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Business groups, investment, and firm value

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Chapter 6

Concluding remarks

6.1 Overview

Business groups abound in many countries, implying that their economic impact is potentially very large. Yet, the economic functions of business groups are not well understood. Are business groups welfare improving? Does group affiliation affect the value of a firm? Do group companies use internal capital markets, and, if so, who benefits from these transfers? Do business groups primarily serve the interests of the controlling shareholders, or do public shareholders also benefit from group affiliation?

In chapter 1, we mentioned that the main purpose of this thesis is to extend our knowledge of business groups' impact on firm value. Our approach was to empirically investigate the relationship between group affiliation and firm value in India. We have presented four chapters, in which different aspects of business groups and their impact on firm value have been analyzed. We find that there is no general valuation effect of group affiliation. The impact of a business group on the value of its affiliates depends on a number of firm and group characteristics, such as the position of a firm in the group hierarchy, the quality of a firm's investment projects, and the number of industries spanned by a business group. The purpose of this final chapter is to summarize our main findings, point to unanswered questions and give some suggestions for further research.

6.2 Main findings

The individual chapters each deal with a separate issue that is related to the general topic of this thesis, the mechanisms through which group affiliation affects firm value. Here, we briefly summarize our main findings and the most important conclusions that we derive from these results.

In chapter 2, we analyze the overall effect of group affiliation of firm value in a panel of Indian companies. We find that there is no overall valuation effect of group affiliation: in general, the market value of group companies does not significantly differ from that of stand-alone companies, taking into account differences in size, industry, and financial structure. Moreover, we find that the effect of calendar-year and firm-specific effects is significant. This implies that using panel data estimators leads to more reliable results. Because there are large differences in the size, composition, and control structure of business groups, we do not find this result very surprising. It would be more surprising if despite the heterogeneity in business groups, the valuation effect would be the same for all firms in all groups.

Next, we investigate whether the valuation effect depends on specific group or firm characteristics. It turns out that the valuation effect is not determined by the degree of diversification of the business group. This result contradicts the main conclusion of Khanna and Palepu (2000). We believe that our result is more robust, since it is based on more appropriate econometric models. Another finding deals with the relationship between the valuation effect and firm age. More specifically, we find that group affiliation is especially beneficial for older firms. In sum, group affiliation is not good or bad per se, but its effect on firm value may depend on a number of group- and firm-characteristics.

Because older firms are often thought to have better access to external financing, our result seems to speak against the efficiency of the intermediation function of business groups. If business groups would indeed improve the access to financial markets of otherwise constrained firms, we would expect small and/or young firms to benefit most from group affiliation. This is not confirmed by our estimation results, however.

Of course, this is only an indirect test of the intermediation role of business groups. In chapter 3, we use a more direct test of the intermediation

function of business groups. We analyze the effect of group affiliation on the sensitivity of a firm's capital expenditure to the amount of internal funds available. We find that group affiliates' capital expenditure is less sensitive to changes in the amount of internal funds. This suggests that group companies find it easier to attract external financing, i.e., face lower costs of external funds. Moreover, we find that this result cannot be explained by other differences between group affiliates and stand-alone companies, like their size and age. This result suggests that business groups do substitute for missing or imperfect capital markets and that business groups indeed play a role as intermediaries between individual firms and external finance. Combined with the evidence in chapter 2, we conclude that group firms' lower cash-flow sensitivity of investment is not creating value, in general. Lower financing constraints may fail to create value because there is no guarantee that the firms with the highest marginal return to capital indeed get to invest more. In other words, lower costs of capital may lead to overinvestment. Another reason why firm value does not increase when financing constraints are reduced, is that there may be other offsetting costs to group affiliation (e.g. the expropriation of minority shareholders).

The issue of the intra-group allocation of capital is analyzed in chapter 4. In this chapter, evidence from inter-firm investments and loans shows that other members of the business group are an important source of financing for group affiliates. This confirms that the internal capital market is a distinctive feature of business groups in India, implying that they do to some extent substitute for external capital markets. Moreover, whether group affiliation increases firm value partly depends on the allocative efficiency of the business group's internal capital market. Although the intra-group allocation of capital is not efficient in general, it is more efficient for groups who are less diversified. In addition, ownership variables affect the efficiency of the internal capital market. We find that the allocation is tilted towards firms in which the controlling shareholder has a large ownership stake.

A closer look at the valuation effects on the group's internal capital market reveals that the relationship between internal capital market efficiency and firm value is increasing in the promoter's ownership stake in that firm. Interestingly, we find that the valuation effect of ownership variables also depends on a firm's investment opportunities. This suggests that promoters

not only use their control rights to the detriment of minority shareholders, but also to transfer funds to high quality investment projects.

The final chapter takes a somewhat different perspective on group affiliation's effect on firm value. Firm value is determined by the magnitude and the risk of the cash flows generated by the firm. Whereas chapters 3 and 4 focus on how business groups affect the size of firm cash flows, chapter 5 analyzes the role of business groups in the riskiness of the affiliated firms. We use an asset-pricing model to determine whether there is a difference between group companies' and stand-alone companies' stock returns. Our first finding is that group affiliates have significantly lower stock returns than stand-alone companies, even after we correct for market, size and value premia. This does not necessarily imply that group companies are outperformed by stand-alone firms. We show that there is common variation in the returns to group companies, which implies that there is a group affiliation factor. This means that group affiliation for some reason lowers the return required by investors. Part of the difference in performance can indeed be explained by a group affiliation factor. Although we find no conclusive answer to the question why there is a group affiliation factor, we believe our findings suggest that it may have something to do with group companies being less susceptible to financial distress.

We have analyzed the relationship between group diversification and firm value in a number of chapters. In chapter 2, we found that group diversification does not affect the link between group affiliation and firm value, in general. The analysis of the intra-group allocation of capital in chapter 4 showed that the efficiency of a group's internal capital market is decreasing in the diversity of the group's activities. With respect to risk, the evidence of chapter 5 suggests a more positive role of group diversification. The negative effect of group affiliation on the riskiness of a company is most pronounced for the most diversified business groups. All in all, this suggests that the positive effect of group diversification on firm value through the business group's ability to absorb macroeconomic shocks is offset by the negative effect of inefficient reallocation of funds within the group.

6.3 General conclusions and suggestions for further research

A general conclusion from this overview is that group affiliation affects firm value in a variety of ways, and that the valuation effect does not always have the same sign. Obviously, the large differences in the structure and functioning of business groups cause equally large differences in the relationship between firm value and group affiliation. Confronting the empirical results with the theoretical explanations of business groups that were surveyed in chapter 1, yields a mixed picture. The evidence suggests that both intermediation and tunneling play a role in Indian business groups. Some groups create value by efficiently reallocating capital, whereas other groups clearly show evidence of diversion by the controlling shareholder. More interestingly, we also find that business groups engage in tunneling and intermediation at the same time. In this respect, the intermediation view and the expropriation view are complementary. We find that the efficiency of the intermediation function is increasing in the controlling shareholder's incentive to tunnel, which suggests that tunneling may very well lead to efficient transfers of capital. It may be the case that some efficient transfers of capital are not feasible in a 'normal' internal capital market, but become feasible through a combination of the controlling shareholder's incentives and his ability to exercise control.

Compared with the existing literature on business groups, we use more appropriate econometric techniques. We find that using these techniques sometimes leads to different outcomes, and is therefore an important step in improving our understanding of business groups. For example, contrary to the literature, we find that more diversified groups do not add more value, in general. In line with this is the negative relationship between group diversification and the efficiency of the internal capital market.

In recent years, business groups have almost become synonymous with tunneling, at least in the finance literature: business groups are primarily used for the expropriation of minority shareholders. Our results tell a more detailed picture. Apart from the fact that tunneling not always hurts minority shareholders, we also find that the controlling shareholders often pay at least part of the price for tunneling. Investors seem to recognize the con-

trolling shareholder's incentives and adjust their valuation accordingly. This result puts the discussion about tunneling in a somewhat different perspective. If tunneling is a problem, it must be so because of its macroeconomic effects.

The expropriation of minority shareholders is problematic because it raises the cost of equity, making it a less attractive means of financing, and impeding the development of equity markets. It is exactly in this situation that business groups may create value. Thus, business groups are not the cause of minority shareholder expropriation, but rather the result of it. However, if business groups act as a substitute for equity markets, they may slow the development of these markets. If business groups (partly) reduce the disturbing effect of an underdeveloped capital market, the need to reform the institutional framework may be less urgent. Hence, although business groups may be an optimal response to existing (capital) market imperfections, in equilibrium, they may result in less developed (capital) markets. A more detailed analysis of the equilibrium effects of business groups, both theoretically and empirically, would be an interesting topic for further research.

Group companies and stand-alone companies differ with respect to their riskiness, which explains part of the difference in returns. This is an important result, with consequences for the discussion about the welfare implications of business groups. However, although we have some evidence that the common variation in the returns to group companies may be related to financial distress, the economic rationale behind this result is not yet clear. A better understanding of the relationship between group diversification and the riskiness of the affiliates' stocks would further our insight into the economic role of business groups.

Empirical studies by their very nature depend heavily on the availability of data. A number of interesting issues has not been analyzed due to data problems, but should be mentioned here. First, we only use data on listed Indian companies, mainly because for these companies share price data can be used to measure market value. As a consequence, we have only dealt with the relationship between business groups and listed companies. However, group affiliation is not restricted to these companies. This has at least two pitfalls. First, part of a business group may be privately held. More specifically, in many groups, a privately owned holding company plays an important role

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in the financial structure of the business group. Including these parts yields a more complete picture of the functioning of business groups. A second pitfall of confining this research to listed companies is that small start-up companies are often not included. Anecdotal evidence suggests that business groups play an important role in the financing of start-up companies. The role of business groups as venture capitalists therefore remains to be analyzed.

Another area where the availability of data was a binding restriction, is the evolution of ownership of group companies over time. Whereas group affiliation is fairly constant, the ownership stake of different owners may change from time to time. With a time series of ownership data, better tests of the theories of business groups can be developed. Investigating the effect of changes in ownership on the allocation of capital and on firm value would be a very worthwhile exercise. For example, it would be interesting to investigate what determines the ownership stake of the controlling shareholder. Tests of the tunneling hypothesis typically are based on the assumption that ownership is exogenous, and that the causality runs from ownership to value. These assumptions enable the researcher to identify the effect of ownership variables on firm value. However, one could also imagine the ownership stake being endogenous, and being determined by a firm's investment opportunities, among other things. This would be the case, for instance, if the controlling shareholder increases his ownership stake in affiliates that are expected to perform well. To test whether ownership indeed is endogenous, more data on ownership variables are needed.

