

**Studi Moderasi Kategori Saham Pada Pengaruh Sentiment
Investor Terhadap Herding yang di Moderasi Kembali Oleh
Volatilitas dan Kapitalisasi Pasar**



DISERTASI

Diajukan untuk memenuhi sebagian syarat untuk memperoleh
gelar doktor pada Program Studi Doktor Manajemen
Konsentrasi Manajemen Keuangan

Oleh :

Rengga Madya Pranata

NIM : 2208892

**PROGRAM STUDI DOKTOR MANAJEMEN
FAKULTAS PENDIDIKAN EKONOMI DAN BISNIS
UNIVERSITAS PENDIDIKAN INDONESIA**

2025

**Studi Moderasi Kategori Saham Pada Pengaruh Sentiment
Investor Terhadap Herding yang di Moderasi Kembali Oleh
Volatilitas dan Kapitalisasi Pasar**

Oleh:
Rengga Madya Pranata

M.M UPI Bandung 2021
S.Pd UPI Bandung 2019

Sebuah Disertasi yang diajukan untuk memenuhi salah satu syarat memperoleh
gelar Doktor (Dr.) pada Fakultas Pendidikan Ekonomi dan Bisnis

© Rengga Madya Pranata 2025
Universitas Pendidikan Indonesia
Agustus 2025

Hak Cipta dilindungi undang-undang.
Disertasi ini tidak boleh diperbanyak seluruhnya atau sebagian,
dengan dicetak ulang, difoto kopi, atau cara lainnya tanpa ijin dari penulis.

LEMBAR PENGESAHAN

Studi Moderasi Kategori Saham Pada Pengaruh Sentiment Investor Terhadap Herding yang di Moderasi Kembali Oleh Volatilitas dan Kapitalisasi Pasar

Disertasi ini disetujui dan disahkan oleh:

Ketua Promotor,



Prof. Dr. Ikaputera Waspada, M.M.
NIP. 196104201987031002

Co Promotor,



Prof. Dr. H. Nugraha, S.E., M.Si., Akt. CA., CPA.
NIP. 196611261990011002

Anggota,



Dr. Budi Supriatono Purnomo, S.E., M.M., M.Si., CACP., CFP.
NIP. 196901082006041001

Mengetahui,
Ketua Program Studi Manajemen
Fakultas Pendidikan Ekonomi dan Bisnis
Universitas Pendidikan Indonesia


Dr. Maya Sari, S.E., M.M.
NIP. 197107052002122007

ABSTRAK

Rengga Madya Pranata (2208892). “**Studi Moderasi Kategori Saham Pada Pengaruh Sentimen Investor Terhadap Herding yang di Moderasi Kembali Oleh Volatilitas dan Kapitalisasi Pasar**” Dibawah bimbingan Prof. Dr. Ikaputera Waspada, M.M., Prof. Dr. H. Nugraha, S.E., M.Si., Akt. CA., CPA., Dr. Budi Supriatono Purnomo, S.E., M.M., M.Si ., CACP., CFP.

Pasar saham Indonesia kerap kali berada dalam kondisi tekanan pasar (*market stress*) yang ditandai oleh tingginya volatilitas, ketidakpastian, dan fluktuasi harga yang ekstrem. Dalam situasi demikian, investor cenderung menunjukkan perilaku *herding* yakni kecenderungan untuk mengikuti keputusan kolektif tanpa mempertimbangkan informasi fundamental. Salah satu faktor utama yang memengaruhi perilaku ini adalah sentimen investor, yang terbentuk dari persepsi, emosi, dan ekspektasi terhadap kondisi pasar. Namun demikian, pengaruh sentimen terhadap *herding* tidak bersifat universal, melainkan bergantung pada karakteristik saham dan dinamika pasar tertentu. Penelitian ini bertujuan untuk mengkaji pengaruh sentimen investor terhadap perilaku *herding*, dengan memeriksa peran moderasi kategori saham (growth dan value) serta pengaruh moderasi berjenjang dari volatilitas dan kapitalisasi pasar. Data yang digunakan merupakan data mingguan selama periode lima tahun (2019–2023) yang diambil dari 48 perusahaan terdaftar di Bursa Efek Indonesia (BEI), yang diklasifikasikan ke dalam kategori saham growth dan value. Metode analisis yang digunakan adalah *moderated moderation* dengan pendekatan Model 3 Hayes PROCESS, yang memungkinkan identifikasi interaksi tiga variabel secara simultan. Hasil penelitian menunjukkan bahwa sentimen investor memiliki pengaruh negatif terhadap perilaku *herding*, yang berarti sentimen positif cenderung menurunkan kecenderungan investor untuk mengikuti arus kolektif. Namun, efek ini diperkuat secara signifikan pada saham kategori value. Volatilitas pasar memperlemah hubungan moderasi tersebut, terutama dalam kondisi pasar tidak stabil. Sebaliknya, kapitalisasi pasar memperkuat efek moderasi kategori saham, khususnya pada saham value berkapitalisasi kecil. Temuan ini tidak berlaku konsisten pada saham growth, yang cenderung lebih spekulatif dan tidak menunjukkan interaksi signifikan dengan kapitalisasi maupun volatilitas. Penelitian ini memberikan kontribusi penting dalam literatur *behavioral finance*, khususnya dalam konteks pasar negara berkembang, serta menyajikan implikasi praktis bagi investor dan regulator dalam memahami dinamika psikologis dan perilaku kolektif di pasar modal.

Kata kunci: Sentimen Investor, Herding, Kategori Saham, Volatilitas, Kapitalisasi Pasar, *Moderated Moderation*, Behavioral Finance.

ABSTRACT

Rengga Madya Pranata (2208892). "Moderation Study of Stock Category on the Effect of Investor Sentiment on Herding Moderated by Volatility and Market Capitalization" Supervised by Prof. Dr. Ikaputera Waspada, M.M., Prof. Dr. H. Nugraha, S.E., M.Si., Akt. CA., Dr. Budi Supriatono Purnomo, S.E., M.M., M.Si.

The Indonesian stock market is often under market stress, characterized by high volatility, uncertainty, and extreme price fluctuations. In such situations, investors tend to exhibit herding behavior, which is the tendency to follow collective decisions without considering fundamental information. One of the main factors influencing this behavior is investor sentiment, which is formed from perceptions, emotions, and expectations regarding market conditions. However, the influence of sentiment on herding is not universal but depends on specific stock characteristics and market dynamics. This study aims to examine the influence of investor sentiment on herding behavior by investigating the moderating role of stock categories (growth and value) and the moderating effects of volatility and market capitalization. The data used are weekly data over a five-year period (2019–2023) taken from 48 companies listed on the Indonesia Stock Exchange (IDX), classified into growth and value stock categories. The analysis method used is moderated moderation with the Hayes PROCESS Model 3 approach, which allows the simultaneous identification of interactions between three variables. The results indicate that investor sentiment has a negative effect on herding behavior, meaning that positive sentiment tends to reduce investors' tendency to follow collective trends. However, this effect is significantly amplified in value stocks. Market volatility weakens this moderating relationship, particularly in unstable market conditions. Conversely, market capitalization strengthens the moderating effect of stock categories, especially in small-cap value stocks. These findings do not apply consistently to growth stocks, which tend to be more speculative and do not show significant interactions with market capitalization or volatility. This study makes an important contribution to the behavioral finance literature, particularly in the context of emerging markets, and provides practical implications for investors and regulators in understanding the psychological dynamics and collective behavior in capital markets.

Keywords: Investor Sentiment, Herding, Stock Categories, Volatility, Market Capitalization, Moderated Moderation, Behavioral Finance.

DAFTAR ISI

LEMBAR PENGESAHAN	iii
ABSTRAK	iv
ABSTRACT	v
DAFTAR ISI.....	vi
DAFTAR TABEL.....	ix
DAFTAR GAMBAR	x
DAFTAR LAMPIRAN.....	xi
BAB I PENDAHULUAN	1
1.1 Latar Belakang	1
1.2 Rumusan Masalah	13
1.3 Tujuan Penelitian	14
1.4 Manfaat Penelitian	14
BAB II KAJIAN LITERATUR, KERANGKA PEMIKIRAN, DAN HIPOTESIS	17
2.1 Behavioral Finance.....	17
2.2 Bias di Pasar Modal	19
2.3 Herding.....	21
2.4 Sentiment Investor	25
2.5 Volatilitas	26
2.6 Kapitalisasi Pasar	29
2.7 Kategori Saham.....	30
2.8 Penelitian Terdahulu	33
2.9 Kerangka Pemikiran.....	38

2.9.1 Keterkaitan Kategori Saham Pada Pengaruh Sentiment Investor Terhadap Herding.....	38
2.9.2 Keterkaitan Kategori Saham dan Volatilitas Pada Pengaruh Sentiment Investor Terhadap Herding.....	41
2.9.3 Keterkaitan Kategori Saham dan Kapitalisasi Pasar Pada Pengaruh Sentiment Investor Terhadap Herding.....	44
2.10 Hipotesis Penelitian.....	48
BAB III METODE PENELITIAN.....	49
3.1 Objek Penelitian	49
3.2 Jenis Penelitian dan Metode Penelitian.....	49
3.3 Operasionalisasi Variabel.....	50
3.4 Jenis dan Sumber Data	53
3.5 Populasi dan Sampel	54
3.5.1 Populasi	54
3.5.2 Sampel	54
3.2.3 Teknik Pengumpulan Data	56
3.6 Teknik Analisis Data dan Keabsahan Data.....	56
3.6.1 Analisis Deskriptif	57
3.6.2 Analisis Verifikatif.....	57
BAB IV HASIL DAN PEMBAHASAN	63
4.1 Deskriptif Statistik	63
4.1.1 Kategori Saham Growth.....	70
4.1.2 Kategori Saham Value	73
4.2 Uji Multikolinieritas.....	75
4.3 Uji Hipotesis.....	76
4.3.1 Hasil Analisis Model 1	76
4.3.2 Hasil Analisis Model 2	79

4.3.3 Hasil Analisis Model 3	83
BAB V PEMBAHASAN	89
5.1 Deskriptif.....	89
5.1.1 Kategori Saham Growth.....	89
5.1.2 Kategori Saham Value	91
5.2 Verifikatif.....	94
5.2.1 Keterkaitan Kategori Saham Pada Pengaruh Sentiment Investor Terhadap Herding.....	94
5.2.2 Keterkaitan Kategori Sham dan Volatilitas Pada Pengaruh Sentiment Investor Terhadap Herding.....	98
5.2.3 Keterkaitan Kategori Saham dan Kapitalisasi Pasar Pada Pengaruh Sentiment Investor Terhadap Herding.....	103
5.3 Temuan Penelitian.....	107
BAB VI SIMPULAN, IMPLIKASI, DAN REKOMENDASI.....	112
6.1 Simpulan	112
6.2 Implikasi.....	113
6.3 Rekomendasi.....	116
DAFTAR PUSTAKA	120
LAMPIRAN	135

DAFTAR TABEL

Tabel 2. 1 Index Sentimen Investor	26
Tabel 2. 2 Membedakan Saham Growth dan <i>Value</i>	31
Tabel 2. 3 Penelitian Terdahulu	33
Tabel 3. 1 Operasionalisasi Variabel	52
Tabel 3. 2 Sumber Data.....	54
Tabel 3. 3 Sampel Penelitian.....	56
Tabel 4. 1 Statistik Deskriptif Keseluruhan	63
Tabel 4. 2 Statistik Deskriptif Growth	70
Tabel 4. 3 Statistik Deskriptif <i>Value</i>	73
Tabel 4. 4 Uji Multikolinieritas.....	75
Tabel 4. 5 Hasil Analisis Model 1	76
Tabel 4. 6 Ringkasan Model 1	77
Tabel 4. 7 Hasil Kondisional Efek Model 1.....	78
Tabel 4. 8 Hasil Analisis Model 2.....	79
Tabel 4. 9 Ringkasan Model 2	81
Tabel 4. 10 Efek Kondisional Sentimen terhadap Herding pada Kombinasi Kategori Saham dan Volatilitas	82
Tabel 4. 11 Hasil Analisis Model 3.....	83
Tabel 4. 12 Ringkasan Model 3	86
Tabel 4. 13 Efek Kondisional Sentimen terhadap Herding pada Kombinasi Kategori Saham dan Market Capitalization	86

DAFTAR GAMBAR

Gambar 1. 1 Data IHSG 20 Tahun Terakhir	1
Gambar 1. 2 Grafik Literasi Masyarakat Indonesia	3
Gambar 2. 1 Paradigma Penelitian.....	48
Gambar 3. 1 Konseptual Diagram.....	58
Gambar 4. 1 Herding Keseluruhan.....	64
Gambar 4. 2 Frekuensi Herding	65
Gambar 4. 3 Sentimen Keseluruhan.....	66
Gambar 4. 4 Distribusi Sentimen	67
Gambar 4. 5 Volatilitas Keseluruhan	69
Gambar 4. 6 Kapitalisasi Pasar Keseluruhan	70
Gambar 4. 7 Herding Saham Growth.....	72
Gambar 4. 8 Sentimen Saham Growth.....	72
Gambar 4. 9 Herding Saham <i>Value</i>	74
Gambar 4. 10 Sentimen Saham <i>Value</i>	75
Gambar 4. 11 Interaksi antara Sentimen dan Kategori Saham terhadap Herding	78
Gambar 4. 12 Interaksi antara Sentimen, Kategori Saham, dan Volatilitas terhadap Herding.....	82
Gambar 4. 13 Interaksi antara Sentimen, Kategori Saham, dan Kapitalisasi Pasar terhadap Herding	87

DAFTAR LAMPIRAN

Lampiran 1	135
------------------	-----

DAFTAR PUSTAKA

- Abbasian, E., Abbasion, V., & Moradpour Oladi, M. (2008). Interactions of returns and volatilities among different sizes of stocks: a Survey in Tehran Stock Exchange. *Iranian Economic Review*, 13(21), 1-16.
- Adem, A. M. and Sarioğlu, S. E. (2020). Analysis of investors herding behaviour: an empirical study from istanbul stock exchange. European Journal of Business and Management Research, 5(2).
<https://doi.org/10.24018/ejbm.2020.5.2.250>
- Adnan, M. (2023). Modeling *herding* behavior in the Indonesian Capital Market. *International Journal of Economics, Business and Management Research*, 7(04), 167-179.
- Ah Mand, A., Janor, H., Abdul Rahim, R., & Sarmidi, T. (2023). Herding behavior and stock market conditions. *PSU Research Review*, 7(2), 105-116.
- Ahmad, M. and Wu, Q. (2022). Does *herding* behavior matter in investment management and perceived market efficiency? evidence from an emerging market. Management Decision, 60(8), 2148-2173.
<https://doi.org/10.1108/md-07-2020-0867>
- Ahmad, Z., Ibrahim, H., & Tuyon, J. (2017). Institutional investor behavioral biases: syntheses of theory and evidence. *Management Research Review*, 40(5), 578–603. <https://doi.org/10.1108/mrr-04-2016-0091>
- Akin, I., & Akin, M. (2024). Behavioral finance impacts on US stock market volatility: an analysis of market anomalies. *Behavioural Public Policy*, 1-25.
- Almansour, B. Y., & Arabyat, Y. A. (2017). Investment decision making among Gulf investors: behavioural finance perspective. *International Journal of Management Studies*, 24(1), 41-71.
- Almansour, B. Y., Elkrgħli, S., & Almansour, A. Y. (2023). Behavioral finance factors and investment decisions: A mediating role of risk perception. *Cogent Economics & Finance*, 11(2), 2239032.

- Alsedrah, I., & Ahmad, N. (2014). Behavioral Finance: The missing piece in modern finance. In *Proceedings of the First Middle East Conference on Global Business, Economics, Finance and Banking*.
- Ampofo, R. T., Aidoo, E. N., Ntiamoah, B. O., Frimpong, O., & Sasu, D. (2023). An empirical investigation of COVID-19 effects on *herding* behaviour in USA and UK stock markets using a quantile regression approach. *Journal of Economics and Finance*, 47(2), 517-540.
- Andrikopoulos, A., & Angelidis, T. (2008). *Idiosyncratic risk, returns and liquidity in the London Stock Exchange: a spillover approach*. SSRN.
- Ansari, A. and Ansari, V. A. (2021). Do investors herd in emerging economies? evidence from the indian equity market. *Managerial Finance*, 47(7), 951-974.
<https://doi.org/10.1108/mf-06-2020-0331>
- Arisoy, Y. E. (2010). "Stock return predictability and the impact of investor sentiment on stock returns in the U.S. stock market." *Finance Research Letters*, 7(4), 257-267.
- Arjoon, V., & Bhatnagar, C. S. (2017). Dynamic herding analysis in a frontier market. *Research in International Business and Finance*, 42, 496-508.
- Baddeley, M. (2010). Herding, social influence and economic decision-making: socio-psychological and neuroscientific analyses. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 365(1538), 281-290.
- Badola, S., Sahu, A. K., & Adlakha, A. (2023). A systematic review on behavioral biases affecting individual investment decisions. *Qualitative Research in Financial Markets*, 16(3), 448-476.
- Bai, J., Guo, J., Sun, B., Guo, Y., Bao, Q., & Xiao, X. (2023). Intelligent forecasting model of stock price using neighborhood rough set and multivariate empirical mode decomposition. *Engineering Applications of Artificial Intelligence*, 122, 106106.
- Baker, M. & Wurgler, J., (2007). Investor Sentiment in the Stock Market. *Journal of Economic Perspectives*, 21(2), pp. 129-152.

- Balcilar, M., Demirer, R. & Hammoudeh, S., (2014). What Drives Herding in Oil-Rich, Developing Stock Markets? Relative Roles of Own Volatility and Global Factors. *North American Journal of Economics and Finance*, Volume 29, pp. 418-440.
- Bansal, N., Connolly, R. A., & Stiversc, C. (2016). High Risk Episodes and the Equity Size Premium.
- Banz, R. W. (1981). "The relationship between return and market *value* of common stocks." *Journal of Financial Economics*, 9(1), 3-18.
- Barberis, N., & Thaler, R. (2003). "A survey of behavioral finance." *Handbook of the Economics of Finance*, 1, 1053-1128.
- Bauman, W. S., Conover, C. M., & Miller, R. E. (1998). "Growth versus *value* and large-cap versus small-cap stocks in international markets." *Financial Analysts Journal*, 54(2), 75-89.
- BenSaïda, A. (2017). Herding effect on idiosyncratic volatility in US industries. *Finance Research Letters*, 23, 121-132.
- Bhowmik, R., & Wang, S. (2020). Stock market volatility and return analysis: A systematic literature review. *Entropy*, 22(5), 522.
- Bikhchandani, S., & Sharma, S. (2000). Herd behavior in financial markets. *IMF Staff papers*, 47(3), 279-310.
- Bikhchandani, S., Hirshleifer, D., & Welch, I. (1992). A theory of fads, fashion, custom, and cultural change as informational cascades. *Journal of political Economy*, 100(5), 992-1026.
- Black, A., & McMillan, D. G. (2006). "Value versus growth stocks and the *value* premium: Evidence from the UK." *European Financial Management*, 12(4), 589-606.
- Black, F., & Scholes, M. (1973). The pricing of options and corporate liabilities. *Journal of political economy*, 81(3), 637-654.
- Blasco, N., Corredor, P., & Ferrer, E. (2018). Analysts *herding*: when does sentiment matter?. *Applied Economics*, 50(51), 5495-5509.
<https://doi.org/10.1080/00036846.2018.1486999>

- Blasco, N., Corredor, P., & Ferreruela, S. (2011). Market sentiment: a key factor of investors' imitative behaviour. *Accounting & Finance*, 52(3), 663-689.
<https://doi.org/10.1111/j.1467-629x.2011.00412.x>
- Bodie, Z., Kane, A., Marcus, A. J., Hartanto, R. B., Prasanti, A., & Permatasari, I. (2014). *Manajemen portofolio dan investasi*. Salemba Empat.
- Bollerslev, T. (1986). Generalized autoregressive conditional heteroskedasticity. *Journal of econometrics*, 31(3), 307-327.
- Caparrelli, F., D'Arcangelis, A. M., & Cassuto, A. (2004). Herding in the Italian stock market: a case of behavioral finance. *The Journal of Behavioral Finance*, 5(4), 222-230.
- Cevik, E., Kirci Altinkeski, B., Cevik, E. I., & Dibooglu, S. (2022). Investor sentiments and stock markets during the COVID-19 pandemic. *Financial Innovation*
- Chan, L. K., & Lakonishok, J. (2004). Value and growth investing: Review and update. *Financial Analysts Journal*, 60(1), 71-86.
- Chen, Z., & Ru, J. (2021). Herding and capitalization size in the Chinese stock market: a micro-foundation evidence. *Empirical Economics*, 60(4), 1895-1911.
- Chiang, T. C. and Zheng, D. (2010). An empirical analysis of herd behavior in global stock markets. *Journal of Banking & Finance*, 34(8), 1911-1921.
<https://doi.org/10.1016/j.jbankfin.2009.12.014>
- Choi, K. H., & Yoon, S. M. (2020). Investor sentiment and herding behavior in the Korean stock market. *International Journal of Financial Studies*, 8(2), 34.
- Chong, T. T. L., & Ng, W. K. (2008). Technical analysis and the London stock exchange: testing the MACD and RSI rules using the FT30. *Applied Economics Letters*, 15(14), 1111-1114.
- Christie, W. G., & Huang, R. D. (1995). Following the pied piper: do individual returns herd around the market?. *Financial Analysts Journal*, 31-37.
- Cipriani, M., & Guarino, A. (2005). Herd behavior in a laboratory financial market. *American Economic Review*, 95(5), 1427-1443.

- Copeland, M., & Copeland, T. (2016). VIX versus Size. *Journal of Portfolio Management*, 42(3), 76.
- Copeland, M., Copeland, T., & Lai, Z. (2021). A Tale of Two Tails: Mortality, Size, Volatility, and EPU. *Journal of Portfolio Management*, 48(1), 98-114.
- Damodaran, A. (2013). Equity risk premiums (ERP): Determinants, estimation and implications The 2012 edition. In *Managing and measuring risk: Emerging global standards and regulations after the financial crisis* (pp. 343-455).
- Datt Pathak, D., & Singh Thapa, B. (2024). Beyond market anomalies: How heuristics and perceived efficiency shape investor behavior in developing markets. *Investment Management and Financial Innovations*, 21(3), 1–14.
[https://doi.org/10.21511/imfi.21\(3\).2024.01](https://doi.org/10.21511/imfi.21(3).2024.01)
- Delfabbro, P., King, D. L., & Williams, J. (2021). The psychology of cryptocurrency trading: Risk and protective factors. *Journal of behavioral addictions*, 10(2), 201-207.
- Devenow, A., & Welch, I. (1996). Rational herding in financial economics. *European economic review*, 40(3-5), 603-615.
- Dewan, P., & Dharni, K. (2019). Herding behaviour in investment decision making: a review. *Journal of Economics, Management and Trade*, 24(2), 1-12.
- Dhingra, B., Batra, S., Aggarwal, V., Yadav, M., & Kumar, P. (2024). Stock market volatility: a systematic review. *Journal of Modelling in Management*, 19(3), 925-952.
- Dömötör, B. and Váradi, K. (2019). Stock market stress from the central counterparty's perspective. *Studies in Economics and Finance*, 36(1), 51-62.
<https://doi.org/10.1108/sef-03-2016-0063>
- Dorfleitner, G., & Utz, S. (2012). "Safety first portfolio choice based on financial and sustainability returns." *European Journal of Operational Research*, 221(1), 155-164.
- Economou, F., Kostakis, A., & Philippas, N. (2018). "Cross-country effects in herding behavior: Evidence from four South European markets." *Journal of International Financial Markets, Institutions, and Money*, 18(5), 487-502.

- Engle, R. F. (1982). Autoregressive conditional heteroscedasticity with estimates of the variance of United Kingdom inflation. *Econometrica: Journal of the econometric society*, 987-1007.
- Fama, E. F., & French, K. R. (1992). "The cross-section of expected stock returns." *The Journal of Finance*, 47(2), 427-465.
- Fama, E. F., & French, K. R. (1998). "Value versus growth: The international evidence." *The Journal of Finance*, 53(6), 1975-1999.
- Fei, F., & Zhang, J. (2023). Chinese stock market volatility and herding behavior asymmetry during the COVID-19 pandemic. *Cogent Economics & Finance*, 11(1), 2203436.
- Forbes, K. J., & Rigobon, R. (2002). No contagion, only interdependence: measuring stock market comovements. *The journal of Finance*, 57(5), 2223-2261.
- Fransiska, M., Sumantri, S., & Pangestu, S. (2018). Herding behavior in Indonesian investors. *International Research Journal of Business Studies*, 11(2), 129-143.
- G, S. (2021). Impact of Financial Literacy and Behavioural Biases on Investment Decision-making. *FIIB Business Review*, 13(1), 72–86.
<https://doi.org/10.1177/23197145211035481>
- Gajera, M. A., Vyas, M. P., & Patoliya, M. P. (2013). RISK AND RETURN ANALYSIS OF BSE SMALL, MEDIUM & LARGE CAPITALIZATION INDICES". *Management*, 2(3).
- Galariotis, E. C., Krokida, S. I., & Spyrou, S. I. (2016). Herd behavior and equity market liquidity: Evidence from major markets. *International Review of Financial Analysis*, 48, 140-149.
- Galariotis, E. C., Rong, W., & Spyrou, S. I. (2015). Herding on fundamental information: A comparative study. *Journal of Banking & Finance*, 50, 589-598.
- Gothe, R., & Mishra, J. (2023). Role of Herd Behavior on Investment Decision of Mutual Fund Investors in India-An Empirical Study. *Tujin Jishu/Journal of Propulsion Technology*, 44(4), 2023.

- Graham, B., & Dodd, D. (1934). *Security Analysis*. New York: McGraw-Hill.
- Guarino, A. & Cipriani, M., (2008). Herd behavior and contagion in financial markets. *The BE Journal of Theoretical Economics*, 8(1), 0000102202193517041390.
- Guo, X., Gu, C., Zhang, C., & Li, S. (2024). Institutional herding and investor sentiment. *Journal of Financial Markets*, 68, 100891.
- Gupta, D. (2018). Herding Behavior in Financial Market: Critical Literature Review. *Asian Journal of Research in Banking and Finance*, 8(6), 60-72.
- Gurung, R., Kumar Dahal, R., Ghimire, B., & Koirala, N. (2024). Unraveling behavioral biases in decision making: A study of Nepalese investors. *Investment Management and Financial Innovations*, 21(1), 25–37.
[https://doi.org/10.21511/imfi.21\(1\).2024.03](https://doi.org/10.21511/imfi.21(1).2024.03)
- Hagan, P. S., Kumar, D., Lesniewski, A. S., & Woodward, D. E. (2002). Managing smile risk. *The Best of Wilmott*, 1, 249-296.
- Han, Q., & Keen, S. (2021). Aggregate excess demand on wall street. *Helijon*, 7(11), e08355. <https://doi.org/10.1016/j.heliyon.2021.e08355>
- Haritha, P. H. and Uchil, R. (2019). Impact of investor sentiment on decision-making in indian stock market: an empirical analysis. *Journal of Advances in Management Research*, 17(1), 66-83. <https://doi.org/10.1108/jamr-03-2019-0041>
- Haritha, P. H. and Uchil, R. (2020). Influence of investor sentiment and its antecedent on investment decision-making using partial least square technique. *Management Research Review*, 43(11), 1441-1459. <https://doi.org/10.1108/mrr-06-2019-0254>
- Hariyanto, D. (2021). Effect of trading volume, market capitalization, firm size in explaining return on vultures. *Journal of Advanced Research in Economics and Administrative Sciences*, 2(2), 50-64. <https://doi.org/10.47631/jareas.v2i2.228>
- Heston, S. L. (1993). A closed-form solution for options with stochastic volatility with applications to bond and currency options. *The review of financial studies*, 6(2), 327-343.

- Hirshleifer, D. (2015). Behavioral Finance. *Annual Review of Financial Economics*, 7(1), 133–159. <https://doi.org/10.1146/annurev-financial-092214-043752>
- Holmes, P., Kallinterakis, V. & Ferreira, M. P., (2013). Herding in a Concentrated Market: a Question of Intent. *European Financial Management*, 19(3), pp. 497-520.
- Hsieh, S. F. (2013). Individual and institutional herding and the impact on stock returns: Evidence from Taiwan stock market. *International Review of Financial Analysis*, 29, 175-188.
- Hsieh, S. F., Chan, C. Y., & Wang, M. C. (2020). Retail investor attention and *herding* behavior. *Journal of Empirical Finance*, 59, 109-132.
- Huang, T. C., Lin, B. H. & Yang, T. H., (2015). Herd Behavior and Idiosyncratic Volatility. *Journal of Business Research*, 68(4), pp. 763-770.
- Hwang, S. and Salmon, M. (2004). Market stress and *herding*. *Journal of Empirical Finance*, 11(4), 585-616. <https://doi.org/10.1016/j.jempfin.2004.04.003>
- Israel, R., Laursen, K., & Richardson, S. A. (2020). Is (systematic) *value* investing dead?. *Journal of Portfolio Management, Forthcoming*.
- Iyer, S. R. and Harper, J. T. (2017). Cash flow volatility and investor sentiment. *Managerial Finance*, 43(2), 178-192. <https://doi.org/10.1108/mf-02-2016-0045>
- Jain, J., Gupta, S., & Walia, N. (2019). Evaluation of behavioral biases affecting investment decision making of individual equity investors by fuzzy analytic hierarchy process. *Review of Behavioral Finance*, 12(3), 297–314. <https://doi.org/10.1108/rbf-03-2019-0044>
- Jegadeesh, N., & Titman, S. (2001). "Profitability of momentum strategies: An evaluation of alternative explanations." *The Journal of Finance*, 56(2), 699-720.
- Jlassi, M., & Naoui, K. (2015). Herding behaviour and market dynamic volatility: evidence from the US stock markets. *American journal of finance and accounting*, 4(1), 70-91.

- Khan, S. K., Islam, J., & Hassan, N. U. (2023). Unlocking The Investment Puzzle: The Influence Of Behavioral Biases & Moderating Role Of Financial Literacy. *Journal of Social Research Development*, 4(2), 433–444. <https://doi.org/10.53664/jsrd/04-02-2023-17-433-444>
- Kling, G. and Gao, L. (2008). Chinese institutional investors' sentiment. *Journal of International Financial Markets, Institutions and Money*, 18(4), 374-387. <https://doi.org/10.1016/j.intfin.2007.04.002>
- Komalasari, P. T., Asri, M., Purwanto, B. M., & Setiyono, B. (2022). Herding behaviour in the capital market: what do we know and what is next?. *Management Review Quarterly*, 72(3), 745-787.
- Kou, S. (2001). "A jump-diffusion model for option pricing." *Management Science*, 47(8), 1085-1101.
- Kumar, S. and Goyal, N. (2015). Behavioural biases in investment decision making – a systematic literature review. *Qualitative Research in Financial Markets*, 7(1), 88-108. <https://doi.org/10.1108/qrfm-07-2014-0022>
- Lakonishok, J., Shleifer, A., & Vishny, R. W. (1994). "Contrarian investment, extrapolation, and risk." *The Journal of Finance*, 49(5), 1541-1578.
- Lee, C. C., Chen, M. P., & Hsieh, K. M. (2013). Industry herding and market states: evidence from Chinese stock markets. *Quantitative Finance*, 13(7), 1091-1113.
- Li, T., Chen, H., Liu, W., Yu, G., & Yu, Y. (2023). Understanding the role of social media sentiment in identifying irrational herding behavior in the stock market. *International Review of Economics & Finance*, 87, 163-179.
- Li, X., Brooks, C., & Miffre, J. (2009). "Hedging effectiveness of implied volatility indices: A comparison of GARCH models." *Journal of Futures Markets*, 29(3), 266-282.
- Liao, L., Liu, B., & Wang, H. (2011). Information discovery in share lockups: evidence from the split-share structure reform in China. *Financial Management*, 40(4), 1001-1027.

- Litimi, H., BenSaïda, A. & Bouraoui, O., (2016). Herding and excessive risk in the American stock market: A sectoral analysis. *Research in International Business and Finance*, Volume 38, pp. 6-21.
- Liu, S. (2015). Investor sentiment and stock market liquidity. *Journal of Behavioral Finance*, 16(1), 51-67.
- Lopez de Prado, M. (2019). Tactical investment algorithms. Available at SSRN 3459866.
- Melas, K. D., & Michail, N. A. (2023). Buy together, but recycle alone: Sentiment-driven herding behavior in oceanic dry bulk shipping. *Review of Behavioral Finance*, 15(4), 534-549.
- Metawa, N., Hassan, M. K., Metawa, S. A., & Safa, M. F. (2019). Impact of behavioral factors on investors' financial decisions: case of the egyptian stock market. *International Journal of Islamic and Middle Eastern Finance and Management*, 12(1), 30-55. <https://doi.org/10.1108/imefm-12-2017-0333>
- Mezghani, T., Boujelbène, M., & Elbayar, M. (2021). Impact of covid-19 pandemic on risk transmission between googling investor's sentiment, the chinese stock and bond markets. *China Finance Review International*, 11(3), 322-348. <https://doi.org/10.1108/cfri-08-2020-0120>
- Mittal, S. K. (2022). Behavior biases and investment decision: theoretical and research framework. *Qualitative Research in Financial Markets*, 14(2), 213-228.
- Neelanjana, B. H., & Hassan, H. H. (2019). The impact of dividend policy on the volatility of share price of manufacturing companies in Malaysia. *International Journal of Recent Technology and Engineering*, 7(5), 212-224.
- Ng, S. H., Zhuang, Z., Toh, M. Y., Ong, T. S., & Teh, B. H. (2022). Exploring herding behavior in an innovative-oriented stock market: evidence from ChiNext. *Journal of Applied Economics*, 25(1), 523-542.
- Nofsinger, J. R. and Sias, R. W. (1999). Herding and feedback trading by institutional and individual investors. *The Journal of Finance*, 54(6), 2263-2295. <https://doi.org/10.1111/0022-1082.00188>

- Oehler, A., & Wendt, S. (2009). Herding behavior of mutual fund managers in Germany. *Available at SSRN 1343470*.
- Ouarda, M., El Bouri, A., & Bernard, O. (2013). Herding behavior under markets condition: Empirical evidence on the European financial markets. *International Journal of Economics and Financial Issues*, 3(1), 214-228.
- Ouarda, M., El Bouri, A., & Bernard, O. (2013). Herding behavior under markets condition: Empirical evidence on the European financial markets. *International Journal of Economics and Financial Issues*, 3(1), 214-228.
- Patro, A. and Kanagaraj, A. (2012). Exploring the herding behaviour in indian mutual fund industry. *Asian Journal of Finance & Accounting*, 4(1). <https://doi.org/10.5296/ajfa.v4i1.1478>
- Patwarani, R., & Husodo, Z. (2023). Examining Herding Behaviour and Its Impact on Stock Market Volatility: Insights from Asian Economies. *Jurnal Manajemen Teori dan Terapan*, 16(3).
- Pavone, P. (2019). Market capitalization and financial variables: Evidence from Italian listed companies. *International Journal of Academic Research Business and Social Sciences*, 9(3), 1356-1371.
- Peswani, S., & Joshipura, M. (2019). The volatility effect across size buckets: evidence from the Indian stock market. *Shilpa Peswani and Mayank Joshipura (2019). The volatility effect across size buckets: evidence from the Indian stock market. Investment Management and Financial Innovations*, 16(3), 62-75.
- PH, H., & Rishad, A. (2020). An empirical examination of investor sentiment and stock market volatility: evidence from India. *Financial Innovation*, 6(1), 34.
- Pompian, M. (2006): Behavioral Finance and Wealth Management – How to Build Optimal Portfolios That Account for Investor Biases. *Financ Mark Portfolio Manag* 21, 491–492 (2007). <https://doi.org/10.1007/s11408-007-0065-3>

- Putri, S. G., Husni, T., & Rahim, R. (2023). The Impact of Investor Sentiment on *Value and Growth Stocks Return*. *Business and Investment Review*, 1(4), 74-86.
- Ramashar, W., Sandri, S. H., & Hidayat, R. (2022). Faktor Psikologi dan Keputusan Investasi Mahasiswa di Pasar Modal. *Jurnal Riset Akuntansi Dan Keuangan*, 10(1), 93-102.
- Reinganum, M. R. (1999). The significance of market capitalization in portfolio management over time. *Journal of Portfolio Management*, 25(4), 39.
- Reuters. (2022, October 12). Indonesian president orders stress test for economy amid global uncertainty. Diakses dari <https://www.reuters.com/markets/asia/indonesian-president-order-stress-test-economy-amid-global-uncertainty-2022-10-12>
- Ricciardi, V., & Simon, H. K. (2000). What is behavioral finance?. *Business, Education & Technology Journal*, 2(2), 1-9.
- Ritter, J. R. (2003). Differences between European and American IPO markets. *European financial management*, 9(4), 421-434.
- Ryu, D., Kim, H., & Yang, H. (2017). Investor sentiment, trading behavior and stock returns. *Applied Economics Letters*, 24(12), 826-830.
- Safuan, S., Sugandi, E. A., Aziz, O. Q., & Triandhari, R. (2022). Indonesia's Financial Stress Events And Macroeconomic Dynamics. *Bulletin of Monetary Economics and Banking*, 25(3), 323-370.
- Sahi, S. K. (2017). Psychological biases of individual investors and financial satisfaction. *Journal of Consumer Behaviour*, 16(6), 511-535.
- Şahin, M. (2020). Impact of weather on COVID-19 pandemic in Turkey. *Science of the Total Environment*, 728, 138810.
- Schmeling, M. (2009). Investor sentiment and stock returns: some international evidence. *Journal of Empirical Finance*, 16(3), 394-408. <https://doi.org/10.1016/j.jempfin.2009.01.002>
- Schwert, G. W. (1990). Stock volatility and the crash of '87. *The review of financial studies*, 3(1), 77-102.

- Scott, D. W., Stumpp, M., & Xu, Y. (1998). "Equity style returns and asset class benchmarks." *Journal of Portfolio Management*, 24(4), 66-77.
- Seok, J. H., Kim, G., Kim, S. E., & Mark, T. B. (2019). The Impact of Economic Sentiment Index on the Price Relationship between Organic and Conventional Fruits in Korea.
- Seraj, A. H. A., Alzain, E., & Alshebami, A. S. (2022). The roles of financial literacy and overconfidence in investment decisions in Saudi Arabia. *Frontiers in psychology*, 13, 1005075.
- Shah, M. U. D., Shah, A., & Khan, S. U. (2017). *Herding behavior in the Pakistan stock exchange: Some new insights*. *Research in International Business and Finance*, 42, 865-873.
- Sharma, M. S., & Bikhchandani, S. (2000). Herd behavior in financial markets: A review. *IMF Working Papers*, (2000/048).
- Shefrin, Hersh (2005); A behavioral Approach to Asset Pricing; Elsevier Academic Press.
- Shukla, A., Vaya, D., Dadhich, M., & Goel, A. (2024). Impact of Behavioral Biases on Investors' Stock Trading Decisions: A Comprehensive Quantitative Analysis. *Indian Journal Of Science And Technology*, 17(8), 670–678. <https://doi.org/10.17485/ijst/v17i8.2845>
- Spyrou, S. (2013). Herding in financial markets: a review of the literature. *Review of Behavioral Finance*, 5(2), 175-194.
- Statman, M. (2000). Socially responsible mutual funds (corrected). *Financial Analysts Journal*, 56(3), 30-39.
- Su, X. (2021). Can green investment win the favor of investors in China? Evidence from the return performance of green investment stocks. *Emerging Markets Finance and Trade*, 57(11), 3120-3138
- Subedi, D., & Bhandari, D. R. (2024). Impact of psychological factors on investment decisions in Nepalese share market: A mediating role of financial literacy. *International Journal of Economics and Management*, 2(02), 124-138.

- Syarif, D. H., Wahyudi, S., & Muharam, H. (2017). Applying an international CAPM to *herding* behaviour model for integrated stock markets. *Journal of International Studies (2071-8330)*, 10(4).
- Tan, L., Chiang, T. C., Mason, J. R., & Nelling, E. (2008). "Herding behavior in Chinese stock markets: An examination of A and B shares." *Pacific-Basin Finance Journal*, 16(1-2), 61-77.
- Vințe, C., & Ausloos, M. (2023). Portfolio volatility estimation relative to stock market cross-sectional intrinsic entropy. *Journal of Risk and Financial Management*, 16(2), 114.
- Wangzhou, K., Khan, M., Hussain, S., Ishfaq, M., & Farooqi, R. (2021). Effect of regret aversion and information cascade on investment decisions in the real estate sector: The mediating role of risk perception and the moderating effect of financial literacy. *Frontiers in Psychology*, 12, 736753.
- Wermers, R. (1998). "Mutual fund herding and the impact on stock prices." *The Journal of Finance*, 53(2), 581-622.
- Wong, T. S. (2018). *Characteristics of stocks and individual investor herd behavior: A causal-comparative study* (Doctoral dissertation, Walden University).
- Wu, M., Hu, W., & Weng, P. (2023). Herd behaviors in index futures trading: driving factors and impact on market volatility. *Journal of Futures Markets*, 43(10), 1373-1392. <https://doi.org/10.1002/fut.22413>
- Yang, C., & Zhou, L. (2015). Sentiment approach to underestimation and overestimation pricing model. *Economic Modelling*, 51, 280-288.
- Yao, C. Z., & Li, H. Y. (2020). Time-varying lead-lag structure between investor sentiment and stock market. *The North American Journal of Economics and Finance*, 52, 101148.
- Yao, J., Ma, C., & He, W. P. (2014). Investor *herding* behaviour of Chinese stock market. *International Review of Economics & Finance*, 29, 12-29.
- Yoon, J. and Oh, G. (2022). Investor herding behavior in social media sentiment. *Frontiers in Physics*, 10. <https://doi.org/10.3389/fphy.2022.1023071>