

Research Proposal

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

Author: *Seyyed Morteza Aghajanzadeh*

Supervisors: *Dr. Mahdi Heidari, Dr. Mahdi Mohseni*

Institution: *Tehran Institute for Advanced Studies*

Research Objective

Related literature points out that common ownership of mutual funds 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 investigate the effect of common block-holder on co-movement and find which factor intensively and extensively affects 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. \(2005\)](#) provide 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' co-ordination ([Pantzalis 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.

While most of the prior investigations on factors affecting common-ownership have focused on the fund, the role of the block-holders as one the most important factors in firms' governance ([Holderness \(2003\)](#), [Edmans \(2014\)](#), and [Edmans and Holderness \(2017\)](#)) has remained a black box. 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.

Despite the presence of the business group in both emerging economies, e.g., Brazil, Chile, China, India, Indonesia, South Korea, and developed countries, e.g., Italy, Sweden, ([Khanna and Yafeh \(2007\)](#)), there is also a lack of evidence on whether being at the same business group can lead to the co-movement. Business groups consist of legally independent firms operating across diverse industries different from commonly held firms. To the best of our knowledge, we are the first study about the role of the business groups on 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 \(2008\)](#)). We also use the same methodology as [Anton and Polk \(2014\)](#) to compose pairs, define control variables, and calculate co-movement.

Contribution

Recent studies have focused on the role of direct and indirect common ownership of mutual funds on co-movement. Using Iran’s unique setting, we shed light on the role of block-holder ownership on co-movement. In addition, we will show that whether being in a business group as a measure of indirect common ownership can explain observed co-movement.

References

- Anton, M. and Polk, C. (2014). Connected stocks. *The Journal of Finance*, 69(3):1099–1127.
- Barberis, N. and Shleifer, A. (2003). Style investing. *Journal of financial Economics*, 68(2):161–199.
- Barberis, N., Shleifer, A., and Wurgler, J. (2005). Comovement. *Journal of financial economics*, 75(2):283–317.
- David, J. M. and Simonovska, I. (2016). Correlated beliefs, returns, and stock market volatility. *Journal of International Economics*, 99:S58–S77.
- Edmans, A. (2014). Blockholders and corporate governance. *Annu. Rev. Financ. Econ.*, 6(1):23–50.
- Edmans, A. and Holderness, C. G. (2017). Blockholders: A survey of theory and evidence. *The handbook of the economics of corporate governance*, 1:541–636.
- Fama, E. F. and MacBeth, J. D. (1973). Risk, return, and equilibrium: Empirical tests. *Journal of Political Economy*, 81(3):607–636.
- Grullon, G., Underwood, S., and Weston, J. P. (2014). Comovement and investment banking networks. *Journal of Financial Economics*, 113(1):73–89.
- Hameed, A. and Xie, J. (2019). Preference for dividends and return comovement. *Journal of Financial Economics*, 132(1):103–125.
- Holderness, C. G. (2003). A survey of blockholders and corporate control. *Economic policy review*, 9(1).
- Khanna, T. and Yafeh, Y. (2007). Business groups in emerging markets: Paragons or parasites? *Journal of Economic literature*, 45(2):331–372.
- Koch, A., Ruenzi, S., and Starks, L. (2016). Commonality in Liquidity: A Demand-Side Explanation. *The Review of Financial Studies*, 29(8):1943–1974.
- Pantzalis, C. and Wang, B. (2017). Shareholder coordination, information diffusion and stock returns. *Financial Review*, 52(4):563–595.

- Shiller, R. J. (1989). Comovements in stock prices and comovements in dividends. *The Journal of Finance*, 44(3):719–729.
- Skoulakis, G. (2008). Panel data inference in finance: Least-squares vs fama-macbeth. *Available at SSRN 1108865*.
- Wu, Q. and Shamsuddin, A. (2014). Investor attention, information diffusion and industry returns. *Pacific-Basin Finance Journal*, 30:30–43.