THE STRUCTURE OF CORPORATE FINANCE IN BELGIUM : AN EMPIRICAL INVESTIGATION

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Abstract

This paper studies the factors influencing the capital structure of Belgian corporate finance since 1984. Using three different datasets, aggregate balance sheets, aggregate flows of funds and a large panel of individual firms followed up during 10 years, we are able to give some empirical evidence for the importance of institutional features in the choice of corporate financing decisions. At the aggregate level, large firms are generally more highly levered; however, in the past ten years we observe a clear reduction in bank debt and a sharp increase in financial assets. Small firms on the other hand are less highly levered but have shifted toward greater long-term debt in recent years. Using flows of funds, we find that small firms have corporate financing decisions that remain roughly constant through time with a clear dominance of self-finance. In contrast we note for large firms an increased reliance on external sources of finance. Possible explanations of these patterns are investigated in our econometric study of panel data. We find that Belgian firms rely primarily on internal funds which seems to confirm the "pecking order" story of Myers and Majluf (1984). We also find that the emergence of coordination centers in the late 1980's explain much of the changing financial structure of large Belgian firms. These structures allow a higher leverage while they reduce the proportion of bank finance. Finally, control considerations are shown to explain the high level of financial assets on large firms' balance sheets.

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1 Introduction

This paper studies the factors influencing the capital structure of Belgian firms since the mid 1980's. Using three different datasets (aggregate balance sheets, aggregate flows of funds and a large sample of individual firms followed during 10 years) we identify some important institutional features affecting the choice of corporate financing decisions in Belgium. At the aggregate level, as far as large firms is concerned, we observe a high relative leverage in 1986 which has subsequently been reduced by a sharp decrease of bank finance. We also observe an increasing high fraction of financial assets. Small firms on the other hand have maintained roughly constant leverage in the last 10 years but have shifted toward long-term debt. Using flows of funds, we found that small firms have corporate financing decisions that remain roughly constant through time with a clear dominance of self-finance. During the late 1980's which was a period of investment boom in Belgium, large firms have increased sharply their reliance on external sources of finance to the point that external finance exceeded internal finance. This is quite exceptional when compared to international studies. To explore the reasons for these patterns we carry out a study of an extensive panel set of Belgian firms.We find that Belgian firms rely primarily on internal funds which seems to confirm the "pecking order" story of Myers and Majluf (1984). We also find that the emergence of coordination centers in the late 1980's explain much of the changing financial structure of large Belgian firms. These structures allow a higher leverage while they reduce the proportion of bank finance.

Over the past decade there have been many studies on the determinants of capital structure in the United States and to a lesser extent in Europe.Very little is known however about the Belgian case. So that a first motivation of this paper is to start filling this gap thanks to databases provided by the National Bank of Belgium. Previous studies on Belgian corporate finance have either study the historical changes [see for instance Cassiers (1996) for a study of the role of banks in Belgium] or either specific issues related to Belgian firms [see for example Huveneers and Buchet (1996) for an analysis of a Belgian group or de Bodt *et al.* (1996) for the leasing decision in Belgium]. However there exists no study attempting to globally analyse corporate financing decisions of Belgian firms.

At the international level, previous studies [see, for example Mayer (1990) and Berglof (1990)] have stressed the difference of leverage between bank-oriented and market-oriented countries. Furthermore international comparison based on flow of funds data reveal the almost universal dominance of retained earnings as a source of investment finance. More recently, Rajan and Zingales (1995) found relative similar leverage determinants of large listed firms across G-7 countries but they suggest that that the type of cross-sectional analysis they carried out was hampered by a lack of detailed data allowing a better understanding of institutional factors. Their study suggests that international differences in financial structure are less than might be expected from "market" versus "bank" trade-off and that those differences may be driven by tax considerations.

Our study contributes to the international comparison of financial structure by analysing the case of Belgium. Roughly speaking Belgium is in the continental model generally associated with Germany in the historical role played by large banks [see Edwards and Fischer (1993)]. Belgian corporate finance is also characterised by the presence of large shareholders being mostly holding companies and family groups, and by a control exercised through pyramidal and complex ownership structures. Since 1982, the legislation on coordination centers gives many tax advantages to multinational companies established in Belgium. According to agency-based corporate finance theories, these institutions should have important implications on financial structure. On the one hand, the availability of investors to serve as large shareholders should reduce agency costs making pecking order less important and facilitating equity issues. On the other hand, coordination centers change tax conditions and may be able to reduce distress costs by organizing corporate rescues. This in turn should increase the leverage for firms linked to a coordination center.

For the first time, we are able to analyse a large sample of Belgian firms, focussing not only on large stock-listed firms but also on medium and small firms. Our sample consists in more than 1500 firms that are followed during 10 years. This sample represents about 20% of the Belgian non-financial sector in terms of total assets. The data were collected from CD-rom edited by the National Bank of Belgium. Furthermore, the Belgian law requires firm's balance sheets to report outstanding debt by time to maturity (less than one year or at least one year to maturity) and by type of lender (bank or not). This is much more detailed than is systematicaly available on American financial statements which have been the basis of many previous studies. Corporate financing decisions can therefore be analysed in terms of choice of intermediated finance and in terms of maturity. Finally Belgian financial statements require to report share holdings in other companies. This allows us to study the influence of membership to a multinational group (with ties to a coordination center) which is subject to special tax treatments.

The organization of the present paper is as follows : in the second section, we give a bird's eye view of Belgian corporate finance. We stress on the major financial reforms occuring since the 80's and we give the principal characteristics of Belgian institutional factors. In the third section we describe the principal facts of Corporate Belgium's sources of finance using aggregate balance sheets and compare it with other industrialized countries. We also report flow of funds tables that show how Belgian firms have financed their investments from 1985 to 1993. In the fourth section we carry out a panel data analysis on a sample of 1546 companies followed during 10 years. This microeconomic study allows us to study the principal determinants of capital structure choices among firms. Section five concludes.

2 Corporate finance in Belgium

2.1 Bank versus market

Historically, Belgian finance has long been characterised by a banking system with large dominating main banks. Following after 'big bangs' in several European financial markets in the mid-80's, this bank oriented country has however undergone major financial reforms.

The modernization of the Brussels stock market took place in 1989 with the introduction of computerized trading for all stocks on the forward market. The Belgian Futures and Options Exchange began trading in 1991. A market has been designed for small capital issues with the aim of attracting middle-sized firms to public markets. However, the success of this market in Belgium is very limited [1].

The modernization of the market for Belgian government treasury certificates (TCs)[2] started in January 1991. Before that reform, the market for TCs was restricted to a group of resident financial intermediaries with the result that TC rates were above the interbank rates. Hence, this reform has induced a greater competition between credit institutions to lower the public debt burden. This money market reform coincided with the development of short-term debt corporate market. In July 1991 the first commercial paper programme (called "billet de tresorerie") was launched in Belgium. However, another short-term paper (called "billet a ordre") still obtains the bigger share of the market. This short-term paper is essentially issued by coordination centers for fiscal reasons.

The law of March 1993 gives to credit institutions the possibility to hold shares in non-financial firms. Furthermore, this law removes the distinction between banks previously segmented as banks, saving banks and public credit institutions.

2.1.1 Coordination Centers

A particularity of the Belgian system is the existence of coordination centers. Coordination centers were created in 1982 by the "Royal Decree 187" to give incentives to multinationals to relocate their financial operations in Belgium [3] and to favour employment. These firms

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[1] Only 7 firms were listed on the secondary market in 1995

[2] see Lefebvre (1991)

[3] Note that these kinds of tax advantages to multinational firms are not particular to Belgium : in the Netherlands there are the distribution centers; in France there are the tax conventions with Monaco; in

allow multinational groups (with a consolidated capital and reserves in excess of BEF 1 billion and an annual turnover of at least 10 billion BEF) to carry out a large variety of financial and management services on a roughly tax-free basis. In 1997, about 300 international groups have set up coordination centers. These include the largest U.S. based multinationals as well as U.K, German, Dutch, Scandinavian and Belgian groups. The coordination center legislation enables a large range of intra-group financing operations as well as support services in a tax-free setting. Support services can consist in advertising, collection and dissemination of information, insurance and reinsurance, scientific research, government relations and accounting and administrative data processing activities. Financial services activities consist in leasing, reinvoicing, factoring, netting and cash pooling as well as traditional group lending activities. All these activities are restricted to be performed to the sole benefit of all or part of the group[4] companies. These centers have many tax advantages. Coordination centers may not be part of a bank and may not hold shares in any company. They benefit from many tax advantages :

1. Coordination centers are taxed on the basis of their "operating costs". This method consists in calculating the taxable revenue as a percentage of costs, with personnel expenditures, financial charges and depreciation excluded. The rate applied to the "operating costs" is the one used by the coordination center to charge the group companies.

2. Interest, dividends and royalties paid by coordination centers are not subjected to withholding tax.

3. Belgian companies making loans to coordination centers benefit from a notional withholding tax attributed to the interest paid by the center if the funds are used for investment or research in Belgium. This notional tax is then retroceded by banks to the center and it results in a reduction of interest rate. Belgian companies that receive dividends from coordination centers may also benefit from this notional withholding tax.

Thanks to these advantages, the principal activity of coordination centers is to finance investments of the members of the group. Loaned funds from coordination centers may come from capital of the coordination center or from financial institutions or from affiliated companies. Coordination centers may also issue bonds. In 1989, according to a survey

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U.K. there are the corporations tax companies in the Channel Islands.

[4] A group is defined to include all corporations in which direct and/or indirect shareholdings represent at least 20% of their capital or 20% of the voting rights attached to the shares.

all the firms member of the group, we may predict that the effect of coordination centers will be nothing more than a tax advantage. However, in the case different shareholders govern the firms in the group, we may predict that conflicts of interest may arise as to how to allocate funds inside the group. In this case, participation in coordination center could affect the cost of capital for non-tax reasons. Due to data availability, we are unfortunately not able to distinguish groups with a concentrated ownership, and those with stakeholders having divergent interests. We may however predict that both types of groups exist so that both tax and real effects can result from the existence of coordination centers. This is further explored in our econometric study section.

2.2 Control oriented versus arms length

Belgian corporate ownership [5], is characterized by a high degree of ownership concentration, by the importance of holding companies and families and by a control exercised through pyramidal and complex ownership structures to avoid hostile acquisitions. Berglof (1996) notes that Belgian controlling shareholders have reinforced their positions in order to rule out hostile takeovers in particular after the take-over law in 1989 following the hostile attempt on Société Générale de Belgique, the oldest and the largest Belgian holding company. La Porta et. al. (1996) report that on average in the ten largest Belgian companies 57% of the equity is owned by the three largest shareholders. This has to be compared with the 20% of the equity owned by the largest shareholders in the U.S. From a corporate control perspective[6] a concentrated holding allows and encourages investors to monitor and influence the management. Hence, conflicts of interest may not be as important as in the US. However, it does raise the possibility that the firm may be led to pursue some non-value maximizing objective favored by the large shareholder. One such objective would be diversification, for example, family groups probably do not hold diversified portfolios otherwise.

2.3 Disintermediation

In Figure 2 , we report the ratio of the annual change of financial liabilities of Belgian banks to the change of gross financial liabilities of the private sector. This ratio can be considered as a measure of the degree of intermediation. In the same figure, we also report the ratio of the variation of the net liabilities to the foreign sector to variation of gross financial liabilities.

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[5] see also Renneboog (1996)

[6] for a survey on corporate governance issues, see for example Prowse (1994)

3 Sources of Belgian corporate finance

3.1 International comparison

[illegible]

[illegible]

[illegible]

[illegible]