Research Proposal

Title: *Connected Stocks via Business Groups: Evidence from an Emerging Market*

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Research Objective

Related literature points out that common ownership and business groups are non-fundamental factors that lead to co-movement in stock returns. Using unique Iran's financial market context, this paper attempts to find which factors intensively and extensively affect co-movement.

Motivation

It is well established in the literature that socks comove in many dimensions. While first coming investigations attributed the companies' return co-movement to their fundamentals, (e.g. Shiller (1989)), recent findings have focused on the role of non-fundamental characteristics. Barberis and Shleifer (2003) and Barberis et al. (2005) provided theoretical models for predicting the co-movement between fundamentally unrelated companies. Trying to explain factors affecting co-movement, Anton and Polk (2014) suggests that common ownership positively affects co-movement[1]. Subsequently, Koch

[1]There are some factors like, Index inclusion (Barberis et al. (2005)), investors' attention to the companies (Wu and Shamsuddin (2014)), Investment banks' underwriting (Grullon et al. (2014)), correlated beliefs (David and Simonovska (2016)), shareholders' coordination (Pantzalis and Wang (2017)), and preference for companies' dividends (Hameed and Xie (2019)) that have been identified by researchers.

et al. (2016) provides evidence that even owners' liquidity needs' correlation can result in co-movement independent of direct common ownership.

Despite the findings in recent financial literature regarding common ownership, business groups have not been considered as matters of common ownership. Business groups are everywhere in emerging markets (e.g., Brazil, Chile, China, India, Indonesia, South Korea, and many more) and even in some developed economies (e.g., Italy, Sweden), and there are debates about the pros and cons of them (Khanna and Palepu (2000), Khanna and Yafeh (2007), Johnson et al. (2000), Bertrand et al. (2002)). Studies have found co-movement among stocks of business groups, but the explanation for co-movement is controversial.

Even though there have been investigations on the effects of common ownership, they have been primarily focused on fund ownership. This type of owner performs particular behavior due to their needs, and little is known about other ownership types. Following Anton and Polk (2014), we are the first study that uses block-holder ownership to investigate the relationship between common ownership and co-movement.

Data

We use a unique data set that includes the daily report of the block-holder's ownership, defined as a shareholder who owns at least 1% of the total outstanding shares. The set of variables contains firms' characteristics like market cap and book value, detailed information on daily trade like volume and return, and members of business groups. The time period of the study is from 2015 to 2020.

Methodology

A method wildly used in Empirical asset pricing is the two-step approach of Fama and MacBeth (1973). In the first step, cross-sectional regressions are used to obtain estimates of the parameters of interest for each period. Then, in the second step, the time series of these estimates are used to get final estimates for the parameters and standard errors so that t-statistics can be computed (Skoulakis (2008)). Furthermore, We use the same methodology as Anton and Polk (2014) to compose pairs, define control variables, and calculate co-movement.

Contribution

According to the restrictions of data in the US that quarterly fund ownership data is available, investigations in this area are limited to the fund ownership impact on co-movement. This type of owners perform particular types of behavior due to their needs and the fact that they are intermediates. Nevertheless, in Iran, the block holders' daily ownership data, including mutual fund ownership, is publicly accessible. So research through this data can show whether common ownership other than mutual fund ownership can lead to co-movement or not.

In this paper, we consider the co-movement of the companies in business groups. Best of our knowledge, it is the first study that compares direct and indirect common ownership. Also, a modified measurement is introduced in this paper to calculate the common ownership of the companies.

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