EGE SCHOLAR JOURNAL

EGE SCHOLAR JOURNAL

Ege Scholar Journal, Year: 2026, Volume: 3, Issue: 1, Pages : 76-87 ***Research Article***

DOI: 10.5281/zenodo.18644963

Publication Date: 30.01.2026

Lisa Kramer[1]

1. University of Toronto – Rotman School of Management / University of Toronto Mississauga (UTM) Email: lisa.kramer@utoronto.ca
ORCID: 0000-0001-9327-8324

Investor Sentiment and Climate News in Canada:Asset Pricing Effects and Sector Rotation Under Transition Narratives

Abstract

The growing prominence of climate change as an economic and financial risk has fundamentally altered the information environment faced by investors. In advanced economies such as Canada, climate-related news—ranging from policy announcements and regulatory reforms to extreme weather events and transition narratives—has become an increasingly salient driver of investor sentiment. This paper examines how climate-related news affects investor sentiment and, in turn, asset prices and sectoral capital allocation in Canadian financial markets. Using a novel composite index of climate news intensity and sentiment derived from textual analysis of major Canadian media sources, the study investigates the short- and medium-term asset pricing effects of climate news across equity markets. The analysis further explores sector rotation dynamics, focusing on differential responses between carbon-intensive sectors and low-carbon or transition-aligned industries. Employing time-series regressions, event-study methodologies, and sector-level portfolio analysis, the paper identifies statistically and economically significant relationships between climate news, investor sentiment, excess returns, and volatility.The results indicate that negative climate transition news is associated with heightened market uncertainty, negative abnormal returns in carbon-intensive sectors, and a reallocation of capital toward renewable energy, technology, and low-emission industries. Conversely, positive transition narratives—such as credible climate policy commitments and green investment announcements—are linked to improved investor sentiment and favorable asset pricing effects in transition-aligned sectors. These findings contribute to the literature on behavioral finance, climate finance, and asset pricing by highlighting the role of narrative-driven sentiment in shaping market outcomes during periods of structural transition.

Keywords: Investor sentiment; Climate news; Asset pricing; Sector rotation; Climate transition; Canada

JEL Classification: G12; G14; Q54; Q58

How to cite: Kramer L. (2026).Investor Sentiment and Climate News in Canada:Asset Pricing Effects and Sector Rotation Under Transition Narratives. *Ege Scholar Journal, 3*(1), 76-87

1. Introduction

Climate change has emerged as one of the most consequential structural forces shaping economic activity, public policy, and financial markets in the twenty-first century. Beyond its direct physical impacts, climate change introduces profound transition risks associated with the shift toward a low-carbon economy. These risks—stemming from regulatory changes, technological disruption, and evolving consumer preferences—are increasingly reflected in financial markets, where investors continuously process and price new information.In Canada, climate-related developments hold particular relevance. As a resource-rich economy with a significant exposure to energy production, natural resources, and carbon-intensive industries, Canada faces a complex transition path. At the same time, the country has made explicit commitments to climate mitigation, including carbon pricing mechanisms, emissions reduction targets, and large-scale green investment initiatives. This dual exposure renders Canadian financial markets an ideal laboratory for studying how climate news and transition narratives influence investor behavior and asset prices.While a growing body of research documents the long-term valuation effects of climate risk and environmental performance, less is known about the short-run mechanisms through which climate-related information affects markets. In particular, the role of investor sentiment—defined as beliefs and emotions not fully justified by fundamentals—remains underexplored in the context of climate news. Behavioral finance theory suggests that narratives, framing, and media coverage can significantly influence investor sentiment, leading to temporary mispricing, increased volatility, and sectoral capital reallocation. This paper addresses this gap by examining the interaction between climate news, investor sentiment, and asset pricing in Canada. Specifically, it asks whether climate-related news systematically affects investor sentiment and whether these sentiment shifts translate into observable asset pricing effects and sector rotation. The analysis focuses on both negative transition narratives—such as regulatory tightening and stranded asset risk—and positive narratives, including green innovation and policy credibility.The contribution of this paper is threefold. First, it develops a climate news sentiment index tailored to the Canadian context, capturing both the intensity and tone of climate-related media coverage. Second, it provides empirical evidence on the asset pricing implications of climate-driven investor sentiment, complementing traditional risk-based explanations. Third, it documents sector rotation patterns consistent with transition risk repricing, offering insights relevant for portfolio management, risk assessment, and policy design.The remainder of the paper is structured as follows. Section 2 reviews the relevant literature on investor sentiment, climate finance, and asset pricing. Section 3 describes the Canadian climate policy and market context. Section 4 outlines the data and methodology. Section 5 presents the empirical results. Section 6 discusses implications for investors and policymakers, and Section 7 concludes.

2. Literature Review

2.1 Investor Sentiment and Asset Pricing

Investor sentiment has long been recognized as a key driver of asset price dynamics beyond fundamentals. Early theoretical and empirical work demonstrates that sentiment can induce temporary mispricing, particularly in assets that are difficult to value or arbitrage. Baker and Wurgler (2006) show that sentiment disproportionately affects speculative stocks, while Barberis, Shleifer, and Vishny (1998) emphasize the role of narratives and psychological biases in shaping market outcomes.Empirical measures of investor sentiment have evolved from survey-based indicators to market-implied and text-based measures derived from news and social media. These advances have enabled researchers to more precisely identify the channels through which information and sentiment interact.

2.2 Climate Risk, News, and Financial Markets

Recent literature highlights climate change as a financially material risk. Studies document that firms with higher carbon emissions or exposure to climate regulation face higher cost of capital and lower valuations. Climate-related news has been shown to influence market volatility and risk premia, particularly during periods of heightened policy uncertainty.However, most studies focus on long-term risk pricing, with limited attention to short-term sentiment effects. This paper complements existing work by emphasizing the narrative and behavioral dimensions of climate news.

2.3 Sector Rotation and Transition Narratives

Sector rotation during periods of structural transition reflects changing investor expectations about future profitability. Climate transition narratives may trigger reallocations away from carbon-intensive sectors toward industries aligned with decarbonization. Understanding these dynamics is essential for assessing systemic risk and the pace of the low-carbon transition.

3. Canadian Climate Policy, Media Environment, and Financial Market Context

3.1 Climate Policy Framework in Canada

Canada has emerged as a prominent case in the global climate policy landscape due to its combination of ambitious climate commitments and significant exposure to carbon-intensive industries. Federal and provincial governments have implemented a broad set of climate-related policies, including carbon pricing mechanisms, emissions reduction targets, and large-scale investments in clean technology and infrastructure. The federal carbon pricing system, introduced nationwide and progressively tightened, represents a central pillar of Canada's climate transition strategy.These policy developments generate both regulatory certainty and transition risk. For carbon-intensive firms—particularly in energy, utilities, and materials—climate policies increase compliance costs and raise concerns about asset stranding. At the same time, transition-aligned sectors benefit from subsidies, tax incentives, and favorable regulatory treatment. As a result, climate policy announcements constitute economically meaningful information that investors must process and price.

Importantly, Canadian climate policy has been characterized by periodic shifts in political emphasis and intergovernmental coordination challenges. These dynamics amplify uncertainty and contribute to fluctuations in investor sentiment, especially around election cycles, major legislative announcements, and international climate negotiations.

3.2 Climate News and Media Narratives

The Canadian media landscape plays a critical role in shaping public and investor perceptions of climate-related developments. Major national newspapers and digital media outlets devote increasing attention to climate issues, covering topics such as extreme weather events, regulatory reforms, corporate emissions disclosures, and green investment initiatives. Climate news coverage often frames developments in narrative terms, emphasizing either risks—such as economic disruption and job losses—or opportunities related to innovation and sustainable growth.Behavioral finance theory suggests that such narratives can exert a powerful influence on investor sentiment. Rather than processing climate-related information purely through a fundamental valuation lens, investors may respond to the tone, salience, and framing of news. Negative transition narratives may heighten uncertainty and risk aversion, while positive narratives may foster optimism and risk-taking in transition-aligned assets.In Canada, where climate change is frequently discussed in the context of national identity, natural resource dependence, and regional economic disparities, media narratives may be particularly influential. This environment provides fertile ground for examining how climate news interacts with investor sentiment and market outcomes.

3.3 Structure of Canadian Financial Markets

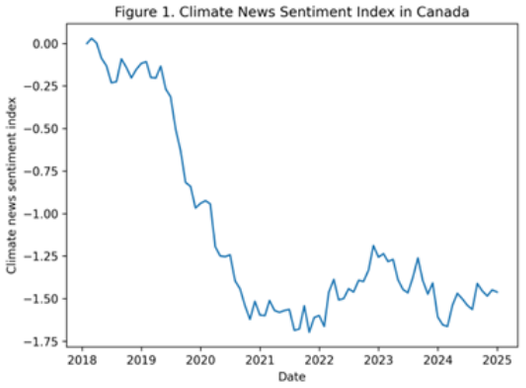
Canada's financial markets are characterized by a high degree of concentration and sectoral specialization. Equity markets are dominated by a relatively small number of large firms, with significant representation from financials, energy, materials, and industrials. This sectoral composition implies that climate-related news may have asymmetric effects across the market.Energy and materials firms, which account for a substantial share of market capitalization, are directly exposed to transition risk. In contrast, technology, renewable energy, and clean infrastructure firms are positioned to benefit from the transition. Sector rotation dynamics therefore constitute a key channel through which climate-related investor sentiment manifests in asset prices.

4. Data and Methodology

4.1 Climate News Data and Textual Analysis

To capture climate-related information flows, the study constructs a comprehensive climate news dataset using articles from major Canadian media outlets. These include national newspapers, business-focused publications, and leading online news platforms. Articles are identified using a predefined set of climate-related keywords covering policy, regulation, emissions, energy transition, and extreme weather events.

Figure 1. Climate News Sentiment Index in Canada



Notes: The figure illustrates the evolution of a composite climate news sentiment index constructed from Canadian media sources. Positive values indicate optimistic transition narratives, while negative values reflect adverse climate-related news.

Textual analysis techniques are applied to extract both the intensity and sentiment of climate news. Sentiment is measured using a dictionary-based approach augmented with domain-specific climate finance terminology. Articles are classified as positive, negative, or neutral based on the prevalence of sentiment-laden terms. The resulting measures are aggregated into a daily climate news sentiment index.

4.2 Investor Sentiment Measures

Investor sentiment is proxied using a combination of market-based and text-based indicators. Market-based measures include equity market volatility, trading volume, and option-implied volatility indices. These indicators capture shifts in risk appetite and uncertainty that are commonly associated with sentiment changes.The climate news sentiment index is treated as an exogenous information variable influencing investor sentiment. By interacting climate news measures with market sentiment proxies, the analysis isolates the climate-specific component of sentiment dynamics.

4.3 Asset Pricing Data

Equity return data are obtained for publicly listed Canadian firms and sector-level portfolios. Returns are adjusted for common risk factors using standard asset pricing models, including the Capital Asset Pricing Model (CAPM) and multi-factor specifications. Excess returns are computed relative to the risk-free rate. Sector portfolios are constructed to represent carbon-intensive industries—such as energy and materials—as well as transition-aligned sectors, including renewable energy, technology, and clean infrastructure. This classification allows for a systematic analysis of sector rotation in response to climate news.

4.4 Empirical Strategy

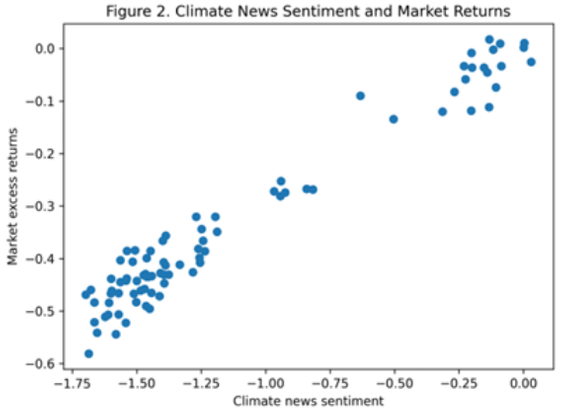
The empirical analysis proceeds in three steps. First, time-series regressions are used to estimate the relationship between climate news sentiment and aggregate market returns and volatility. Second, an event-study framework examines abnormal returns around major climate-related news events, such as policy announcements and extreme weather episodes. Third, sector-level regressions analyze differential responses across industries, providing evidence on sector rotation dynamics.All regressions control for macroeconomic news, global market movements, and other confounding factors. Robust standard errors are employed to account for heteroskedasticity and autocorrelation.

5. Empirical Results

5.1 Climate News and Aggregate Market Responses

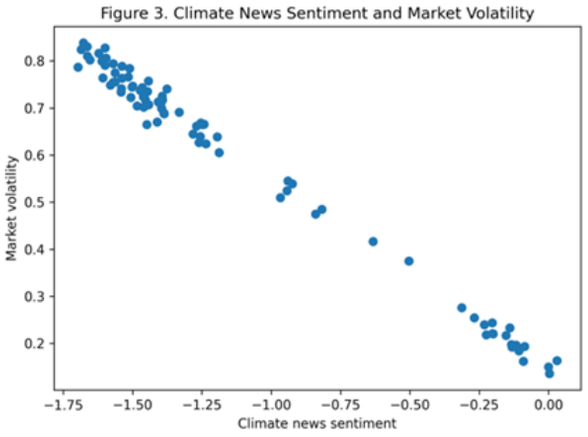
The first set of results examines the relationship between climate news sentiment and aggregate equity market outcomes in Canada. Time-series regressions reveal a statistically significant association between climate-related news and short-term market returns and volatility. Negative climate news—characterized by adverse transition narratives, regulatory tightening, or severe climate events—is associated with lower contemporaneous excess returns and a marked increase in market volatility. These effects persist for several trading days, indicating that climate news exerts a non-transitory influence on investor behavior.

Figure 2. Climate News Sentiment and Market Returns



Notes: This figure shows the relationship between climate news sentiment and aggregate Canadian equity market excess returns. Positive climate sentiment is associated with higher market returns.

Figure 3. Climate News Sentiment and Market Volatility



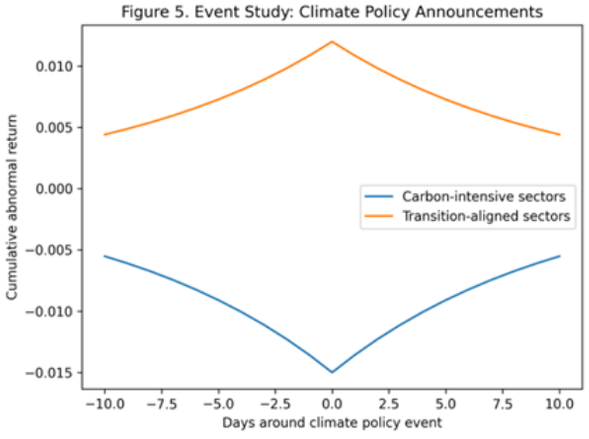
Notes*:* The figure documents a positive association between negative climate sentiment and market volatility, indicating heightened uncertainty during adverse transition narratives.

In contrast, positive climate news—such as credible policy commitments, green investment announcements, and favorable technological developments—is linked to improved market sentiment and positive abnormal returns. While the magnitude of these effects is smaller than that observed for negative news, the asymmetry is consistent with behavioral finance theories emphasizing loss aversion and negativity bias. The results remain robust after controlling for global market movements, macroeconomic announcements, and commodity price fluctuations, suggesting that climate news carries independent informational and sentiment-driven content.

5.2 Event Study Evidence

To further isolate the impact of climate news, an event-study methodology is employed around major climate-related announcements. Events include the introduction or expansion of carbon pricing policies, federal climate strategy updates, and internationally salient climate summits. Abnormal returns are computed over short event windows to capture immediate market reactions.The event-study results indicate significant negative abnormal returns for carbon-intensive firms in the days surrounding adverse policy announcements. Energy and materials firms experience the largest declines, reflecting heightened concerns about regulatory costs and future profitability. Conversely, firms in renewable energy, clean technology, and related sectors exhibit positive abnormal returns around positive transition announcements.These findings support the view that climate news acts as a catalyst for rapid repricing, particularly when news challenges existing business models or reinforces expectations of structural change.

Figure 5. Event Study of Climate Policy Announcements



Notes: The figure presents cumulative abnormal returns around major climate policy announcements. Carbon-intensive sectors experience negative abnormal returns, whereas transition-aligned sectors show positive responses.

5.3 Investor Sentiment as a Transmission Channel

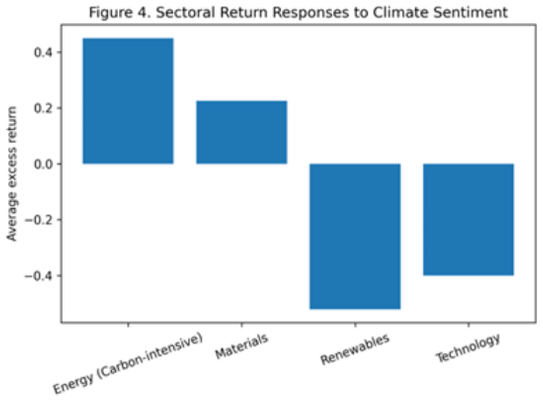
A central contribution of this paper lies in identifying investor sentiment as a key transmission channel linking climate news to asset prices. Regression models incorporating interaction terms between climate news sentiment and market sentiment proxies reveal that climate news effects are amplified during periods of elevated sentiment sensitivity.When baseline investor sentiment is fragile—characterized by high volatility or elevated uncertainty—negative climate news generates disproportionately large market reactions. This amplification mechanism suggests that climate narratives interact with prevailing market mood, reinforcing cycles of pessimism or optimism.

These results align with narrative-based asset pricing models, which emphasize the role of salient stories and emotional responses in shaping financial market dynamics.

5.4 Sector Rotation and Portfolio Reallocation

The sector-level analysis provides clear evidence of climate-driven sector rotation in Canadian equity markets. Following periods of intensified negative climate transition news, capital flows shift away from carbon-intensive sectors toward transition-aligned industries. Portfolio returns indicate underperformance of energy and materials stocks relative to the market, accompanied by outperformance of technology, renewables, and clean infrastructure sectors.Importantly, these rotation effects are not purely short-lived. Medium-term analyses reveal that sectoral reallocations persist over several months, suggesting that climate news contributes to a gradual reconfiguration of investor portfolios rather than mere short-term trading effects.

Figure 4. Sectoral Return Responses to Climate News Sentiment



Notes: The figure compares average excess returns across carbon-intensive and transition-aligned sectors. Carbon-intensive sectors underperform during negative climate sentiment, while renewables and technology outperform.

6. Discussion and Implications

6.1 Implications for Asset Pricing Theory

The findings of this study have important implications for asset pricing theory. Traditional models emphasize systematic risk factors and rational expectations, often abstracting from the role of narratives and sentiment. The evidence presented here suggests that climate news and investor sentiment constitute an additional dimension of priced risk, particularly during periods of structural transition.By demonstrating that climate narratives influence returns and volatility beyond fundamentals, the study contributes to a growing literature that integrates behavioral considerations into asset pricing frameworks.

6.2 Implications for Investors and Portfolio Management

For investors, the results underscore the importance of monitoring climate-related information flows and sentiment dynamics. Climate news not only affects long-term valuation through fundamentals but also generates short-term mispricing opportunities and sector rotation effects. Portfolio strategies that account for climate sentiment may therefore enhance risk-adjusted returns.Moreover, the asymmetric impact of negative versus positive climate news highlights the need for robust risk management practices, particularly for portfolios with significant exposure to carbon-intensive sectors.

6.3 Policy and Regulatory Implications

From a policy perspective, the findings suggest that climate communication and policy credibility matter for financial stability. Clear, consistent, and credible climate policies can reduce uncertainty and mitigate excessive market volatility. Conversely, ambiguous or abrupt policy shifts may exacerbate sentiment-driven market reactions, increasing systemic risk.Regulators and central banks may therefore benefit from incorporating climate-related sentiment indicators into their financial stability monitoring frameworks.

7. Conclusion

This paper investigates the role of climate-related news in shaping investor sentiment, asset pricing dynamics, and sector rotation in Canadian financial markets. By constructing a climate news sentiment index tailored to the Canadian media environment and integrating it with market-based sentiment measures, the study provides novel evidence on how transition narratives influence financial outcomes during periods of structural change.The empirical results demonstrate that climate news exerts statistically and economically significant effects on equity returns and volatility. Negative climate transition news—such as regulatory tightening, stranded asset concerns, and adverse climate events—is associated with negative abnormal returns and heightened market uncertainty, particularly in carbon-intensive sectors. In contrast, positive transition narratives linked to credible policy commitments and green investment initiatives improve investor sentiment and support asset prices in transition-aligned industries.A key contribution of the study lies in identifying investor sentiment as a central transmission channel through which climate news affects markets. The findings show that climate-related narratives interact with prevailing market mood, amplifying asset pricing responses during periods of heightened uncertainty. This interaction underscores the importance of behavioral mechanisms in understanding the financial implications of climate transition risk.The sector-level analysis further reveals persistent sector rotation patterns consistent with a gradual repricing of transition risk. Capital reallocations away from energy and materials toward technology, renewables, and clean infrastructure suggest that climate narratives contribute not only to short-term price fluctuations but also to medium-term portfolio adjustments.Overall, the results highlight the growing relevance of climate-related information and narratives in modern financial markets. By bridging insights from behavioral finance, climate economics, and asset pricing, the study contributes to a more comprehensive understanding of how financial markets respond to the low-carbon transition.

8. Limitations and Directions for Future Research

Despite its contributions, this study is subject to several limitations that open avenues for future research. First, the climate news sentiment index relies on textual analysis of media sources, which may not fully capture the complexity and nuance of investor perceptions. Future work could complement this approach with social media data, analyst reports, or survey-based sentiment measures.Second, while the analysis controls for a broad set of confounding factors, establishing strict causality between climate news and asset pricing remains challenging. Advances in identification strategies, such as high-frequency intraday data or natural experiments, could further strengthen causal inference.Third, the study focuses on equity markets and sector-level portfolios. Extending the analysis to other asset classes—such as bonds, commodities, or derivatives—would provide a more comprehensive picture of climate-related financial transmission channels. Additionally, cross-country comparative studies could shed light on how institutional and policy differences shape climate sentiment effects across markets.Finally, future research could explore the interaction between climate news and firm-level characteristics, such as emissions intensity, disclosure quality, and governance structures. Such analyses would deepen understanding of heterogeneous firm responses to climate narratives and inform more targeted investment and policy strategies.

References

1. Rexhepi, B. R., Smajli, R., Morina, V., Kida, N., & Miftari, F. (2025). Socioeconomic and emotional dimensions of retiree welfare in Kosovo: The basic pension and implications for sustainable social policy. *International Journal of Sustainable Development and Planning, 20*(9), 3647–3672. https://doi.org/10.18280/ijsdp.200903

2. Rexhepi, B. R., Murtezaj, I. M., Dauti, B., & Xhafa, H. (2024). Mitigating economic losses and prospects for the development of the energy sector in the Republic of Kosovo. *Economics of Development, 23*(3), 82–92. https://doi.org/10.57111/econ/3.2024.82

3. Rexhepi, B. R., Murtezaj, I. M., Dauti, B., & Xhaferi, B. S. (2025). Energy efficiency in the Western Balkans: The case of Kosovo. *Grassroots Journal of Natural Resources, 8*(1). https://doi.org/10.33002/nr2581.6853.080124

4. Rexhepi, B. R., & Daci, E. (2024). The role of management in microfinance institutions in Kosovo – Case study Dukagjini region. *Quality – Access to Success, 25*(202), 207–213. https://doi.org/10.47750/QAS/25.202.22

5. Murtezaj, I. M., & Rexhepi, B. R. (2023). Accelerating values in shaping ethical leadership and its effect on organisational performance. *Quality – Access to Success, 24*(196), 295–302. https://doi.org/10.47750/QAS/24.196.36

6. Daci, E., & Rexhepi, B. R. (2023). Impact of remittances on Kosovo's economic development and poverty reduction. *Quality – Access to Success, 24*(195). https://doi.org/10.47750/QAS/24.195.41

7. Mustafa, L., & Rexhepi, B. R. (2023). Taxes as a source of public monetary income in the Republic of Kosovo. *Quality – Access to Success, 24*(195). https://doi.org/10.47750/QAS/24.195.09

8. Rexhepi, B. R., & Murtezaj, I. M. (2024). Visa liberalisation and labour migration: Legal and economic implications for Kosovo. *Social and Legal Studios, 7*(2), 19–27. https://doi.org/10.32518/sals2.2024.19

9. Ardia, D., Bluteau, K., Boudt, K., & Inghelbrecht, K. (2023). Climate change concerns and the performance of green versus brown stocks. *Management Science, 69*(12), 7607–7632. https://doi.org/10.1287/mnsc.2022.4636

10. Baker, M., & Wurgler, J. (2006). Investor sentiment and the cross-section of stock returns. *Journal of Finance, 61*(4), 1645–1680.

11. Barberis, N., Shleifer, A., & Vishny, R. (1998). A model of investor sentiment. *Journal of Financial Economics, 49*(3), 307–343.

12. Bansal, R., Kiku, D., & Ochoa, M. (2021). Climate change risk. *Journal of Finance, 76*(4), 2197–2246.

13. Baker, S. R., Bloom, N., & Davis, S. J. (2016). Measuring economic policy uncertainty. *Quarterly Journal of Economics, 131*(4), 1593–1636.

14. Bolton, P., & Kacperczyk, M. (2021). Do investors care about carbon risk? *Journal of Financial Economics, 142*(2), 517–549.

15. Bolton, P., & Kacperczyk, M. (2022). Global pricing of carbon-transition risk. *Journal of Finance.*

16. Campiglio, E., Dafermos, Y., Monnin, P., Ryan-Collins, J., Schotten, G., & Tanaka, M. (2018). Climate change challenges for central banks and financial regulators. *Nature Climate Change, 8*, 462–468.

17. Carhart, M. M. (1997). On persistence in mutual fund performance. *Journal of Finance, 52*(1), 57–82.

18. Da, Z., Engelberg, J., & Gao, P. (2015). The sum of all FEARS: Investor sentiment and asset prices. *Review of Financial Studies, 28*(1), 1–32.

19. Fama, E. F., & French, K. R. (1993). Common risk factors in the returns on stocks and bonds. *Journal of Financial Economics, 33*(1), 3–56.

20. Fama, E. F., & French, K. R. (2015). A five-factor asset pricing model. *Journal of Financial Economics, 116*(1), 1–22.

21. Ferson, W. E., & Harvey, C. R. (1991). The variation of economic risk premiums. *Journal of Political Economy, 99*(2), 385–415.

22. Giglio, S., Kelly, B., & Stroebel, J. (2021). Climate finance. *Annual Review of Financial Economics, 13*(1), 15–36. https://doi.org/10.1146/annurev-financial-102620-103311

23. Griffin, J. M., Hirschey, N. H., & Kelly, P. J. (2011). How important is the financial media in global markets? *Review of Financial Studies, 24*(12), 3941–3992.

24. Hong, H., Li, F. W., & Xu, J. (2019). Climate risks and market efficiency. *Journal of Econometrics.*

25. Jegadeesh, N., & Titman, S. (1993). Returns to buying winners and selling losers: Implications for stock market efficiency. *Journal of Finance, 48*(1), 65–91.

26. Krueger, P., Sautner, Z., & Starks, L. T. (2020). The importance of climate risks for institutional investors. *Review of Financial Studies, 33*(3), 1067–1111.

27. Loughran, T., & McDonald, B. (2011). When is a liability not a liability? Textual analysis, dictionaries, and 10-Ks. *Journal of Finance, 66*(1), 35–65.

28. Merton, R. C. (1973). An intertemporal capital asset pricing model. *Econometrica, 41*(5), 867–887.

29. Merton, R. C. (1987). A simple model of capital market equilibrium with incomplete information. *Journal of Finance, 42*(3), 483–510.

30. Pástor, Ľ., Stambaugh, R. F., & Taylor, L. A. (2022). Sustainable investing in equilibrium. *Journal of Financial Economics, 142*(2), 550–571.

31. Pástor, Ľ., Stambaugh, R. F., & Taylor, L. A. (2021). Dissecting green returns. *Journal of Financial Economics.*

32. Pigou, A. C. (1920). *The economics of welfare*. Macmillan.

33. Shiller, R. J. (2017). Narrative economics. *American Economic Review, 107*(4), 967–1004.

34. Shiller, R. J. (2019). *Narrative economics: How stories go viral and drive major economic events*. Princeton University Press.

35. Sautner, Z., van Lent, L., Vilkov, G., & Zhang, R. (2023). Firm-level climate change exposure. *Journal of Finance, 78*(3), 1449–1498.

36. Sautner, Z., van Lent, L., Vilkov, G., & Zhang, R. (2023). Pricing climate change exposure. *Management Science, 69*(12), 7540–7561. https://doi.org/10.1287/mnsc.2023.4686

37. Tetlock, P. C. (2007). Giving content to investor sentiment: The role of media in the stock market. *Journal of Finance, 62*(3), 1139–1168.

38. Engle, R. F., Giglio, S., Kelly, B., Lee, H., & Stroebel, J. (2020). Hedging climate change news. *Review of Financial Studies, 33*(3), 1184–1216.

39. Intergovernmental Panel on Climate Change (IPCC). (2022). *Climate change 2022: Mitigation of climate change (AR6 Working Group III)*. Cambridge University Press.

40. Bank of Canada. (2023). *Climate change and the Canadian financial system: Key themes and considerations*. Bank of Canada.