In Germany, by contrast, private households place roughly 50% of their financial assets with banks and building companies, while their holding of securities account for less than 25% of the total (table 7). In

particular, stocks in the hands of private households amount to merely 5.6% of the total, as compared with 23.8% for their U.S. counterparts.

TABLE 7. Composition of financial assets of private households, pension funds and insurance companies in Germany (percent, end of year).

	Private households		Pension funds and insurance companies	
	1972	1991	1972	1991
Stocks	8.4	5.6	9.8	15.8
Bonds	8.9	18.1	19.7	23.1
Bank deposits	54.0	42.7	15.3	35.6
Deposit with building companies	7.8	4.0	-	-
Insurance	14.9	21.8	-	-
Loans	-	-	55.2	25.5
Other	6.0	7.9	-	-

Source: RICH and WALTER, 1993.

Yet, the capital structure of Swiss nonfinancial corporations looks like a mix of U.S. and German patterns. In Switzerland, the share of equity in total capital is lower than in the United States, but the two countries' shares of fixed income securities are about equal. Besides, for the share of bank loans, the Swiss percentage figure is closer to German than U.S. levels (table 8).

TABLE 8. Capital structure of nonfinancial corporations in Switzerland (percent, 1973-1988).

Equity	39.9 - 47.9
Equity in bank portfolios	0.6 - 0.7
Bonds	14.8 - 17.1
Bank loans	30.5 - 41.4
Loans from pension funds	3.9 - 4.5

Source: RICH and WALTER, 1993.

Table 9 exhibits data on the composition of financial assets in the hands of Swiss private households and institutional investors. Once again, the Swiss patterns differ from those of Germany. As far as asset preferences of private households are concerned, there are greater similarities between Switzerland and the United States than between Switzerland and Germany. Swiss private households keep about 30% of their financial assets in the form of bank deposits, including fiduciary accounts and cash bonds, a share somewhat higher than in the United States but considerably lower than in Germany. In turn, the private households' share of securities is lower than in the United States but higher than in Germany.

TABLE 9. Composition of financial assets of private households, pension funds and insurance companies in Switzerland (percent, end of 1990).

	Private households	Pension funds and insurance companies
Stocks	15.1	10.0
Of which foreign	9.0	5.2
Bonds	16.6	30.8
Of which Domestic Government	0.3	2.5
Of which foreign	14.3	4.0
Cash bonds	5.2	7.2
Loans	-	36.2
Of which mortgage loans	-	15.2
Bank deposits and fiduciary accounts	25.6	11.9
Of which fiduciary accounts	3.0	0.4
Insurance and pension reserves	36.8	-
Other	0.8	3.8
Source: RICH and WALTER, 1993.		

By contrast, there are marked differences between the asset preferences of Swiss and U.S. institutional investors. In Switzerland, institutional investors hold roughly 40% of their assets in the form of securities, as compared with over 70% in the United States. Conversely, loans by institutional investors to ultimate borrowers are more important

in Switzerland than in the United States. Bank deposits are also more important in Switzerland, but less so than in Germany.

The relative importance of Swiss capital markets is confirmed by table 10, presenting data on the major stock exchanges of the three countries under review. Table 10 suggests that in Switzerland stock exchanges play a much larger role than in Germany. At the end of 1990, the market value of stocks, issued by domestic companies and listed on the major domestic stock exchanges, amounted to as much as 88% of GNP in Switzerland, as compared to 26.8% in Germany, and 49.6% the United States.

TABLE 10. Stock exchanges in the United States, Germany and Switzerland, 1990.

	United States	Germany	Switzerland
Number of companies listed (end of year)			
Domestic	6.413	649	182
Foreign	351	555	240
Market value of stocks of listed domestic companies (end of year)			
Billions of U.S. dollars	3.105	343	167
Percent of GNP	49.6	26.8	88.0
Source: RICH and WALTER, 1993.			

Consequently, the Swiss experience suggests that universal banking can be consistent with a relatively developed domestic capitals market. In this sense, it is not possible to hold that universal banks are the result of a relative underdevelopment of such markets, or either that universal banks inhibit their development²².

22 RICH GEORG and WALTER CHRISTIAN, The future of universal banking, *Cato Journal*, vol. 3, n° 2: 289-313, 1993, pgs. 295-302.

Additionally to these arguments, it is not possible to hold that universality tends to concentrate the relevant market due to the branching network that a universal bank theoretically needs for functioning. In particular, FOHLIN shows that in the United Kingdom the branch network covered the country much earlier than in Germany. Banks averaged thirty branches apiece in 1890, forty-five in 1900, and ninety three in 1910. Of course, population grew, and many branches were formed out of previously independent banks. Thus, the availability of banking offices to the population increased less than the figures on branching per institutions might imply. Still, there were about 8000 people per United Kingdom branch in 1890 and only 5500 per branch by 1910.

In contrast, despite the absence of prohibitions on these practices, hardly any branches existed in Germany until the eighteen seventies, at which point the newly founded Deutsche Bank began a campaign to build a network. In 1890, less than a quarter of Berlin listed banks maintained branches, and even the branching banks averaged only two subsidiary offices each. Even by 1900, German joint-stock credit banks averaged only one branch apiece overall (four, if only those with branches are considered)²³. Therefore, the German experience indicates that neither size nor universality requires branching in general, at the same time that the British case denotes that branching, like size, does not necessarily spur universality. As a consequence, the association of universality with relevant-market concentration through the introduction of branches (and, therefore, with an increased potential for abuse of market power) is a false proposition. In other words, since two of the most important incentives for concentration (geographical diversification and access to a larger deposit base) require branching, and universality is not necessarily correlated with branching, it is not possible to state

23 FOHLIN CATERINE, *Banking industry structure, competition and performance: does universality matter?*, cit., pg. 7. These numbers quadrupled over the ensuing decade, and while the sudden increase in branching in Germany, as in the United Kingdom, stemmed partly from takeovers of existing institutions, the increased penetration of banking offices was exceptional nonetheless. Population per branch in Germany declined from 45,000 in 1900 to under 15,000 in 1910. If private banks are included, using a broad estimate of 1,500 single-office institutions, the figure for population per branch would fall to 9,200 people per office in 1910.

that universality leads unavoidably to market concentration and, therefore, to higher probabilities of anticompetitive behaviors²⁴.

Even more specifically, table 11 shows that the German universal banking sector was actually less concentrated than the English deposit banking sector over the entire period from 1884 to 1913. In both countries, the largest members of the banking sector built up significant nationwide branching networks during this period. Such branching was normally accomplished by the takeover of a smaller bank in the location of a desired branch, and this movement contributed to the concentration increases in both England and Germany. As a result, while the top five banks held approximately one fifth of the total bank assets in both Germany and the United Kingdom in 1890, the top five held 29 and 36 percent in the two countries, respectively, by 1910. This comparison then underscores the lack of a generalized connection between universality, branching and concentration: the German banks were universal before they branched, and the British banks branched actively without expanding the scope of their business²⁵.

24 Cfr. *ibidem*, pgs. 7-8.

25 *Ibidem*, pgs. 11 and 36. In respect of this comparison, contrasts with the United States are regarded as misleading, since, as it was mentioned, two of the most important incentives for concentration (geographical diversification and access to a larger deposit base) require branching, and in the United States there were legal limits on such practices. Nevertheless, provided the fact that in this country, in spite of cross-border restrictions, in some states branching was not prohibited, it must be noted that when California began to engage in branching, around 1907, the concentration of banking increased, reaching almost 16% by 1913. Texas remained a unit banking state, and its banking concentration increased by only one percentage point between 1900 and 1913. The experience of the United States therefore suggests that it is not possible to prove that branching does not stimulate concentration; however, the results indicate that sufficient conditions for concentration can arise in specialized systems, particularly when they are unhampered by branching restrictions, rejecting then the idea according to which one of the disadvantages of the German universal banking is its excessive concentration.

TABLE 11. Banking industry structure in Germany, U.K and U.S., 1890-1910.

	1890			1900			1910		
	Germ.	US.	UK.	Germ.	US.	UK.	Germ.	US.	UK.
Thousands of people/bank*	302	6.3	115.5	268	6.1	204.4	221	3.8	374.4
Thousands of people/banking office*	211	6.3	7.5	45.1	6.1	6.3	14.8	3.7	5.5
Branches per bank**	0.98	0	14.3	1.01	0.01	31.5	4.3	0.02	67.5
	(2.6)			(4.4)	(1.4)	(16.8)	(1.9)		
Average assets/bank (millions 1913 dollars)	9.4	0.64	27.8	15.6	0.89	43.3	23.3	0.79	73.7
Five-firm concentration ratio***	19	3.2	21	22.5	6.5	25.5	29.3	6.23	35.5
Ten-firm concentration ratio***	28.8	5.6	32	33.3	9.8	41	43.5	9.06	56
	(56.3)		(38)	(50)		(46.3)	(54.8)		(64.7)
Notes									
<p>* Population per branch includes the main office. Number of banks and branches for the UK comes from Capie and Webber (1985). For Germany, 1890 figures are estimated based on joint-stock banks listed in Berlin (reported in Saling's 1891); thus, population per branch and branches per bank are overestimated. Number of banks for Germany comes from Deutsche Bundesbank (1976), but those numbers are lower than the number of banks reported in the <i>Handbuch der deutschen Aktiengesellschaften</i> (HDAG) under credit banks. Branches per bank and population per branch for Germany in 1900 and 1910 come from HDAG. So, for Germany, people per bank and people per branch are not comparable.</p> <p>** Branches per bank excludes the main office. For the U.S. and Germany, figures in parentheses are the number of branches per bank that owned branches (not including the main office itself).</p> <p>*** Figures in parentheses, for Germany, exclude estimated private bank assets; and, for the U.K., include only England and Wales. Available series exclude private banks for Germany. The concentration ratios estimated for the UK. by Capie and Rodrik-Bali include private banks. The ratios for the US are from 1908. Ratios for 1913 are 4.45 and 6.78.</p>									
Source: FOHLIN, 2000.									

The above mentioned results are in turn backed up by the FOHLIN's finding according to which, given the ROA (returns on assets) and ROE (returns on equity) measures of profitability, German returns are not significantly and consistently higher than both American and British returns over the period examined (1880-1913). This not only reinforces the argument that states that universality is not linked with anticompetitive behavior, but can also imply that universal banks are not drastically more efficient than specialized institutions in providing commercial services²⁶.

However, it is necessary to quote that, in terms of FOHLIN, though universality is not correlated to anticompetitive behavior through market concentration, it is not true either the statement of CALOMIRIS according to which *minimum efficient scale may be larger for a universal bank, thus universality offer greater opportunities for a bank to grow*. Specifically in this regard, FOHLIN shows that while it is true that the specialized American banks were far behind the German universal banks in terms of average assets per bank, UK. banks on average owned almost three times the assets of their German counterparts in 1890²⁷.

2.2. RISKINESS AND CONFLICTS OF INTEREST

According to BESTON, in addition to market power, it is possible to identify as central charges against universal banking (i) *increased riskiness*: commercial banks engaged in the securities business are likely to incur in greater risk than institutions that circumscribe to deposit taking and lending. Therefore, universal banks are prone to increase the likelihood of losses by their depositors. On the other hand (ii), it is argued that universal banks are likely to be involved in conflicts of interest in respect of their creditors and debtors²⁸.

26 *Ibidem*, pgs. 22-25.

27 *Ibidem*, pgs. 3 and 5.

28 BESTON G.J., *The separation of the commercial and investment banking. The Glass Steagall Act revisited and reconsidered*, Oxford University Press, New York, 1990, pgs. 149-159.

It is to be highlighted, as regards theoretical increases in risk-taking by universal institutions, that such idea has been posed as explanatory argument of financial crisis in developing countries, which is the case, for instance, of Colombia. According to CLAVIJO, in this country, in virtue of Law 45 of 1923, the banking system was flexible enough to allow for universal banking. However, the lack of dynamic markets brought about their segmentation, leading them therefore, on practice, to their insertion into a specialized system. In this way, financial products were ascribed to particular entities: those indexed to inflation (UPAC) were the monopoly of mortgage institutions (CAVs), while demand deposits remained the monopoly of commercial banks; consumer activities, by their side, had to be funded through CDs denominated in pesos, offered by commercial banks and near-banks (CFCs).

In 1990 was approved Law 45 and in 1993 Law 35, which were both aimed at a gradual movement towards *multibanking* by recurring to the scheme of subsidiaries and financial holdings. Then the local financial system experienced a credit expansion over the 1993-1997 period, which ended-up with a financial crisis during 1998-2000. In this regard, it was held that

“the over-expansion of the financial system through subsidiaries and branch-outs resulted in a costly scheme, which, combined with real asset depreciation, resulted in capital losses of about -32% for mortgage institutions and 21% for banks (...) during the years 1990-92, the banks reported profits over capital of 20.2% and of 2.2% with respect to assets (almost double the average figure reported by Spaniard banks). During the period of consolidation (1993-97), the banks maintained their good performance, reporting capital profits of 12.2% and 1.8% with respect to assets. In the meantime, mortgage institutions (CAVs) reported similar figures (20% and 1.5%, respectively). In all these years, solvency indicators for banks were close to 13%, almost five percentage points above the 8% required by the Basle Agreement, and mortgage institutions reported around 11%. However, the speculative bubble created over the years 1993-97 finally exploded in 1998, reverting most of the above mentioned indicators. Banks reported capital losses of 21% and 2.4% with respect to assets during the period 1998-2000(I). Mortgage institutions lost about 32% of their capital or 2.5% of their assets. Furthermore, solvency

indicators declined to an average of just 9.8% for mortgage institutions and to 10.3% for banks”²⁹.

Nevertheless, in spite of these observations, RICH and WALTER, supplementing the BESTON’s analysis, and drawing on the case of Switzerland, show that there is no consistent empirical evidence suggesting that a universal model increases risk. Moreover, a theoretical argument supports such statement: since universal banks possess a higher capacity to diversify their risk than specialized institutions, universal entities are not likely to carry on higher risks. However, problems could arise from the fact that universal banks are typically of extensive dimensions. If such institutions run into insolvency problems, central banks could be confronted with the dilemma of “too big to fail”. Nevertheless, as RICH and WALTER make it clear, this aspect is not related universality of banks but to their size³⁰.

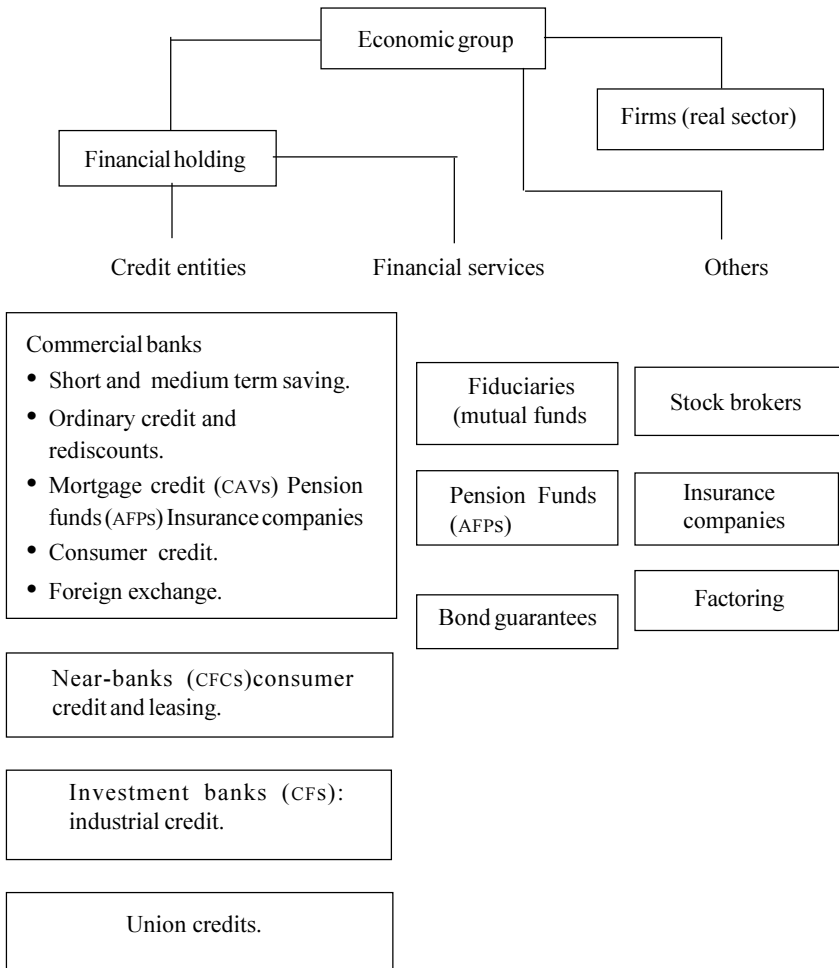
Additionally, even the above-mentioned Colombian case supports this position. In effect, in spite of the fact that it was initially held by regulators that the 1998-99 crisis was brought about by an increase in risks undertaken by financial institutions as a consequence of the banking model introduced by Law 45 of 1990, finally regulations implemented to cope with the crisis were neither aimed at eliminating such model nor at accenting in any other way specialization within the banking sector. In contrast, concerning structural reforms, Laws 510 and 546 established that commercial bank would absorb mortgage institutions and the use of branch offices was further flexibilized to cover fiduciaries and broker operations, which, in fact, implied a further step towards a multibanking scheme. This is how the Colombian banking model adopted the following form under Laws 510 and 546, 1999³¹:

29 CLAVIJO SERGIO, *Towards multibanking in Colombia: from ‘patchwork’ to financial holdings*, Banco de la República, Bogotá, DC, 2000, pgs. 2, 3 10.

30 Cfr. RICH GEORG and WALTER CHRISTIAN, op. cit., pgs. 308-309.

31 CLAVIJO SERGIO, op. cit., pg. 9.

FIGURE 1. Organizational composition of the financial sector under Law 510/99.



Source: CLAVIJO, 2000.

Finally, as regards potential conflicts of interest, WALTER and RICH hold that market forces themselves have the capacity to diffuse such eventual problem. For example, if a universal bank attempts to hide blunders in underwriting by shifting unsaleable securities to its trust department, its customers are likely to be confronted with relatively low returns on their portfolio investments. On the other hand,

competitors, including specialized banks, have an incentive to bid away customers from the low-performing universal institution³².

3. ALTERNATIVE POSTURES

According to ELSAS and KRAHNEN, in order to understand the role that universal institutions play for entrepreneurial development, it is necessary to make a distinction between the relatively small group of large, publicly traded corporations on the one hand, and the small and medium-sized companies on the other. In the vast majority of enterprises in Germany, both in terms of number and scale, bank involvement is neither in the function of shareholders nor as proxy voters or board members, but usually just as lenders. However, for these firms, bank debt is the single most important source of outside financing, which in turn implies a central role of financial institutions. On the other hand, there is a smaller group of exchange-listed firms, in respect of which banks perform the role of investors and assume functions in corporate control and governance. Thus, it is necessary to introduce a separate exam for each group of entities³³.

3.1. UNIVERSAL BANKS AS FINANCERS OF LARGE COMPANIES THROUGH EQUITY STAKES AND INTERVENTION IN CORPORATE GOVERNANCE

3.1.1. EMPIRICAL EVIDENCE ON UNIVERSAL BANKING AND FIRM PERFORMANCE

In this regard, table 12 displays statistics on bank influence rights reported by SEGER³⁴, from which it deserves to be underlined that:

32 *Ibidem*, pgs. 309-310.

33 ELSAS RALF and KRAHNEN JAN PIETER, *Universal banks and relationship with firms*, Center for Financial Studies, Goethe University, Frankfurt, 2003, pg. 2.

34 SEGER FRANK, *Banken, Erfolg und Finanzierung*, Deutscher Universitätsverlag, Wiesbaden, 1997, cited by ELSAS RALF and KRAHNEN JAN PIETER, op. cit., pg. 6.

- 70% of all sample firms have a bank representative as a member of the supervisory board, and in 41.6% of all cases, bank representatives constitute more than 25% of board members representing capital.
- Banks hold equity stakes in approximately only 25% of all cases; therefore it is possible to argue that, to some extent, the relevance of direct equity holdings is exaggerated in the public debate. Nevertheless, for 8% of the sample firms, these stakes are equal or higher than 25% of capital, enabling the respective bank to block all fundamental votes at the general meeting³⁵.
- The sample mean of proxy-votes at general meetings is in excess of a blocking minority with roughly 30%, and in 41.5% of all cases the aggregate proxy-votes of all banks exceed 25%. Adding proxy-votes and direct equity stakes shows that banks had a majority of votes at 35.4% of general meetings.

Therefore, these data provide support for the idea of significant influence of banking institutions in Germany on large industrial firms. However, it must be kept in mind that these numbers are aggregated over all banks for a given firm. In this form, to effectively block, for example, a change in a firm's statutes, all banks have to agree on a mutual policy and coordinate their actions. As a consequence, it is likely that coordination failures and free-rider problems will reduce the effective power by banks³⁶.

35 Unlike in the US, it results common in Germany that there be significant block-holdings. For instance, according to FRANKS/MAYER and BOEHMER, for all listed firms over the period 1985 to 1997, roughly 85% of the firms had a blockholder with a stake above 25%, whilst 57% had one with a stake above 50%. BOEHMER EKKEHARD, "Business groups, large shareholders, and bank control: An analysis of German takeovers", *Journal of Financial Intermediation* 9: 117-148, 2000; FRANKS JULIAN and MAYER COLIN, "The ownership and control of German corporations", *Review of Financial Studies* 14: 943-977, 2001.

36 ELSAS RALF and KRAHNEN JAN PIETER, op. cit., pg. 7.

TABLE 12. Measures of bank influence rights.

	Mean	Equal 0%	Equal or more than 25%	Equal or more than 50%	Number of observations
Share of bank debt in total firm financing	17.1%	n.a.	25.0%	n.a.	144
Supervisory board	70.1%	29.9%	—	—	144
Share of bank representatives in board members representing capital	—29.9%	41.6%	9.7%	144	
Firms with direct equity holding by banks	24.3%	75.7%	8.3%	2.1%	144
Proxy-voting rights of banks at general meetings	29.5%	n.a.	41.5%	20.0%	65
Total voting rights at general meetings by banks	37.9%	n.a.	49.2%	35.4%	65

Source: ELSAS and KRAHNEN, 2003.

Once established that German universal banks exert significant influence on the management of large German firms, it is necessary to determine whether this is economically beneficial or detrimental, due to the fact that bank dependence could simply be seen as synonymous of the bargaining power of such entities, allowing them to extract significant rents³⁷, or else as a way of resolution of informational asymmetries problems. Under this last view, the hypothesis that *firms which exhibit higher bank dependence entail a better performance*, results supported³⁸.

37 WEINSTEIN DAVID and YAFEH YISHAY. “On the costs of bank-centered financial system: Evidence from the changing main bank relations in Japan”, *Journal of Finance*, 53: 635-672, 1998.

38 GORTON GARY and SCHMID FRANK, “Universal banking and the performance of German firms”, *Journal of Financial Economics*, 58: 29-80, 2000.

Regarding this issue, drawing on ELSAS and KRAHNEN, table 13 summarizes a selection of empirical studies addressing the relation between bank dependence and firm performance.

TABLE 13. Studies on bank dependence, firm investment and profitability for German firms.

Study	SEGER (1997)	LEHMANN and WEIGAND (2000)	GORTON and SCHMID (2000)	ELSTON (1998)	FOHLIN (1998)
Panel A: General characteristics					
Observation period	1990-1992	1992-1996	1975-1986	1973-1984	1903-1913
Sample size	144	361	283/280	139	75
Industry affiliation	Non-financial, Manufacturing	Manufacturing	Manufacturing	Manufacturing	Non-financial
Performance measure	ROA, ROE	ROA	Market-to-book value of equity, ROE	Cash-flow sensitivity of investment	Cash-flow sensitivity of investment
Measure of bank dependence	Debt, share, equity stakes, supervisory board, proxy voting	Equity stake	Equity stakes, proxy voting	Direct bank equity stake	Cross directorate membership
Information on proxy votes	Yes, subsample of firms	No	Yes, sub-sample firms	No	---
Panel B: Results: Impact of bank dependence measure on firm performance					
Bank debt financing	Negative	---	---	---	---
Equity control rights	Positive	Positive	Positive	---	---
Supervisory board representation	Negative	Insignificant	---	---	---
Panel C: Impact of bank dependence measure on investment /cash-flow correlation					
Supervisory board	---	---	---		Unstable/ insignificant
Equity control rights	---	---	---	Negative	
Source: ELSAS and KRAHNEN, 2003.					

In spite of the heterogeneity in terms of the underlying firms samples and available information, the results are roughly consistent. Concretely, the GORTON and SCHMID study shows that bank control has a positive impact on firm performance, similar to the effect of block-holdings by non-financial investors. After controlling for both issues simultaneously, it is found, though, that direct shareholding by banks improves firm performance beyond the level achieved by non-bank block-holders. It is suggested that this superior control effect of banks is due to either better information and superior expertise, or because of the additional threat to cut-off debt financing if the management refuses to comply with bank interests³⁹.

These results are consistent with the findings by LEHMANN/WEIGAND⁴⁰ and SEGER⁴¹, who also report better firm performance for more highly concentrated shareholder structures and equity holdings by banks.

With regard to the impact of proxy-voting rights on firm performance, neither the GORTON and SCHMID study nor the SEGER one finds evidence that these are used to exert management control. GORTON and SCHMID suggest this insignificance may be due to the fact that proxy-voting rights merely reflect the degree of dispersion of shareholdings. That is, the lower the shareholder concentration, the higher will be the level of proxy-votes, since these arise from the delegation of voting rights to banks by small and non-pivotal investors. This characteristic of proxy votes might be due to the inherently high coordination problems associated with the exercising of such votes.

The relation between supervisory board representation by banks and firm performance is addressed by all three studies. SEGER and LEHMANN/WEIGAND consistently find no impact of board representation on firm performance. One corresponding explanation is provided by

39 GORTON GARY and SCHMID FRANK, *op. cit.*, cited by ELSAS RALF and KRAHNEN JAN PIETER, *op. cit.*, pg. 8.

40 LEHMANN ERIK and WEIGNAD JÜRGEN, "Does the governed corporation perform better? Governance structures and corporate performance in Germany", *European Finance Review*, 4, 157-195, 2000. Cited by ELSAS RALF and KRAHNEN JAN PIETER, *op. cit.*, pg. 8.

41 SEGER FRANK, *op. cit.*, cited by ELSAS RALF and KRAHNEN JAN PIETER, *op. cit.*, pg. 8.

GORTON and SCHMID, who argue that membership on a supervisory board is directly derived from equity control rights, which subsumes whatsoever impact of membership on the respective supervisory body on firm performance.

Summarizing, then, there is a beneficial role of direct equity stakes held by banks on firms' operative quality, indicating that banking institutions play a particular role in the process of corporate governance in Germany; nevertheless, with respect to alternative means of exerting management control (i.e. proxy-voting rights and supervisory board representation), the evidence seems in general to imply the irrelevance of these factors, rejecting thus the common perception that proxy votes provide banks with a significant and frequently criticized amount of influence rights⁴².

3.1.2. BANKS, LIQUIDITY AND FINANCING CONSTRAINTS

A second consequence of close ties between banks and large industrial firms is concerned with the ability of the former to mitigate financing constraints of the latter. In accordance with FAZZARI, HUBBARD and PETERSEN, capital market imperfections lead to firm preferences for internal over external sources of financing, and this can be analyzed by regressing firm investment expenditures on a measure of internal financing and investment opportunities. In a supposed context without distortions, all investment projects with positive net present value would be financed, thus rendering the choice of funding irrelevant. In such a context, firm expenditures would not depend on the availability of internally generated funds. Hence, a regression of investment expenditures on cash-flow would yield no systematic relation. However, if capital market imperfections are present, there will be a positive correlation between

42 Cfr. ELSAS RALF and KRAHNEN JAN PIETER, op. cit., pg. 8. In defense of the association of proxy votes and significant influence rights by banks: JÜRGENS ULRICH, RUPP JOACHIM and VITOLS KATRIN, *Corporate Governance and Shareholder Value in Deutschland*, Discussion paper FS II 00-202, Wissenschaftszentrum Berlin, Berlin, 2000, pg. 4 and ss.

firm investment and cash flow, which would indicate the severity of financing constraints⁴³.

In this sense, under the assumption that banks are able to mitigate financing constraints because of their role as active monitors of firm management, a negative impact of firms bank dependence on the cash-flow correlation of investments is to be expected⁴⁴, particularly in the case of German universal banks, which are

“thought to foster long-term relationships with industrial firms, promoting more efficient and stronger investment”⁴⁵.

Effectively, international evidence reports a strong positive correlation between cash-flow and investment. ELSTON, by her side, investigates the impact of bank dependence on firm investment expenditures by analyzing a sample of one hundred thirty-nine (139) German manufacturing firms (table 13). She estimates cash-flow sensitivities over the period from 1973-1984 for two sub-samples: one consisting of 26 firms where banks had a high direct equity stake in the firms, and one where no equity stakes were reported. The shown coefficients of cash-flow sensitivities are significantly lower for the sub-sample of firms classified as bank dependent, which indicates that such dependence mitigates financing constraints⁴⁶.

43 FAZZARI STEVEN, HUBBARD GLENN and PETERSON BRUCE, “Investment and finance reconsidered”, *Brookings Papers on Economic Activity* 1:114-195, 1988, pg. 9 and ss.

44 In this regard: FOHLIN CAROLINE, “Relationship Banking, Liquidity, and Investment in the German Industrialization”, *Journal of Finance*, 53: 1737-1758, 1998; HOUSTON JOEL and JAMES CHRISTOPHER, “Do relationships have limits? Banking relationships, financial constraints and investment”, *Journal of Business*, 74: 347-374, 2001, pgs. 349 and ss.

45 FOHLIN CATERINE, “Relationship Banking, Liquidity, and Investment in the German Industrialization”, *cit.*, pg. 1737.

46 ELSTON JULIE ANN, “Investment, liquidity constraints, and bank relationships: Evidence from German manufacturing firms”, in: BLACK S.W. and MOERSCH M. (eds.). *Competition and convergence in financial markets*, North-Holland - Elsevier Science, Amsterdam, 1998, cited by ELSAS RALF and KRAHNEN JAN PIETER, *op. cit.*, pg. 12.

Nevertheless, this empirical finding is inconclusive, if FOHLIN's results are kept in mind. FOHLIN analyzes a sample of firms over the period 1903-1913, shifting the focus to Germany's late period of industrialization (table 13). FOHLIN measures bank dependence by cross-directorates between firms and banks (i.e., cases where the bank is represented in either the executive or supervisory board of the firm, or the firm is represented in the bank's executive or supervisory board). The results from different model specifications neither suggest that bank dependence systematically affects firm investments in terms of its level, nor investment correlation with cash-flow⁴⁷.

In words of ELSAS and KRAHNEN, this lack of coherence in the results could be attributed to FOHLIN's use of a very specific type of measure for bank dependence (cross-directorates). However, since (as it was shown in the preceding section) supervisory board representation is systematically correlated to direct equity stakes (and proxy-votes), FOHLIN's results do indeed cast some doubt on there being a particular role of banks for corporate governance in Germany. Yet, it could be expected that a mitigating effect of bank dependence on financial constraints were not pronounced for the period taken into account by the FOHLIN's study⁴⁸.

3.2. BANKS AS FINANCIERS OF SMALL AND MEDIUM SIZED ENTERPRISES: LENDING RELATIONSHIPS

In terms of ELSAS and KRAHNEN, bank debt is the single most important source of external funding for corporations not only in Germany, but also along a cross country comparison, provided the fact that great part of the real sector is regularly composed by small and medium sized enterprises, and, to the extent that such entities take normally the form of limited liability companies (GmbH) or limited partnerships (KG), bank

47 FOHLIN CAROLINE, "Relationship Banking, Liquidity, and Investment in the German Industrialization", cit., cited by ELSAS RALF and KRAHNEN JAN PIETER, op. cit., pgs. 12-13.

48 ELSAS RALF and KRAHNEN JAN PIETER, op. cit., pgs. 12-13.

influence via direct equity holdings, supervisory board representation and proxy voting rights become irrelevant in those contexts. In such cases, therefore, the concept of *hausbank* financing finds plenty application, that is, *the appreciation of banking institutions from the standpoint of their information-intensive, long-term relationships with firms*. Within such *hausbank* relationships, banks are said to be the primary financier of firms, being equipped with more relevant and more timely information than any other external investor (like, for example, an “outside bank”). Moreover, *hausbanks* are deemed to accept a special responsibility in the event that borrowers face financial distress. Now, even though this category is in some cases used to describe the function of banks for all segments of firms, it refers more specifically to the events when the lending function of banking institutions is addressed⁴⁹.

The economic rationale for this special responsibility refers precisely to the privileged information that acquires a banking institution in virtue of its reiterative long-term interaction with the borrower, in such a manner that this responsibility derives directly from the category of *relationship lending*⁵⁰.

More precisely, three foremost potential benefits attributed to this category can be identified:

- First, a close relationship to its bank can induce a borrower to reveal more information than in a different financing framework⁵¹. In turn, a

49 *Ibidem*, pgs. 2, 14.

50 This concept is defined as a long term implicit contract between a bank and its debtor, which allows them to acquire particular information about firms financial prospects. Cfr. ELSAS RALF and KRAHNEN JAN PIETER, *op. cit.*, pg. 14; Cfr. BOOT ARNOUD, GREENBAUM STEWART and THAKOR ANJAN, “Reputation and discretion in financial contracting”, *American Economic Review*, 83, 1165-1183, 1993, pgs. 1166 and ss.

51 BHATTACHRYA SUDIPTO, CHIESA, GABRIELLA, “Proprietary information, financial intermediation, and research incentives”, *Journal of Financial Intermediation*, 4: 328-357, 1995; YOSHA OVED, “Information disclosure costs and the choice of financing source”, *Journal of Financial Intermediation*, 4: 3-20, 1995.

relationship lender has stronger incentives for information acquisition, and has therefore a higher propensity to possess significant data of firms' prospects in virtue of repeated interaction with the borrower⁵².

- Second, relationship lending allows for contractual flexibility through the renegotiation of terms⁵³.
- Third, commitment between the borrower and the bank allows for intertemporal transfers because it introduces a long-term perspective for the bank. If the borrower cannot switch to another financier easily, then the bank can expect to earn rents in future periods that offset losses at initial stages of the business⁵⁴.

These statements, in turn, have implications for credit availability in general, and credit availability when borrowers face financial distress (i.e., credit availability in a narrow sense). As stated by PETERSEN and RAJAN, the possibility of subsidizing firms in the beginning of a relationship can mitigate problems of moral hazard and adverse selection, which would have restricted loan provision from lenders different than *hausbanks*. Hence, relationship financing can increase credit availability⁵⁵.

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- 52 CAMINAL RAMÓN and MATUTES CARMEN (1997): Can competition in the credit market be excessive?, *CEPR Discussion Paper*, n° 1725, Washington, DC, 1997, pgs. 9 and ss.
- 53 BOOT ARNOUD, GREENBAUM STEWART and THAKOR ANJAN, *op. cit.*, pgs. 1169-1180.
- 54 ALLEN FRANKLIN and GALE DOUGLAS, "Innovations in financial services, relationships, and risk sharing", *Financial Management*, 45: 1239-1253, 1999; PETERSEN MITCHELL A. and RAJAN RAGHURAM, "Trade credit: Some theories and evidence", *Review of Financial Studies* 10: 661-692, 1997; SHARPE STEPHEN A., "Asymmetric information, bank lending, and implicit contracts: A stylized model of customer relationships", *Journal of Finance*, 45, S. 1069-1087, 1990. For an aggregate presentation of these benefits: BOOT ARNOUD, GREENBAUM STEWART and THAKOR ANJAN, *op. cit.*, pgs. 3, 1165-1183, 1993, pgs. 1165-1181.
- 55 PETERSEN MITCHELL A. and RAJAN RAGHURAM, "The effect of credit market competition on lending relationships", *Quarterly Journal of Economics*, 110: 407-443, 1995, pgs. 409 and ss.

Financial distress characterizes a situation where firms are not able to meet current obligations, needing thus a significant injection of liquidity. In such a situation, the long-term perspective of a relationship between a bank and a firm, which gives rise to comparatively wider information in hands of the financial institution, as well as to the existence of intertemporal transfers, can lead to different decisions with respect to the question of denial (i.e. termination) or continuation of debt provision.

In effect, under a hypothesis of financial crisis, lenders must assess whether the situation is temporary or permanent (i.e., whether or not the underlying investment projects of the borrowing firm are efficient, and whether or not default is strategic). If the borrower still has investments with a positive net present value, the efficient decision is a workout and, thus, in favor of a continuation of the relationship. In contrast, if the borrower's projects are of low quality, termination would be the efficient outcome. Therefore, *relationship lending* is susceptible to be interpreted as a form of crisis insurance⁵⁶. It must be emphasized, however, that such an insurance does not imply that *relationship lenders* or *hausbanks* always decide for continuation or a workout. Rather, they are to be expected to decide in favor of the efficient alternative. In this way, relationship lending can in some cases be interpreted as a commitment device for the borrower to *ensure ex-ante* that he will be liquidated if distress occurs, since this *ex-ante* decision restricts his later actions in a desirable mode⁵⁷.

Before turning to empirical evidence on *hausbank* relationships, the following theoretical drawbacks specifically referred to such scheme must be pointed:

56 ELSAS RALF and KRAHNEN JAN PIETER, *op. cit.*, pg. 16.

57 *Ibidem.*, pg. 16; RAJAN RAGHURAM, "Insiders and outsiders: The choice between informed and arm'slength debt", *Journal of Finance*, 47: 1367-1400, 1992, pgs. 1368 and ss.

- First, relationship lending does not permit *hausbanks* perform a monitoring function similar to the one that the maintenance of equity stakes by financial institutions allow⁵⁸.
- Second, the information privilege of banks endogenously induces bargaining power. Hence (additional or exclusive) borrowing from other kinds of lenders can be used to limit rents which would be exploitable by lenders possessing privileged information⁵⁹.
- Finally, the possibility of contract renegotiation may lead to a form of “soft-budget constraint” for borrowers, where relationship lenders are induced to provide additional financing even though it is inefficient. This in turn can adversely affect the incentives of the borrower to avoid non-performing outcomes *ex ante*⁶⁰.

3.2.1. BANKS AS FINANCER OF SMALL AND MEDIUM ENTERPRISES: INTERTEMPORAL TRANSFERS, LIQUIDITY INSURANCE AND CREDIT AVAILABILITY

As already pointed, one of the benefits of the institution of *hausbanks* is that it enables intertemporal transfers, in such a manner that if the borrower is tied to the bank, it can charge interest rates on loans below

58 GALE DOUGLAS and HELWIG MARTIN, “Incentive compatible debt contracts: The one period problem”, *Review of Economic Studies*, 52: 647-663, 1985, pgs. 649 and ss.; DIAMOND DOUGLAS, “Monitoring and reputation: The choice between bank loans and privately placed debt”, *Journal of Political Economy*, 99: 688-721, 1991, pgs. 690 and ss.

59 SHARPE STEPHEN A., (1990): Asymmetric information, bank lending, and implicit contracts: A stylized model of customer relationships, *Journal of Finance*, 45: S. 1069-1087, 1990, pgs. 1069 and ss.; RAJAN RAGHURAM, “Insiders and outsiders: The choice between informed and arm’s length debt”, *Journal of Finance*, 47: 1367-1400, 1992, pgs. 1367 and ss.

60 DEWATRIPONT MATHIAS and MASKIN ERIC, “Credit and efficiency in centralized versus decentralized markets”, *Review of Economic Studies*, 62, 541-556, 1995, pgs. 542 and ss.

the competitive level at the beginning of the relationship, knowing that it will be able to charge interest rates higher than the competitive level at a later stage. Empirical evidence in this regard is related to three specific issues: the first is concerned with the actual adjustment of interest rates charged on lines of credit to corporate borrowers, who are classified as either a *hausbank* or *non-hausbank* customer; the second issue addresses the potential insurance function of relationship lenders by discussing liquidity insurance provided by *hausbanks*; finally, the third issue is concerned with the conjecture according to which intertemporal contracting due to relationship lending can increase the availability of credit to borrowers.

3.2.1.1. EVIDENCE ON LOAN PRICING

From a factual viewpoint, ELSAS and KRAHNEN⁶¹ analyze the loan pricing of banks between *hausbank* and *non-hausbank* relationships. The results suggest that, on average, there is no difference in price setting between *hausbank* and *non-hausbank* customers⁶².

This contrasts with the postulation according to which, in the context of *hausbank* relationships, there will be differences in pricing patterns in respect of other types of contractual banking links for two reasons: firstly because relationship lenders conduct interest rate smoothing for their borrowers, as suggested by BERLIN and MESTER⁶³, and secondly

61 ELSAS RALF and KRAHNEN JAN PIETER, "Is relationship lending special? Evidence from credit-file data in Germany", *Journal of Banking and Finance*, 22, 1283-1316, 1998, pgs. 1284 and ss.

62 This conclusion is at variance with: BERGER ALLEN and UDELL GREGORY F., "Some evidence on the empirical significance of credit rationing", *Journal of Political Economy*, 100: 1047-1077, 1992, pgs. 102 and ss.; DEGRYSE HANS and VAN CAYSELE PATRICK, "Relationship lending within a bank-based system: Evidence from European small business data", *Journal of Financial Intermediation*, 9: 90-109, 2000, pgs. 92 and ss.

63 BERLIN MITCHELL and MESTER LORETTA, "Deposits and relationship lending", *Review of Financial Studies*, 12: 579-607, 2000, pgs. 581 and ss.

because of remuneration of *hausbank*-specific services (like information production and distress insurance) or even because of monopoly rents⁶⁴.

According to ELSAS and KRAHNEN, there are at least three possible explanations for this result: (i) *hausbanks* do not provide services any more valuable than those of other banking institutions; (ii) different patterns of intertemporal transfers cancel out in the cross-section of borrowers; and (iii) adjusting interest rates is not the only way to remunerate *hausbank* services, i.e. the analysis ignores the cross-selling issue and other non-spread income components. Nevertheless, in words of ELSAS and KRAHNEN, it is a caveat or unifying feature of all existing empirical studies on relationship lending and loan pricing that due to lack of data, it has not yet been possible to differentiate empirically between these explanations⁶⁵.

3.2.1.2. LIQUIDITY INSURANCE

ELSAS and KRAHNEN also analyze whether *hausbanks* provide liquidity insurance for borrowers by observing loan contract adjustments as a function of changes in borrower quality. Their results support the claim that, owing to the properties of relationship lending, *hausbanks* increase the credit availability to firms in financial distress as compared with other types of relations. Specifically, give a one-rating-notch deterioration of borrower quality, *hausbanks* increase their loan supply, while ordinary lenders not. Therefore, *hausbanks* offer liquidity insurance to their customers, which is not unconditional, however, as long as it is shown to depend on the magnitude of the change in quality. If the increase in default probability is relatively high, implying a deterioration of two or more notches, all banks on average will decrease their financial commitment, irrespective of the *hausbank* status⁶⁶.

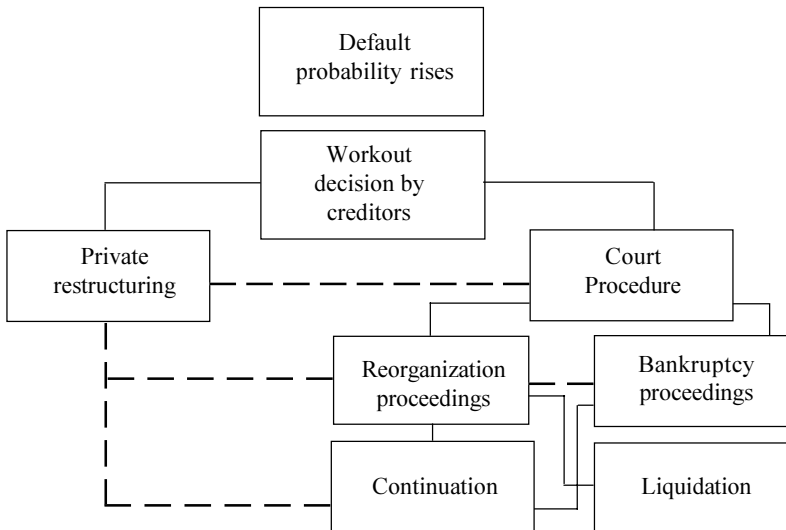
64 ELSAS RALF and KRAHNEN JAN PIETER, *Universal banks and relationships with firms*, cit., pg. 23.

65 *Ibidem*, pg. 23.

66 ELSAS RALF and KRAHNEN JAN PIETER, "Is relationship lending special? Evidence from credit-file data in Germany", cit., pgs. 1285 and ss. -1316.

More specifically, in respect of the cases in which borrowers face a serious deterioration of their performance quality (and thus must confront a workout, liquidation or court process), following ELSAS and KRAHNEN, figure 2 sketches out the logic of a German reorganization procedure, starting from an unexpected event that causes financial distress, followed by an upward adjustment of default expectation by the lender, and a decision by the lenders concerning a possible private reorganization. If this decision is negative, court proceedings will be started, leading either to composition proceedings or compulsory liquidation. If the decision is positive and if the private reorganization involving creditors is successful, the firm will reappear as a viable business unit (continuation). On the other hand, if the reorganization is not successful, the company will enter formal court proceedings⁶⁷.

FIGURE 2. Sequence of a reorganization/liquidation process in Germany.



Source: Cfr. ELSAS and KRAHNEN, 2003.

67 ELSAS RALF and KRAHNEN JAN PIETER, *Universal banks and relationships with firms*, cit., pgs. 28-29.

Working with a sample of 124 medium-sized German borrowers in crisis, Brunner and KRAHNEN report that of the eighteen firms entering court proceedings, none emerged as a viable entity, 50% were liquidated and the remaining 50% were still pending. However, the vast majority of all cases, 85% (106 cases) were in fact reorganized. 16% (18) cases were successfully reorganized, whereas 88 cases were still pending due to the relatively long duration of the workouts⁶⁸.

According to ELSAS and KRAHNEN, this relatively high proclivity to reorganize distressed borrowers can be regarded as common mainly due to *hausbanks* institutions, given that supportive actions by a particular lender are more likely (i) the higher the *preference (seniority)* of his claims is over the claims of other creditors, (ii) the lower his bargaining costs are expected to be relative to other creditors, and (iii) if his uncertainty in the assessment of the real economic value of a debtor's assets is regarded as being relatively low. In this reasoning order, insofar as the three conditions are met by *relationship lenders*, it results reasonable that these institutions engage frequently in workouts of the firms with which they hold lending contracts⁶⁹.

In addition, it is to be underlined that since normally bank debt imply multiple lenders, according to Brunner and KRAHNEN, both the success of bank involvement in pre-bankruptcy corporate workouts and the relative absence of bank involvement in formal bankruptcy proceedings are explained by *bank pools*. For the sample analyzed, in 47% of all cases, a bank pool was formed, typically at or shortly before the outset of the corresponding borrower crisis. Such formation is more likely if the distress event is considered to be serious: for firms with deep crisis rating⁷⁰, 70% will turn to a bank pool, while for the less deep crisis rating this number is 42%.

68 BRUNNER ANTIJE and KRAHNEN JAN PIETER, *Corporate debt restructuring: Evidence on lender coordination in financial distress*, Working Paper, Goethe-Universität, Frankfurt 2002, pg. 4 and ss.

69 Cfr. ELSAS RALF and KRAHNEN JAN PIETER, *Universal banks and relationships with firms*, cit., pg. 34.

70 Bank internal ratings are measured on a six category scale, where categories 5 and 6 (highest default risks or actual default) are interpreted as expected or actual distress.

Further, concretely in respect of the effect of pool formation on the achievement of a significant lowering of the default probability of firms, Brunner and KRAHNEN show that the existence of the figure under review increases the prospect of consolidating such purpose (presumably because of its interest alignment function), while the number of bank relations, given that a pool exists, has a negative impact on this probability. The latter finding suggests that even bank pools are not able to completely resolve the coordination problems inherent in financial distress⁷¹.

3.2.1.3. CREDIT RATIONING

In words of FREIXAS and ROCHET, credit rationing occurs if a borrower's demand for credit is denied even if this borrower is willing to pay all the price and non-price elements of a loan contract⁷².

In this regard, the basic theory is that relying on a relationship lender may enhance credit availability since this lender (i) already has privileged information, (ii) has higher incentives to engage in costly information production, and (iii) could extract rents from the relationship with the borrower in the future above the competitive level⁷³.

71 BRUNNER ANTJE and KRAHNEN JAN PIETER, *op. cit.*, pgs. 6 and ss. Overall, such pools follow a common contractual structure: (i) the coordination of lenders involvement is realized by nominating one pool leader as a trustee; (ii) the agreement covers the outstanding non-collateralized debt of each bank, for which the pool then seeks collateral coverage. However, most pool member banks have additional collateral outside the pool, which is signed before the pool formation; (iii) a stand-still agreement between all member banks guarantees that they will liquidate their collateral only with the consent of the pool; (iv) the shares of non-collateralized debt are the basis for determining individual pool quotas, where the bank with the largest quota becomes the pool leader. Future in- and outflows of cash are then shared among pool members according to their quotas. Finally (v), decision-making within the pool must be unanimous.

72 FREIXAS XAVIER and ROCHET JEAN-CHARLES, *Microeconomics of banking*, MIT Press, Cambridge, London, 1997, pg. 137. Similarly: BALTENSPERGER E., "Credit rationing: Issues and questions, *Journal of Money, Credit, and Banking*, 10: 170-183, 1978, pgs. 173 and ss.

73 ELSAS RALF and KRAHNEN JAN PIETER, *Universal banks and relationships with firms*, cit., pg. 25.

Such idea is empirically confirmed by Fischer, whom, in a first step, analyzes the impact of bank competition in local debt markets on the degree of information acquisition by banks. It turns out that banks in more concentrated local debt markets engage significantly more in information acquisition than banks in more competitive environments⁷⁴.

The next step considers firm behavior with respect to taking discounts offered by suppliers, in other words, trade credit. The frequency of not taking supplier discounts can serve as a proxy for credit rationing since it is presumed to be the most expensive source of financing for firms⁷⁵. Therefore, the effect of relationship lending on credit availability can be tested by the impact of bank concentration in local debt markets on the frequency of firms taking discounts⁷⁶. Effectively, it is shown that the higher the bank concentration in local debt markets, the more often firms will make use of discounts offered by suppliers⁷⁷.

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- 74 FISCHER KARL-HERMANN, *Acquisition of information in loan markets and bank market power - An empirical investigation*, Working Paper, Goethe-Universität, Frankfurt, 2000, pgs. 4 and ss. Since, according to ELSAS and KRAHNEN, relationship lending can be interpreted as being based on information accumulation and being rationally intended for the creation of monopoly power within credit relationships, these results carry over directly to the *hausbank* case. ELSAS RALF and KRAHNEN JAN PIETER, *Universal banks and relationships with firms*, cit., pg. 25.
- 75 For instance, Petersen and RAJAN argue that *not taking discounts offered by suppliers indicates financial constraints because of the high opportunity cost of doing so*. PETERSEN MITCHELL and RAJAN, “The effect of credit market competition on lending relationships”, cit., pg. 409 and ss.
- 76 The underlying idea is that the exogenous monopoly power of banks in credit relationships (i.e., bank concentration) has the same impact on financing restrictions for firms as does endogenous monopoly power arising from relationship lending. PETERSEN MITCHELL and RAJAN, “The effect of credit market competition on lending relationships”, cit., pgs. 409 and ss.
- 77 FISCHER KARL-HERMANN, *Acquisition of information in loan markets and bank market power - An empirical investigation*. Working Paper, Goethe-Universität, Frankfurt, 2000, pgs. 4 and ss. This finding is similar to the results of PETERSEN and RAJAN for U.S. firms, even though in the particular case of Fisher it is offered as explanation for this pattern *the value of accumulated private information*.

CONCLUSION

As it was shown, from a theoretical stance, the model of universal banking is supported basically by the advantages of (i) *delegation of an insider as a monitor of corporate behavior of the corresponding borrower*, which reduces the costs associated with the “*asset-substitution*” and the “*free cash flow*” problems; (ii) increments in the “signal value” of bank decisions about firm finances, (iii) reductions in the costs of corporate crisis if borrowers are deprived from financing channels, and (iv) the possibility of carrying out intertemporal transfers.

In contrast, it is argued also that universal banking systems are conducive to concentration of the relevant market and to correlative augments in the probability of abuse of market power. In addition, it is raised that universal structures breed higher risk-taking and conflicts of interest by banking institutions *vis-à-vis* specialized entities.

Analogously, it has been stated that it is not possible to establish homogeneous functions of universal banking institutions in respect of firms belonging to the real sector, insofar as it is necessary to distinguish between large, publicly traded corporations on the one hand, and small and medium-sized companies on the other. In effect, in the former case, bank participation is undertaken through equity stakes acquisitions, which permits them to exert control on firms through direct involvement in corporate governance. On the contrary, in the latter hypothesis, banks interact with firms through long-term loans, giving rise to *hausbank lending*. In this case, *relationship lending* theoretically enhances firms’ credit availability, provides them with a particular form of liquidity insurance and allows intertemporal transfers. Nonetheless, it is held that relationship lending does not permit *hausbanks* perform a monitoring function similar to the one that the maintenance of equity stakes by financial institutions allow, that the information privilege of banks endogenously induces bargaining power and consequent potential anticompetitive behaviors, and that the possibility of contract renegotiation may lead to a form of “soft-budget constraint” for borrowers, where relationship lenders are induced to provide additional financing even though it is inefficient.

In this sense, it is possible to conclude that even though from a theoretical standpoint the universal banking system does not emerge as an ever-valid proposition to optimize credit availability and its respective utilization, empirical evidence regarding such model reflects its proclivity to contribute to structure relatively efficient credit markets. Such statement is backed up by the outlined documentation on the corporate costs' disparity between the United States and Germany during the 1870-1913 period, the lack of empirical support for the affirmation according to which universal banking conducts to market power abuses, the data showing the overall beneficial role of direct equity stakes held by banks on publicly traded firms' performance, and the factual results entailing that the *hausbank* concept increases credit availability for small and medium-sized enterprises, grants them liquidity insurance and confers them the possibility of being temporarily subsidized through intertemporal transfers.

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