Report Type: Mid Term Award Report

Full Name:

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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, efficiency, 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 determination of group structure. In particular, we want to study how the payoff structure, sharing rules, cooperation and bargaining among agents affect the choice between forming a partnership or forming a corporation. We further analyze how these factors shape the market equilibrium and the stationary distribution of different types of firms in the industry.

## **Activities and Achievement:**

We have made significant progress on the first project. A complete paper has been produced. In this project, we examine whether capital structure models square with the dynamics of payout. More specifically, we explore whether theoretically the target leverage and pecking order models can be reconciled with payout smoothing. We show that a positive (negative) NDR target amplifies (dampens) shocks in assets. When the payout is fixed, positive

(negative) gearing implies a procyclical (countercyclical) investment strategy. If the investment is given, a firm with a positive (negative) NDR target demonstrates a procyclical (countercyclical) payout policy. The two cases suggest that a very negative NDR target is hard to be reconciled with payout smoothing and produces empirically implausible features. However, payout smoothing can be squared with a target leverage policy when the firm partially adjusts toward the target. The maximum degree of smoothing is achieved when the speed of adjustment is between zero and one-half. The paper also shows that payout smoothing can be easily achieved under strict pecking order financing as NDR are free to float to absorb investment needs and income shocks. In addition, more payout smoothing implies a stronger negative relation between debt and net income.

We received helpful and encouraging comments from an anonymous referee. This paper has been accepted by the Annual Review of Financial Economics and will be published in vol 13 in November.

We have now switched our focus to the second project, and have been trying different model setups and exploring potential directions. Progress has been made. We have narrowed down the scope of the project and are converging towards a paper that studies the determination of group structures (partnership versus corporation) and how various factors such as sharing rules, payoff structure, legal framework, taxes and bargaining power affect which organizational structures prevail in the economy, and how they influence profit sharing among the firm's main constituents, as well as output and employment within the economy

## Dissemination:

The first paper has been accepted and moved into the production phrase. The working paper version is now available on SSRN. The paper is also available as CEPR discussion paper DP16199.

We are still fleshing out the model for the second project, and no paper is available for dissemination yet.

Outputs: Chen, Shiqi and Lambrecht, Bart, Do Capital Structure Models Square with the Dynamics of Payout? (May 26, 2021). Available at SSRN:

https://ssrn.com/abstract=3854109 or http://dx.doi.org/10.2139/ssrn.3854109

Major Difficulties and Any Other Issues: We were unable to access the CERF offices and its facilities from 21/3/2020 till 19/7/2021, which has led to some reduction in the research productivity and the extent to which the investigators on this project could efficiently interact and communicate with each other.

Web Links:

Chen, Shiqi and Lambrecht, Bart, Do Capital Structure Models Square with the Dynamics of Payout? (May 26, 2021). Available at SSRN:

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