

Report Type: Mid Term Award Report

Full Name:

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Project Title: The dynamics of corporate financial policies, group decisions, and coalition formation.

Project Start Date: Mon, 01/02/2021

Project End Date: Wed, 01/02/2023

Project Abstract:

This research studies the dynamics of the three main corporate policies: the investment, financing and payout decisions. We first study how these decisions interact, and whether the theories of corporate capital structure and payout can be reconciled with each other given these interactions. Next, we study investment and payout decisions made by a group of investors. We examine the formation, composition, organizational and legal structure of the decision-making coalitions.

Traditionally, the finance literature has studied the firm's three main financial policies in isolation. However, in reality these three key corporate decisions are not independent as they are linked by the firm's sources and uses of funds constraint. The interdependencies between the firm's policies raise many questions that have not been recognized in the existing literature. For example, if we believe that firms follow a target leverage ratio, what are the implications for the dynamics of payout and investment? Alternatively, what are the implications for payout and investment if firms follow a pecking order policy? Our research aims to explore these questions from a theoretical perspective, with a view to produce empirical predictions as to how payout, investment and capital interact.

In the second project, we study the choice of a firm's legal business structure. In particular, we examine how the sharing rules, corporate taxes, limited liability, and capital constraints affect investors' choice of forming a partnership or a corporation. We further study how these factors influence the composition of the firm, and its subsequent investment, financing, and labour decisions.

Activities and Achievement:

We have concluded our first project. The paper is now published at the Annual Review of Financial Economics (vol.13, November, 2021). The paper is entitled: " Do capital structure models square with the dynamics of payout?" A link to the paper can be found here:

<https://www.annualreviews.org/doi/abs/10.1146/annurev-financial-010421-085556>

Over the past six months, we have been focusing on the second project and have made significant progress. The paper is in the write-up stage, and a draft will be available shortly.

The paper compares partnerships with corporations in terms of their

investment and financing policy, and their optimal level of human capital. We examine how various factors such as sharing rules, legal framework, taxes, and capital constraints affect the choice of business structures. This is an underexplored area in finance and economics.

Corporations are subject to corporate and personal taxes, whereas partnerships are entitled to pass-through treatment, which means that partnership income is attributed to the partners and not the partnership. Thus the partnership is not subject to tax and partners only pay personal taxes, unlike corporations which are subject to double taxation. Shareholders in corporations enjoy limited liability. Partnerships have unlimited liability, i.e. the partners are jointly and severally liable for all partnership debt.

We find that the unlimited liability nature of partnerships induces firms to keep debt safe, while for corporations that are shielded by limited liability, risky debt or even 100% debt financing is optimal, provided that bankruptcy costs are not too high. Unlike equity holders in a corporation who can buy and sell their shares, a partner's share in the partnership is linked directly to her human capital, which then determines the partnership's profitability. Therefore, instead of maximizing the total firm value, a partnership maximizes the value per partner. As a result, the optimal number of partners is smaller than the optimal number of employees in a corporation. Moreover, the optimal number of employees (partners) in the corporation (partnership) increases (decreases) with the price of the firm's output. As for the investment decision, we show that the corporation breaks even at a higher output price than the partnership. The corporation underinvests compared to the partnership due to corporate taxes.

After introducing heterogeneity in the productivity of human capital and considering the distribution of firms in the industry, we show that only one large corporation enters the industry if only corporations are allowed. If only partnerships are allowed, multiple small partnerships of the same size enter. However, the total number of partners across all partnerships equals exactly the number of employees in the corporation.

We also derive the conditions under which partnerships or corporations dominate the labour market. In doing so we also consider the case of cooperatives, which are worker-owned corporations. We are currently also studying what happens to the partnership's optimal policies if partners are wealth constrained.

Dissemination:

The first paper is published at the Annual Review of Financial Economics (vol.13 Nov, 2021). The printed version is available on the ARFE website. The pre-print paper version is available on SSRN. The paper is also available as CEPR discussion paper DP16199..

Since the last CERF board meeting in October, the paper was presented by Bart Lambrecht in a seminar at Lancaster University Management School on 29/10/2021. He will also present the paper as part of the keynote speech at the annual conference of the British Accounting and Finance Association meetings on 12/4/2022, and during a seminar at the school of Business of the University of North Carolina at Charlotte on 29/4/2022.

Outputs:

Do Capital Structure Models Square with the Dynamics of Payout?

Shiqi Chen and Bart M. Lambrecht

Annual Review of Financial Economics 2021 13:1, 271-299

ARFE:

<http://www.annualreviews.org/eprint/QHPIGMHME6TBACVJ2K7V/full/10.1146/annurev-financial-010421-085556>

SSRN: <https://ssrn.com/abstract=3854109> or

<http://dx.doi.org/10.2139/ssrn.3854109>

Major Difficulties and Any Other Issues: N/A

Web Links:

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SSRN: <https://ssrn.com/abstract=3854109> or

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Optional - detailed findings and output:

Additional Information:

Declaration: Details of relevant outputs of this award have been submitted to the CERF Database and details of any ensuing outputs will be submitted in due course.

Signature - Main Award Holder: Signature - Main Award Holder