

Claudia Curi

**VALUING FINANCIAL
CONGLOMERATES**

**STYLISED FACTORS
AND NEW EVIDENCE FROM FINANCIAL CRISES**

FrancoAngeli

BANCA, FINANZA E PMI

Informazioni per il lettore

Questo file PDF è una versione gratuita di sole 20 pagine ed è leggibile con



La versione completa dell'e-book (a pagamento) è leggibile con Adobe Digital Editions. Per tutte le informazioni sulle condizioni dei nostri e-book (con quali dispositivi leggerli e quali funzioni sono consentite) consulta [cliccando qui](#) le nostre F.A.Q.



La Collana ospita scritti inerenti le tematiche dell'economia degli intermediari e dei mercati finanziari, nonché temi legati alla finanza e ai rapporti banca-impresa, provenienti da soggetti afferenti a qualsiasi scuola, dipartimento o ente di ricerca, sia nazionale che internazionale.

Nella Collana sono pubblicati esclusivamente lavori scientifici, ossia in grado di offrire un contributo all'avanzamento della conoscenza.

Tutti i lavori sono sottoposti a un processo di double blind review.

Editor in Chief

Lorenzo Gai, Università di Firenze

Comitato Scientifico

Elena Cenderelli, Università di Pisa; Marco Di Antonio, Università di Genova; Loris Nadotti, Università di Perugia; Giampaolo Gabbi, Università di Siena; Giulio Tagliavini, Università di Parma

I lettori che desiderano informarsi sui libri e le riviste da noi pubblicati possono consultare il nostro sito Internet: *www.francoangeli.it* e iscriversi nella home page al servizio “Informatemi” per ricevere via e-mail le segnalazioni delle novità.

Claudia Curi

**VALUING FINANCIAL
CONGLOMERATES**

**STYLISTED FACTORS
AND NEW EVIDENCE FROM FINANCIAL CRISES**

FrancoAngeli

Copyright © 2016 by FrancoAngeli s.r.l., Milano, Italy.

L'opera, comprese tutte le sue parti, è tutelata dalla legge sul diritto d'autore. L'Utente nel momento in cui effettua il download dell'opera accetta tutte le condizioni della licenza d'uso dell'opera previste e comunicate sul sito www.francoangeli.it.

To my parents

CONTENTS

Introduction	pag.	9
1. Financial conglomerates: definition, historical aspects, and corporate structure	»	13
1.1. What is a financial conglomerate?	»	13
1.2. Main determinants of financial conglomerates	»	17
1.2.1. Banking regulatory reforms	»	17
1.2.2. Technological progress, financial conditions, excess capacity, and market consolidation	»	22
1.3. Corporate structure of financial conglomerate	»	24
1.4. Risk(s) in financial conglomerates	»	28
2. The economics of financial conglomerates	»	31
2.1. Scale and scope economies	»	32
2.2. Universal banking model	»	35
2.3. Government subsidies	»	38
2.4. Empirical evidence on scale and scope economies	»	39
2.4.1. Scale economies –1980s – 2000s data	»	40
2.4.2. Scale economies – financial crisis	»	43
2.4.3. Scope economies – 1980s and 1990s data	»	46
2.5. Empirical evidence on diversification strategies	»	50
2.6. Conclusions	»	52
3. Diversification discount in financial conglomerates	»	53
3.1. Is there a diversification discount in non-financial conglomerates?	»	54
3.1.1. Theories, findings, and general issues	»	54
3.1.2. Evidence from the financial crisis	»	66

3.2. Is the “diversification discount” a relevant topic in financial conglomerates?	pag.	69
3.3. Measuring diversification discount in financial conglomerates	»	70
3.3.1. Measuring diversification	»	71
3.3.2. Measuring market-based performance	»	74
3.3.3. Methodological aspects	»	80
3.4. Empirical evidence on the existence of diversification discount	»	85
3.4.1. Testing the diversification discount	»	85
3.4.2. Does the diversification discount depend on the main activity area or a combination of financial areas?	»	94
3.4.3. Corporate governance and the diversification discount	»	97
3.4.4. Internal information scope economies and the diversification discount	»	99
3.5. Conclusions	»	100
4. Studying the diversification discount: empirical evidence from the financial crises on a worldwide sample	»	102
4.1. Introduction	»	102
4.2. Data and sample set	»	103
4.2.1. Sample selection criteria	»	103
4.2.2. Empirical strategy and measures	»	107
4.3. Did the value of diversification increase during the financial crises?	»	109
4.3.1. Explorative analysis	»	109
4.3.2. Multivariate Analysis	»	120
4.4. Conclusions	»	124
5. Conclusions	»	128
References	»	133

INTRODUCTION

Financial conglomerates combine banking, insurance, and other financial services within a single corporation. Recent evidence suggests that diversification has not been beneficial for financial conglomerates over the last two decades and recent international financial crises (2008-2009 and 2010-2011) have shed doubt on previous findings, which indicates that, on average, financial conglomerates have not been able to exploit the potential benefits associated with diversification while controlling the associated costs. Benefits include the creation of an internal capital market void of information asymmetries, improved ability to take advantage of the tax benefits of debt financing, economies of scope, and reduced volatility. The main costs associated with diversification are that it might be rooted in agency problems or lead to power struggles between divisions, which suggests that financial conglomerates engage in diversification without the best interests of their shareholders in mind.

To date, there is no evidence that diversification increases shareholder wealth. Nonetheless, financial conglomerates dominate the financial sector and pose important threats to the systemic risk of the entire economy. In fact, regulators around the world have planned or have already intervened in these special financial instructions. Several advanced economies have adopted or are considering adopting structural bank regulation measures. Common elements of the various initiatives, that include the “Volcker rule” in the United States (US), the proposals of the Vickers Commission in the United Kingdom, the Liikanen Report to the European Commission, and draft legislation in France and Germany, are the restrictions on the scope of banking activities and a mandatory separation of commercial banking from certain securities market activities. Hence, these regulations aim to change how banks organise

themselves and might threaten the corporate structure of financial conglomerates. In fact, financial conglomerates are financial institutions built upon the highest level of integration of diversified business lines combined under the same roof. Proposals for structural bank changes consider the combination of commercial banking and capital market-related activities as a source of systemic risk for the entire economy. The common element of all the proposals is to restrict universal banking by drawing a line somewhere between “commercial” and “investment” banking businesses. Among various channels by which structural changes could decrease the systemic risk, we can find also the requirement of reduction in complexity and possibly size, making them easier to manage, more transparent to outside stakeholders, and easier to resolve in case of distress.

From an investor’s point of view, the key issue is whether shares in a universal bank represent an attractive asset-allocation alternative from a perspective of both risk-adjusted total-return and portfolio-efficiency. The answers to this question, in turn, have an important bearing on the universal bank’s cost of capital and therefore its performance against rivals with a narrower business focus in increasingly competitive markets. After the two financial crises, shareholders of several financial conglomerates, such as the Bank of America, have proposed to more seriously consider breaking the financial conglomerates up. Several CEOs pushed back this proposal for bank breakup, pointing to its business synergies, benefits of scale, and value to clients.

Overall, in recent years we can observe a convergence between regulatory interventions and shareholders proposals in trying to call for a simplification of business models, limiting the cross selling among business lines.

Evaluating a board literature on the assessment (and recent reassessment) of the economic costs and benefits of financial conglomerates involved in both commercial banking activities and proprietary trading and other securities markets activities, this book introduces a general framework to investigate the financial conglomerate’s value relative to focused banks or so called “excess value”. In other terms, the framework enables to investigate whether the market would assign an increase in value to a financial conglomerate (which is multi-industry firm) as a whole rather than to its separated business lines. Elaborating on Laeven and Levine (2007), this book explains the theoretical aspects of this approach as well as the great diversity in the empirical outcome. Throughout, I shed light on the relevance and benefits of using this approach and I identify a set of recommendations for a future research agenda.

A unique characteristic of this book is its use of a dataset on the 50 largest financial conglomerates (in terms of total assets in 2005) headquartered in 15 countries across 2005-2013 period, to which it applies all the approaches to

measure excess value and estimate the relation between excess value and diversification. Moreover, using recent data related to the great financial crisis (2008-2009) and the European debt crisis (2010-2011), this book takes first step in the direction of seeking to answer whether the value of corporate diversification varied with changing economic conditions, in such a way that diversification can provide insurance for investors against bad states of the world.

Overall, this book contributes to the debate on the enduring issues related to the industrial organization of financial intermediation relate to scale and scope. Is bigger better? Is broader better? The pattern of global mergers and acquisition in the financial services sector, suggests firm-level strategies based the presumptive benefits of scale and scope-benefits that are of interest as well to regulators charged with financial system efficiency, stability and competitiveness.

In Chapter 1, I provide a description of financial conglomerates, examining historical roots and the main drivers of development. In Chapter 2, this book provides an in-depth analysis of the economic rationales of financial conglomerates. In theory, if economies of scale and scope are true, then cost advantages should be reflected by better performance of financial conglomerates in financial markets. Conversely, if financial conglomerates experience diseconomies of scale and scope, it is more likely that they trade at a discount. In Chapter 3, I introduce the concept of excess value in financial conglomerates, how to measure it, and the main findings in empirical literature. The last chapter concludes with an empirical investigation of diversification discount prior and during the two financial crises of 2008-2009 and 2010-2011.

This book provides numerous reviews that present valuable perspectives on the topic of financial conglomerates that are well represented in the research published in journals today. For each topic, I have provided not only an overview of the research questions addressed in the literature so far, but also indications for further research.

I believe that this book provides a useful first, in-depth step in exploring the financial conglomerate business, an often discussed but little researched topic. Future directions for research might further explore the diversification discount (or diversification premium) and, more broadly, financial conglomerate value creation strategies.

Last, but not least, I would like to express my sincere gratitude to Professor Maurizio Murgia for his guidance, insightful ideas and support he has provided throughout my research activity. I gratefully acknowledge financial support from Free University of Bolzano-Bozen.

Claudia Curi

1. FINANCIAL CONGLOMERATES: DEFINITION, HISTORICAL ASPECTS, AND CORPORATE STRUCTURE

1.1. What is a financial conglomerate?

The establishment of financial conglomerates is a new worldwide phenomenon, which has developed according to specific country patterns. In fact, country specifics suggest a higher presence of financial conglomerates in continental Europe than in Anglo-Saxon countries. Hence, the complexities and specific characteristics of the different financial conglomerates do not permit the provision of a unanimous definition. Moreover, the meaning of the term “financial conglomerate” is quite different from the notion of “industrial conglomerate”. This is because industrial conglomerates are defined as organisations that combine completely different activities within one holding company (Herring and Santomero 1990), whereas financial conglomerates are characterised by an additional important element that is the high degree of balancing between the services provided by the different parts of the organisation. An obvious definition of a financial conglomerate is a group of firms that predominantly deal with finance (i.e., banks) or, in other words, the financial conglomerate is generally a publicly traded holding company with subsidiaries (and subsidiaries of these subsidiaries) devoted to different financial activities, such as commercial banking, securities brokerage and trading, investment advising, and insurance. The largest financial institutions in the United States (US) and in Europe are generally financial conglomerates.

The essential elements prevailing in most definitions are:

- financial conglomerate relates to a group or holding of firms;
- financial conglomerate is a combination of different kinds of financial institutions or of different types of financial services;

- financial conglomerate could be subject to different types of supervisory rules being constitutes of different financial entities and/or financial services; and
- differences in financial entities and/or services are limited to the extent that there is a certain degree of balance.

These elements acquire a more precise definition depending upon the country where the financial conglomerate was developed (European system or Anglo-Saxon system) and the perspective taken (regulatory versus business). From a regulator's point of view, in Europe the Tripartite Group¹ agreed that, for its purposes, the term "financial conglomerate" would be used to refer to "any group of companies under common control whose exclusive or predominant activities consist of providing significant services in at least two different financial sectors (banking, securities, insurance)" (TripartiteGroup, 1995, p. 1).

In a general sense, a financial conglomerate is a group of entities whose primary business is financial and whose regulated entities engage to a significant extent in at least two of the activities of banking, insurance, and securities (Joint Forum, 1999). The European Union's (EU) financial conglomerates directive (Directive 2002/87/EC), which built on the Joint's Forum's work, contains the most precise definition of a financial conglomerate. The directive defines a financial conglomerate as a group of companies, which meets the following conditions:

- a regulated entity, which is at the head of the group or at least one of the subsidiaries in the group is a regulated entity;
- where there is a regulated entity at the head of the group, it is either a parent undertaking of an entity in the financial sector, an entity which holds a participation in an entity in the financial sector, or an entity linked with an entity in the financial sector by a relationship within the meaning of Article 12(1) of Directive 83/349/EEC;
- where there is no regulated entity at the head of the group, the group's activities mainly occur in the financial sector. This is explained within

¹ The Tripartite Group was created at the initiative of the Basel Committee and was composed of banks, securities, and insurance supervisors acting in a personal capacity but drawing on their experience from supervising different types of financial institutions. The Tripartite Group recognised the trend towards cross sector financial conglomerates and issued a report in July 1995 raising issues of concern in the supervision of financial conglomerates. The purpose of this report was to identify challenges that financial conglomerates pose for supervisors and to consider ways in which these problems could be overcome. To carry this work forward, a formal group was put together, which was the basis for today's Joint Forum.

the meaning of Article 3(1), according to which the interpretation of “activities of a group mainly occur in the financial sector” has to be related to the situation when the ratio of the balance sheet total of the regulated and non-regulated financial sector entities in the group to the balance sheet total of the group as a whole exceeds 40%; and

- at least one of the entities in the group is within the insurance sector and at least one is within the banking or investment services sector²; the consolidated and/or aggregated activities of the entities in the group within the insurance sector and the consolidated and/or aggregated activities of the entities within the banking and investment services sector are both significant, meaning that the average of the ratio of the balance sheet total of that financial sector to the balance sheet total of the financial sector entities in the group and the ratio of the solvency requirements of the same financial sector to the total solvency requirements of the financial sector entities in the group should exceed 10% (p.7)

This directive defines the supervisory features concerning financial conglomerates. In the Revision of the Financial Conglomerates Directive (MEMO/10/376), financial conglomerates are further defined as financial groups that are active in one or more countries and operate in both the insurance and banking business. Moreover, they are defined as large and complex. Owing to their size, financial conglomerates are often of systemic importance to economies, either for one or more Member States or even for the EU as a whole.

From an Anglo-Saxon point of view, a conglomerate is a bank that combines pure banking activities (collecting deposit and granting loans) and securities activities (investment).

From a business prospective, the business model adopted by financial conglomerates is the universal banking model. When searching for a general definition of universal banking model, again there is no single unanimously accepted general definition. However, the majority of authors define the universal banking model in a similar way. For instance, Benston (1994) has defined universal banking model as “the ability of one organisation to provide a full range of financial services, including the products of commercial banks, investment banks, and insurance companies” (p. 1). Saunders and Walter (1994) see this “full” range of financial services as comprising “deposit-taking and

² When the predominant activities are insurance-related, then it refers to bancassurance (see Fiordelisi and Ricci (2011) for a detailed analysis).

lending, trading of financial instruments and foreign exchange, underwriting of new debts and equity issues, brokerage, investment management, and insurance” (p. 84). Greater diversification of earnings attributable to multiple products, client groups, and geographies are often utilised to create more stable, safer, and ultimately more valuable financial institutions. The lower the correlation between the cash flows from the firms various activities, the greater the benefits of diversification. The consequences should include higher credit quality and higher debt ratings (i.e., lower bankruptcy risk), and therefore lower costs of financing than those faced by narrower, more focused firms, while greater earnings stability should bolster stock prices (Smith et al. 2012). The financial landscape in Europe, which is different from the US landscape, has a long history of “universal banking” where financial institutions offer a broad range of financial services, including lending, deposit-taking, underwriting, brokerage, trading, and portfolio management. This model is close to the paradigm that can be found in the German universal-banking model, which historically constitutes the first type of universal banking in the world.

Although universal banking generally matches the notion of financial conglomerates, it is not sufficient for defining a financial conglomerate because the notion of a financial conglomerate implies a higher degree of integration.

Overall, financial conglomerates combine banking, insurance and securities business in the same group. These three business areas differ in terms of risk characteristics and the way they are supervised, which complicates matters in getting an overall view of the conglomerate. The main business of financial conglomerates consists of commercial banking activity, which is collecting customer deposits in order to grant loans and invest in securities. Typically, financial conglomerates interact with customers through a branch network. The risks associated to this activity are credit risk and funding liquidity risk. The second business area is related to insurance. Under this business, financial conglomerates interact with customers through tied agents and independent brokers. The main risks are underwriting risk and investment risk. The third business area is related to the securities business. Under this business, financial conglomerates are exposed to market risk and liquidity risk. The different core businesses correspond to different time horizons. Securities area has the shortest horizon, reflected in the “mark to market” valuation of their balance sheet, while insurance business have the longest horizon. Premiums are received in the present, but claims may occur far into the future. The different risks and time horizons force institution to adopt several risk management practices, such as internal ratings and credit risk portfolio models are used for the commercial banking business area, “value

at risk” (VAR) models are used in securities business, while standard risk transfer techniques are used by insurance business area.

Financial groups can provide financial services through various corporate structures and their choice will depend on practical as well as regulatory elements. Alternative models of corporate structure chosen by financial conglomerations are described in section 1.3. In this book, I focus on European and US financial conglomerate history and literature overview.

1.2. Main determinants of financial conglomerates

The growth of financial conglomerates has been encouraged for several reasons including banking regulatory reforms, changes in economic environments, and increased shareholder pressure for financial performance. These driving forces might be partially responsible for the rapid pace of conglomeration and consolidation of financial institutions (Berger et al. 1999, De Nicoló et al. 2004). Changes in economic environments relate to technological progress; improvements in financial condition; excess capacity or financial distress in the industry or market; international consolidation of markets; and increased competition in financial services. However, the starting point for financial conglomerate creation was very different between the US and Europe. While in Europe, the principle of universal banking was more or less recognised in all banking systems since the nineteenth century, in the US the Glass-Steagall Act of 1933 imposed a strict separation of functions between commercial banks that specialised in retail banking for private households and investment banks, which mainly specialised in wholesale banking and operations in capital markets. Overall, large banks and insurance companies were active in the consolidation process of the 1990s on a domestic and cross-border level, and large financial conglomerates emerged as a result. In the following section, I will discuss the main banking regulatory reforms that occurred in the US and Europe as well as describe how economic changes affected the evolution of financial conglomerates.

1.2.1. Banking regulatory reforms

US background. The growth in financial conglomerates in the US appeared before the Great Depressions and the ensuing Glass-Steagall Act, which in turn led to their break-up. Regulatory restrictions during this time had prohib-

ited bank involvement in underwriting, insurance, and other “nonbank” activities by sections 16, 20, 21, and 32 of the 1933 Banking Act, sections that became collectively known as the Glass-Steagall Act. The Banking Act of 1935 clarified the 1933 legislation and resolved inconsistencies in it. Together, these Acts prevented commercial Federal Reserve member banks from:

- dealing in non-government securities for customers;
- investing in non-investment grade securities for themselves;
- underwriting or distributing non-government securities; and
- affiliating (or sharing employees) with companies involved in such activities.

Conversely, the Glass-Steagall Act prevented securities firms and investment banks from taking deposits. Subsequent measures in 1956 and 1970 strengthened the demarcation between banks, insurance companies, and securities firms. Bank Holding Companies (BHCs) were allowed to underwrite certain eligible securities, including general obligation bonds, US government bonds, and real estate bonds, which were exempted from the original Act. However, it was not until the mid-1980s that the Federal Reserve and the Office of the Comptroller of the Currency began releasing restrictions on greater bank participation in investment banking and in insurance (Lown et al. 2000). The Federal Reserve started its lifting of restrictions by increasing the revenue limit on Section 20 subsidiaries from 5% in 1987 to 25% in December 1996.

In addition to the clear separation between banks and other types of firms, both financial and nonfinancial, American banking has historically been characterised by geographical restrictions, both intrastate and interstate. Such restrictions have been based, in part, on the fear of excessive concentration of financial power, the desire to promote close relationships between bankers and borrowers, and the aspirations of communities to control their economic development. Because of these restrictions, the US banking system is composed of thousands of independently chartered banks, which contrasts sharply with the highly concentrated banking systems of many European countries, Japan, and Canada.

On September 29, 1994, the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 was signed. Later, in 1996, the Federal Reserve began contemplating the elimination of previously instituted “firewalls” between banks and non-bank activity within the subsidiary structure of a BHC (for a more detailed discussion of the history and issues surrounding these firewalls, see Boyd and Graham (1986)). By relaxing interstate banking and

branching restrictions, this historic banking legislation, allowed the formation of larger banks via consolidation with extensive interstate branch networks and elimination of many of the geographic restrictions placed on banks. Hence, the conglomerate phenomenon resurfaced as three major financial sectors – commercial banking, investment banking, and insurance – began to overlap, to compete with each other, and eventually to consolidate.

Although many of the deals in the US throughout the 1990s were domestic bank-to-bank transactions, the average value of such deals rose considerably in the latter part of the decade. Very large banking companies were increasingly expanding the geographic footprint of their operations by buying other very large banks. In 1997, the majority of the barriers were removed. Consequently, in 1998, several mergers took place between the large banks, including Bank America-Nations Bank, Wells Fargo-Norwest, and Banc One-First Chicago NBD. Domestic, cross-industry merger activity represented 11% of the total financial sector consolidation activity by number of transactions and 14% by value during this time (GroupTen 2001). One of the most important and unique financial deals during this period was the 1998 merger between Citicorp, which was a bank holding company, and Travelers, which was an insurance and securities firm. Cross-industry deals involving the acquisition of non-bank financial companies peaked around 1996-1997. Earlier in the decade, restrictions on bank activities limited the level of domestic, cross-industry consolidation activity. The merger between Citicorp and Travelers to form Citigroup did not violate the provisions of the Glass-Steagall Act or the Bank Holding Company Act, which restricted the securities and insurance activities of bank holding companies, because the Board of Governors of the Federal Reserve had the authority to allow Citigroup to operate for as long as five years before requiring a divestiture of certain activities that might be considered impermissible. The issue of whether these deals violated existing laws and regulations became irrelevant in 1999 with the passage of the Gramm-Leach-Bliley Act (GLBA), also known as the Financial Services Modernization Act of 1999. In fact, on November 12, 1999, the GLBA was signed into law and hailed as an important step forward in the removal of the legal barriers between commercial banking and investment banking in the US – a step that would strengthen both sectors. The GLBA produced the new legal structure of the financial holding company whose subsidiaries could engage in diverse financial activities and brought the US into greater parity with many other countries that had long permitted universal banking structures or other financial combinations that included operations across multiple sectors. In fact, the GLBA repealed Sections 20 and 32 of the Glass-Steagall Act, which had prevented commercial banks from being affiliated with investment banks. After the