

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 stocks comove in many dimensions. While first coming investigations attributed the companies 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-movement¹. Subsequently, [Koch et al. \(2016\)](#)

¹There 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 ([Pantazis and Wang \(2017\)](#)), and preference for companies' dividends ([Hameed and Xie \(2019\)](#)) that have been identified by researchers.

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. An extensive empirical literature considers the role of block-holders in firm governance. A long literature surveyed by [Holderness \(2003\)](#), [Edmans \(2014\)](#), and [Edmans and Holderness \(2017\)](#) considers the potential role of block-holders in firm governance. 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 widely 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

Recent studies shed light on the role of direct and indirect common ownership of mutual funds on co-movement. Using Iran's unique setting, we are trying to clarify the role of block-holder ownership on co-movement and compare its effect with the business groups. Additionally, we propose a modification for the measurement of common ownership in [Anton and Polk \(2014\)](#).

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