

## DAFTAR PUSTAKA

- Agarwal, M., 2015, *Developments in mean-variance efficient portfolio selection*, Springer.
- Agatonovic-Kustrin, S. and Beresford, R., 2000, Basic concepts of artificial neural network (ANN) modeling and its application in pharmaceutical research, *Journal of pharmaceutical and biomedical analysis*, **22 (5)**:717–727.
- Akey, P., Robertson, A. and Simutin, M., 2021, Closet active management of passive funds, *Rotman School of Management Working Paper*, (3874582).
- Alam, K.E., Saputra, K.V.I. and Margaretha, H., 2021, *Stocks clustering with Fourier transformation towards Indonesian stocks for pairs trading and investment diversification*, *AIP Conference Proceedings*, vol. 2423.
- Anadani, I., Sharma, Akshita, Dave, D. and Sharma, Anand, 2023, *A Genetic Algorithm Approach for Portfolio Optimization*, *International Conference on Data Science and Applications*, 113–124.
- Arnone, S., Loraschi, A., Tettamanzi, A. and others, 1993, A genetic approach to portfolio selection, *Neural Network World*, **3 (6)**:597–604.
- Asness, C., Frazzini, A., Israel, R., Moskowitz, T.J. and Pedersen, L.H., 2018, Size matters, if you control your junk, *Journal of Financial Economics*, **129 (3)**:479–509.
- Asness, C.S., Frazzini, A. and Pedersen, L.H., 2012, Leverage aversion and risk parity, *Financial Analysts Journal*, **68 (1)**:47–59.
- Auronen, L., 2003, *Asymmetric information: theory and applications*, *Seminar of Strategy and International Business as Helsinki University of Technology*, vol. 167, 14–18.
- Azizan, N.A., Kuang, L.C. and Ahmed, Z., 2012, Forecasting portfolio risk estimation by using Garch and Var methods, *Research Journal of Finance and Accounting*, **3 (11)**:62–69.
- Baker, M., Bradley, B. and Wurgler, J., 2011, Benchmarks as limits to arbitrage: Understanding the low-volatility anomaly, *Financial Analysts Journal*, **67 (1)**:40–54.
- Ban, G.-Y., Karoui, N. El and Lim, A.E.B., 2018, Machine learning and portfolio optimization, *Management Science*, **64 (3)**:1136–1154.
- Bodie, Z., Kane, A., Marcus, A.J. and Jain, R., 2014, *Investments*, McGraw Hill Higher Education.

- Brealey, R.A., Myers, S.C. and Allen, F., 2020, *Principles of corporate finance*, McGraw-hill.
- Brinson, G.P., Hood, L. and Beebower, G.L., 1986, Determinants of Portfolio Performance, *Financial Analysts Journal*, **42**:133–138.
- Cai, F., Le-Khac, N.-A. and Kechadi, T., 2016, Clustering approaches for financial data analysis: a survey, *arXiv preprint arXiv:1609.08520*.
- Cao, D., Tian, Y. and Bai, D., 2015, Time series clustering method based on Principal Component Analysis, *5th International conference on information engineering for mechanics and materials*, 888–895.
- Cappy, A., 2020, *Neuro-inspired information processing*, John Wiley & Sons.
- Chang, T.-J., Yang, S.-C. and Chang, K.-J., 2009, Portfolio optimization problems in different risk measures using genetic algorithm, *Expert Systems with applications*, **36** (7):10529–10537.
- Chen, A.-S., Leung, M.T. and Daouk, H., 2003, Application of neural networks to an emerging financial market: forecasting and trading the Taiwan Stock Index, *Computers & Operations Research*, **30** (6):901–923.
- Christopherson, J.A., Carino, D.R. and Ferson, W.E., 2009, *Portfolio performance measurement and benchmarking*, McGraw Hill Professional.
- Cong, F. and Oosterlee, C.W., 2016, Multi-period mean–variance portfolio optimization based on Monte-Carlo simulation, *Journal of Economic Dynamics and Control*, **64**:23–38.
- Cooley, J.W. and Tukey, J.W., 1965, An algorithm for the machine calculation of complex Fourier series, *Mathematics of computation*, **19** (90):297–301.
- Costantino, F., Gravio, G. Di and Nonino, F., 2015, Project selection in project portfolio management: An artificial neural network model based on critical success factors, *International Journal of Project Management*, **33** (8):1744–1754.
- Dai, Z. and Wen, F., 2018, Some improved sparse and stable portfolio optimization problems, *Finance Research Letters*, **27**:46–52.
- DeMiguel, V. and Nogales, F.J., 2009, Portfolio selection with robust estimation, *Operations research*, **57** (3):560–577.
- Dochow, R., 2016, *Online algorithms for the portfolio selection problem*, Springer.

- Duffie, D. and Pan, J., 1997, An overview of value at risk, *Journal of derivatives*, **4** (3):7–49.
- Fama, E.F., 1970, Efficient capital markets: A review of theory and empirical work, *The journal of Finance*, **25** (2):383–417.
- Febrianti, S., 2018, Analisis Perbandingan Kinerja Indeks Saham Syariah dengan Indeks Saham Konvensional Periode 2015-2017 (Studi Kasus pada JII dan LQ45).
- Ferdinand, F.V., Sebastian, J., Nata, C., Natalia, F. and Adiwena, S., 2022, COVID-19 Clustering by Province: A Case Study of COVID-19 Cases in Indonesia, *ICIC Express Letters, Part B: Applications*, 389–396.
- Ferreira, F.G.D.C., Gandomi, A.H. and Cardoso, R.T.N., 2021, Artificial Intelligence Applied to Stock Market Trading: A Review, *IEEE Access*, **9**:30898–30917.
- French, K.R., Schwert, G.W. and Stambaugh, R.F., 1987, Expected stock returns and volatility, *Journal of financial Economics*, **19** (1):3–29.
- Ghysels, E., Plazzi, A. and Valkanov, R., 2016, Why invest in emerging markets? The role of conditional return asymmetry, *The Journal of Finance*, **71** (5):2145–2192.
- Goel, A., Tripathi, V. and Agarwal, M., 2021, Information asymmetry and stock returns, *Journal of Advances in Management Research*, **18** (1):85–112.
- Gunjan, A. and Bhattacharyya, S., 2023, A brief review of portfolio optimization techniques, *Artificial Intelligence Review*, **56** (5):3847–3886.
- Hartini, D. and Nurmaleni, N., 2018, Penerapan Model Autoregressive Fractionally Integrated Moving Average (ARFIMA) dalam Prakiraan Data Suku Bunga PUAB (Pasar Uang Antar Bank), *LOGIK@*, **8** (1):24–35.
- Haynes, D., Corns, S. and Venayagamoorthy, G.K., 2012, *An exponential moving average algorithm*, 2012 IEEE Congress on Evolutionary Computation, 1–8.
- Holland, J.H., 1975, Adaptation in neural and artificial system, *Ann Arbor, Univeristy of Michigan Press*.
- Hoppner, F., 1999, *Fuzzy cluster analysis: methods for classification, data analysis and image recognition*, John Wiley.
- Houdt, G. Van, Mosquera, C. and Nápoles, G., 2020, A review on the long short-term memory model, *Artificial Intelligence Review*, **53** (8):5929–5955.

- Ian Goodfellow Yoshua Bengio, A.C.F.B., 2017, *Deep Learning (Adaptive Computation and Machine Learning Series)*, MIT Press.
- Islam, M.R. and Nguyen, N., 2020, Comparison of financial models for stock price prediction, *Journal of Risk and Financial Management*, **13** (8):181.
- Jamal, A., Handayani, A., Septiandri, A.A., Ripmiatin, E. and Effendi, Y., 2018, Dimensionality reduction using pca and k-means clustering for breast cancer prediction, *Lontar Komput. J. Ilm. Teknol. Inf.*, **9** (3):192–201.
- Jorion, P., 2007, *Value at risk: the new benchmark for managing financial risk*, McGraw-Hill.
- Jurek, J.W. and Viceira, L.M., 2010, Optimal Value and Growth Tilts in Long-Horizon Portfolios\*, *Review of Finance*, **15** (1):29–74.
- Kalayci, C.B., Ertenlice, O. and Akbay, M.A., 2019, A comprehensive review of deterministic models and applications for mean-variance portfolio optimization, *Expert Systems with Applications*, **125**:345–368.
- Kassambara, A., 2017, *Practical guide to cluster analysis in R: Unsupervised machine learning*, vol. 1, Sthda.
- Kaufman, L. and Rousseeuw, P.J., 2009, *Finding groups in data: an introduction to cluster analysis*, John Wiley & Sons.
- Khashei, M. and Bijari, M., 2010, An artificial neural network (p, d, q) model for timeseries forecasting, *Expert Systems with applications*, **37** (1):479–489.
- Klinker, F., 2011, Exponential moving average versus moving exponential average, *Mathematische Semesterberichte*, **58**:97–107.
- Kolm, P.N., Tütüncü, R. and Fabozzi, F.J., 2014, 60 years of portfolio optimization: Practical challenges and current trends, *European Journal of Operational Research*, **234** (2):356–371.
- Kramer, O. and Kramer, O., 2017, *Genetic algorithms*, Springer.
- Leland, H.E., 1979, Quacks, lemons, and licensing: A theory of minimum quality standards, *Journal of political economy*, **87** (6):1328–1346.
- Li, M., Wang, G., Yu, Z., Wang, H., Wan, J. and Li, T., 2024, Gaussian mixture model with local consistency: a hierarchical minimum message length-based approach, *International Journal of Machine Learning and Cybernetics*, **15** (2):283–302.
- Lin, C.-C. and Liu, Y.-T., 2008, Genetic algorithms for portfolio selection problems with minimum transaction lots, *European Journal of Operational Research*, **185** (1):393–404.

- Lin, Y., Yan, Y., Xu, J., Liao, Y. and Ma, F., 2021, Forecasting stock index price using the CEEMDAN-LSTM model, *The North American Journal of Economics and Finance*, **57**:101421.
- Liu, S. and Xiao, C., 2021, Application and comparative study of optimization algorithms in financial investment portfolio problems, *Mobile Information Systems*, **2021 (1)**:3462715.
- Ma, Y., Han, R. and Wang, W., 2021, Portfolio optimization with return prediction using deep learning and machine learning, *Expert Systems with Applications*, **165**:113973.
- MacQueen, J., 1967, *Some methods for classification and analysis of multivariate observations*, Proceedings of 5-th Berkeley Symposium on Mathematical Statistics and Probability/University of California Press.
- Madhulatha, T.S., 2012, An overview on clustering methods, *arXiv preprint arXiv:1205.1117*.
- Malik, A., 2023, *Daftar Lengkap Reksadana Terbaik pada 2022, Cuan hingga 13,4%, Bareksa*.
- Mann, A.D., 2022, *Machine Learning Methods to Exploit the Predictive Power of Open, High, Low, Close (OHLC) Data* – PhD thesis, UCL (University College London) .
- Manurung, A.H., Budiharto, W. and Prabowo, H., 2018, Algorithm and modeling of stock prices forecasting based on long short-term memory (LSTM), *ICIC Express Letters*, **12 (12)**:1277–1283.
- Markowitz, H., 1952, Modern portfolio theory, *Journal of Finance*, **7 (11)**:77–91.
- Markowitz, H.M., 1952, Portfolio selection, *Journal of finance*, **7 (1)**:71–91.
- Markowitz, H.M., 1999, The early history of portfolio theory: 1600–1960, *Financial analysts journal*, **55 (4)**:5–16.
- McLeish, D.L., 2011, *Monte Carlo simulation and finance*, vol. 276, John Wiley & Sons.
- Meshram, I.S. and Kulal, P.J., 2021, A COMPARATIVE STUDY OF SVM, LSTM AND LR ALGORITHMS FOR STOCK MARKET PREDICTION USING OHLC DATA, *International Research Journal of Modernization in Engineering Technology and Science*, **3 (10)**.
- Ng, R.T. and Han, J., 2002, CLARANS: a method for clustering objects for spatial data mining, *IEEE Transactions on Knowledge and Data Engineering*, **14 (5)**:1003–1016.

- Nti, I.K., Adekoya, A.F. and Weyori, B., 2020, Efficient Stock-Market Prediction Using Ensemble Support Vector Machine, *Open Computer Science*, **10**:153–163.
- Oh, K.J., Kim, T.Y. and Min, S., 2005, Using genetic algorithm to support portfolio optimization for index fund management, *Expert Systems with applications*, **28** (2):371–379.
- OJK, 2023, *Indonesia Capital Market Roadmap 2023-2027*.
- Pakpahan, K., 2003, Strategi investasi di pasar modal, *The Winners*, **4** (2):138–147.
- Panda, K., 2023, *Analysis of Optimal Portfolio Management Using Hierarchical Clustering*, *2023 IEEE International Conference on Advances in Data-Driven Analytics And Intelligent Systems (ADACIS)*, 1–5.
- Paranita, C., 2015, *Analisis kinerja investasi dalam reksadana saham (equity funds) dengan metode sharpe dan treynor* – PhD thesis, Brawijaya University .
- Persio, L. Di and Honchar, O., 2016, Artificial neural networks architectures for stock price prediction: Comparisons and applications, **10**:403–413.
- Pratiwi, N. and Heriyanto, R., 2017, Analisis Kinerja Reksa Dana Saham Menggunakan Metode Sharpe, Treynor dan Jensen Dengan IHSG dan LQ45 (Reksa Dana Saham Yang Terdaftar di OJK Tahun 2009-2013), *Akuntansi dan Manajemen*, **12** (2):85–114.
- Puspadini, M., 2023, *Investor Gen-Z Dominasi Pasar Modal, Komposisi Nyaris 60%*, *CNBC Indonesia*.
- Putri, K.A., 2023, *Jumlah Investor Pasar Modal di Indonesia Masih Sedikit, BEI Ungkap Penyebabnya*, *infobanknews*.
- Rasekhshaffee, K.C. and Jones, R.C., 2019, Machine learning for stock selection, *Financial Analysts Journal*, **75** (3):70–88.
- Ray, S. and Turi, R.H., 1999, *Determination of number of clusters in k-means clustering and application in colour image segmentation*, *Proceedings of the 4th international conference on advances in pattern recognition and digital techniques*, vol. 137, 143.
- Raychaudhuri, S., 2008, *Introduction to monte carlo simulation*, *2008 Winter simulation conference*, 91–100.
- Reilly, F.K., Brown, K.C., Hedges, P.L. and Chang, P.C., 2011, *Investment Analysis and Portfolio Management* (Text Only), *Cengage Learning*.
- Revata, T., Ivanký, S.K. Van and Vincenttius, F.F., 2023, Comparison of ARIMA, ARFIMA and Artificial Neural Network Models for

Indonesian Stocks Market, 革新的コンピューティング・情報・  
制御に関する速報-B: 応用, 14 (10):1095.

Robert V. Hogg, Allen Craig and Joseph W. McKean, 2004, *Introduction to Mathematical Statistics*, 6th edn., Prentice Hall.

Rokhsatyazdi, E., Rahnamayan, S., Amirinia, H. and Ahmed, S., 2020, *Optimizing LSTM based network for forecasting stock market*, 2020 IEEE congress on evolutionary computation (CEC), 1–7.

Rom, B.M. and Ferguson, K.W., 1994, Post-modern portfolio theory comes of age, *Journal of investing*, 3 (3):11–17.

Ross, S., 1976, The arbitrage pricing theory, *Journal of Economic Theory*, 13 (3):341–360.

Roy, A., 2016, A model of security selection and portfolio building through Z-scores, *Global Business Review*, 17 (2):389–399.

Sassetti, P. and Tani, M., 2006, Dynamic asset allocation using systematic sector rotation, *The Journal of Wealth Management*, 8 (4):59–70.

Schabacker, R., 2005, *Technical analysis and stock market profits*, Harriman House Limited.

Sharpe, W.F., 1964, Capital asset prices: A theory of market equilibrium under conditions of risk, *The journal of finance*, 19 (3):425–442.

Shefrin, H. and Statman, M., 2000, Behavioral portfolio theory, *Journal of financial and quantitative analysis*, 35 (2):127–151.

Shim, J., Siegel, J. and Shim, A., 2012, Moving Averages and Smoothing Techniques: Quantitative Forecasting, pp. 277–288.

Sholihah, A. and Asandimitra, N., 2017, Perbandingan kinerja indeks saham syariah dengan indeks konvensional periode 2011-2016 (studi kasus pada issi dan ihsg), *Jurnal Ilmu Manajemen (JIM)*, 5 (3):1–9.

Solimanpur, M., Mansourfar, G. and Ghayour, F., 2015, Optimum portfolio selection using a hybrid genetic algorithm and analytic hierarchy process, *Studies in Economics and Finance*, 32 (3):379–394.

Specht, K. and Gohout, W., 2003, Portfolio selection using the principal components GARCH model, *Financial Markets and Portfolio Management*, 17 (4):450.

- Sprechmann, P., Bronstein, A.M. and Sapiro, G., 2015, Learning efficient sparse and low rank models, *IEEE transactions on pattern analysis and machine intelligence*, **37** (9):1821–1833.
- Staudemeyer, R.C. and Morris, E.R., 2019, Understanding LSTM—a tutorial into long short-term memory recurrent neural networks, *arXiv preprint arXiv:1909.09586*.
- Sukono, Hidayat, Y., Lesmana, E., Putra, A.S., Napitupulu, H., Supian, S., et al., 2018, *Portfolio optimization by using linear programing models based on genetic algorithm*, IOP conference series: materials science and engineering, vol. 300, 12001.
- Vidal, M. and Vidal-García, J., 2023, Indonesian mutual fund performance, Available at SSRN 3890486.
- Wahdah, R. and Hartanto, J., 2016, Analisis Pengukuran Kinerja Reksa Dana Saham di Indonesia, *Jurnal Manajemen dan Akuntansi*, **13** (1).
- Wet, W.A. de De, 2004, The role of asymmetric information on investments in emerging markets, *Economic Modelling*, **21** (4):621–630.
- Wiranda, L. and Sadikin, M., 2019, Penerapan Long Short Term Memory Pada Data Time Series Untuk Memprediksi Penjualan Produk Pt. Metiska Farma, *Jurnal Nasional Pendidikan Teknik Informatika: JANAPATI*, **8** (3):184–196.
- Wong, S., Chan, J., Azizi, L. and Xu, R., 2020, *Non-stationary neural network for stock return prediction*.
- Worlddata, 2019, *Developing Countries*, WorldData.
- Xing, F.Z., Cambria, E. and Welsch, R.E., 2018, Intelligent asset allocation via market sentiment views, *ieee Computational iNtelligeNCe magaziNe*, **13** (4):25–34.
- Ye, J., Goswami, B., Gu, J., Uddin, A. and Wang, G., 2024, From Factor Models to Deep Learning: Machine Learning in Reshaping Empirical Asset Pricing, *arXiv preprint arXiv:2403.06779*.
- Yi, K., Zhang, Q., Cao, L., Wang, S., Long, G., Hu, L., et al., 2023, A survey on deep learning based time series analysis with frequency transformation, *arXiv preprint arXiv:2302.02173*.
- Yoshino, N., Taghizadeh-Hesary, F. and Otsuka, M., 2021, Covid-19 and optimal portfolio selection for investment in sustainable development goals, *Finance research letters*, **38**:101695.
- Zhang, Y., Li, X. and Guo, S., 2018, Portfolio selection problems with Markowitz's mean-variance framework: a review of literature, *Fuzzy Optimization and Decision Making*, **17**:125–158.

Zhang, Z., Zohren, S. and Roberts, S., 2020, Deep learning for portfolio optimization, *arXiv preprint arXiv:2005.13665*.

