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Abstract

This paper presents an overview of the research on the size effect in equity returns. The size effect in financial literature refers to the tendency for small firms to have higher risk adjusted returns on average than large firms over long horizons. It also suggests that firm size plays a significant role in explaining stock returns. A number of studies focus on the evidence on the validity and consistency of the size effect. Many of the early empirical studies identify a significant size premium in US equity stock returns, but more recent papers suggest that the effect has vanished over time. Nevertheless the international evidence reports that a substantial size premium exists in non-US equity markets. This paper surveys empirical studies on the size premium in stock returns in developed and emerging capital markets. Papers which address the use of different indicators as a proxy for size and the impact of these proxies on stock returns are analyzed as well. This issue is especially important since the chosen indicator may be a proxy not for size but for another unknown factor correlated with size. Another question that has become the subject of a heated debate is the reason why small firms earn on average higher returns than large firms. This paper also provides an overview of the academic debate on the causes of the size effect. Based on various studies, possible explanations for the size effect are summarized. The paper suggests possible directions for further research and methodological improvements, including those for the Russian stock market.

JEL: G12, G15, G32

Keywords: size effect, size premium, stock return, asset valuation, capital markets

References

- 1. Amihud Y. Illiquidity and stock returns: cross-section and time-series effects. *Journal of Financial Markets*, 2002, 5(1), pp. 31–56.
- 2. Baetge J., Kirsch H.-J., Koelen P., and Schulz R. On the myth of size premiums in corporate valuation: some empirical evidence from the German stock market. *Journal of Applied Research in Accounting and Finance*, 2010.
- 3. Banz R.W. The relationship between return and market value of common stocks. *Journal of Financial Economics*, 1981, 9, pp. 3–18.
- 4. Berk J.B. A critique of size-related anomalies. *Review of Financial Studies*, 1995, 8, pp. 275–286.
- 5. Berk J.B. *An empirical re-examination of the relation between firm size and return*. Working Paper, University of Washington, 1996.
- 6. Black F. Beta and return. Journal of Portfolio Management, 1993, 8, p. 18.
- 7. Brown P., Kleidon A.W., Marsh T.A. New evidence on the nature of size related anomalies in stock prices. *Journal of Financial Economics*, 1983, 12, pp. 33–56.
- 8. Campbell J.Y., Hilscher J., Szilagyi J. In search of distress risk. *Journal of Finance*, 2008, 63, pp. 2899–2939.

- 9. Ching-Chih L., Chollete C. *Bankruptcy and the size effect*. UiS Working Papers in Economics and Finance, No 2010/6.
- 10. Cho S. The size premium: What role does macroeconomic risk play? Working paper, 2012.
- 11. Cui R., Wu Y. Disentangling liquidity and size effects in stock returns: Evidence from China. Working paper, 2007.
- 12. Dimson E. and Marsh P. Murphy's law and market anomalies. *Journal of Portfolio Management*, 1999, 25(2), pp. 53–69.
- 13. Dimson E., Marsh P. and Stuanton M. Investment style: Size, value and momentum, in 'Credit Suisse Global Investment Returns Sourcebook 2011'. *Credit Suisse Research Institute,* Zurich, 2011, pp. 41–54.
- 14. Duff and Phelps LLC Duff & Phelps Risk Premium Report 2012.
- 15. Elfakhani S., Lockwood L.J., Zaher T.S. Small firm and value effects in the Canadian Stock Market. *Journal of Financial Research*, 1998, 21, pp. 277–292.
- 16. Fama E.F., French K.R Multifactor explanation of asset pricing anomalies. *Journal of Finance*, 1996, 51, pp. 55–84.
- 17. Fama E.F., French K.R. Common risk factors in the returns on stocks and bonds. *Journal of Financial Economics*, 1993, 33, pp. 3–56.
- Fama E.F., French K.R. Dissecting anomalies. *Journal of Finance*, 2008, 63(4), pp. 1653– 1678.
- 19. Fama E.F., French K.R. Size and book-to-market factors in earnings and returns. *Journal of Finance*, 1995, 50, pp. 131–155.
- 20. Fama E.F., French K.R. Size, value, and momentum in international stock returns. *Journal* of *Financial Economics*, 2012, 105(3), pp. 457-472.
- 21. Fama E.F., French K.R. The cross-section of expected stock returns. *Journal of Finance*, 1992, 47, pp. 427–465.
- 22. Global review of accounting and finance, 2012, 1(3), pp. 53–66.
- 23. Grabowski R., King D. *The Size effect and equity returns*. Appendix 5A in Fishman et al.Guide to Business Valuations. Practitioners Publishing Company, 2001.
- 24. Hassan A., and Javed M.T. Size and value premium in Pakistani equity market. *African Journal of Business Management*, 2011, 5(16), pp. 674–675.
- 25. Hearn B. Size and liquidity effects in African frontier equity markets. *Applied Financial Economics*, 2012, 22(9), pp. 681–707.
- 26. Hong W. The Value and size effect Are there firm-specific-risks in China's domestic stock markets? *International Journal of Economics and Finance*, 2011, 3(3), pp. 26–37.
- 27. Horowitz J.L., Loughran T., Savin N.E. The disappearing size effect. *Research in Economics*, 2000, 54(1), pp. 83–100.
- 28. Horowitz J.L., Loughran T., Savin N.E. Three analyses of the firm size premium. *Journal of Empirical Finance*, 2000, 7(2), pp. 143–153.
- 29. Keim D.B. Size-related anomalies and stock return seasonality: Further empirical evidence. *Journal of Financial Economics*, 1983, 12(1), pp. 13–32.
- 30. Knez P.J., Ready M.J On the robustness of size and book-to-market in cross-sectional regressions. *Journal of Finance*, 1997, 52, pp. 1355–1382.
- 31. Lischewski J., Voronkova S. size, value and liquidity. do they really matter on an emerging stock market? *Emerging Markets Review*, 2012, 13, pp. 8–25.
- 32. Lo A.W., MacKinlay A.C. Data-snooping biases in tests of financial asset pricing models. *Review of Financial Studies*, 1990, 3, pp. 431–468.

- 33. Nawazish E.M. Size and value premium in Karachi Stock Exchange. *The Lahore Journal of Economics*, 2008, 13(2), pp. 1–26.
- 34. Nielsen C.Y.G. *Is default risk priced in equity returns?* Scandinavian Working Papers in Economics No 38, 2011.
- 35. Reinganum M.R. Misspecification of asset pricing: empirical anomalies based on earnings' yields and market values. *Journal of Financial Economics*, 1981, 9, pp. 19–46.
- 36. Rouwenhorst K.G. Local return factors and turnover in emerging stock markets. *Journal of Finance*, 1999, 54, pp. 1439–1464.
- 37. Starks L.T., Yong Li, Zheng Lu *Tax-loss selling and the January Effect: Evidence from municipal bond closed-end funds*. AFA 2005 Philadelphia Meetings, 2006.
- 38. Van Dijk M.A. Is Size Dead? A review of the size effect in equity returns. *Journal of Banking & Finance*, 2011, 35, pp. 3263–3274.
- 39. Wahlroos B., Berglund T. Anomalies and equilibrium returns in a small stock market. *Journal* of Business Research, 1986, 14, pp. 423–440.
- 40. Zakamulin V. Forecasting the size premium over different time horizons. *Journal of Banking and Finance*, Forthcoming, 2011.