

Review

A Review of Factors that influence Equity Premium Literature: A Mini-Review Approach

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Abstract: The equity premium (market risk premium) is one of the most crucial a basis for consideration of asset allocation and is one of the centers of asset pricing. Numerous previous researches have examined the factors that predict the size of the premium equity (excess return risk asset less risk-free assets). The premium equity size is why investors choose risky investments (stocks) over non-risk investments (saving products). This study aims to comprehend the predictor of the equity premium. This study was designed using qualitative approaches by reviewing several relevant pieces of literature. A total of 49 articles were collected from Science Direct, Wiley online library, and Taylor & Francis. The results indicated that oil price negatively affects the equity premium, especially during recessions and gold bars or coins. The economic policy uncertainty and return dispersion have negative relationships in China and others but not in U.S. commodities. Economic indicators have failed to predict equity premium in recession but have power with nonparametric tests in bullish markets. Technical indicators are better than economic indicators for predicting equity premium. The policy implication of this review article is the finding of trends in researching premium equity using predictive regression and structured predictive input that focuses more on the U.S. than on emerging markets, and none of the models have reached past 80 percent. Future research should make models analyze technical indicators and news by adding asymmetry, grouping based on equity and commodity distribution, time and profitability, and dynamic and macro models in emerging markets.

Keywords: equity premium; economic policy uncertainty; commodity; predictive regression; mini-review approach



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1. Introduction

In explaining the size of premium equity, it depends on two assets, namely risky assets, which are described here as stocks, and non-risk assets, which are described as treasury bills (US). It is hypothesized that the future movement of premium equity cannot be determined by stocks alone but also by the country's risk-free interest rate. In addition, stock movements in the future can be determined by various factors, namely economic policy such as monetary and fiscal policy (Bekiros et al., 2016; Christou & Gupta, 2020), macroeconomic factors such as interest rates (Buncic & Tischhauser, 2017; Nonejad, 2020), commodity

price such oil price (Wang et al., 2019), fundamental economic factors such as dividend and earnings growth rate (Smith, 2017), financial ratios (Algaba & Boudt, 2017), industrial factors (Donadelli & Persha, 2014), technical factors (Dai, Zhu, et al., 2021), news factors (Breugem & Marfè, 2020) or factors from the history of stock movements (Andreou & Ghysels, 2021), and factors of the number of sellers and buyers (Baur & Löffler, 2015). The size of the riskless assets can also be determined by how expansive or contractive a country is in determining the size of the interest rate.

In the era of globalization, where almost all countries are in an open economy, the interest rate in a country will significantly influence the interest in investing in that country. The decision to increase interest rates can sometimes be caused to attract too much public money, or the country is undertaking a significant expansion for development. These two reasons make differences in goals and objectives so that the results in the future are also different. Safe heaven investment is an alternative in allocating assets. Investors are not only seduced with riskless assets guaranteed by the state; the fact is that commodities such as gold and soybeans are also goods that influence the purchase decision of shares and even riskless assets. Common predictors are dividend yield (Fama & French, 1988) and other macroeconomic valuation ratios such as interest rates (Welch & Goyal, 2008). Many studies focus on predictors of stock market returns after 1945, and data are controversial on whether or not these predictors are developed (Campbell & Thompson, 2008; Cochrane, 2008; Welch & Goyal, 2008).

2. Materials and Methods

This study was designed using qualitative approaches by reviewing several relevant pieces of literature. The articles reviewed were 48 and a review articles, with the keyword equity premium predictability from 2014-2021. Nearly 95% of the articles downloaded are from Elsevier's publications, and the rest are from Taylor & France, Wiley, and Springer online. This study linked a mini-review on equity premium by reading and comparing 48 peer-reviewed journal articles. These articles are summarized in Tables 1 and 2. The first table shows the information's journal articles about the authors, title, journal, publisher, and year of publications. The second table presents the content of journal articles such as title, objectives, findings, and recommendations.

Table 1. The articles' Author(s), Title, Journal, Publisher and Year

No	Author	Title	Journal	Publisher	Year
1	Hubert Dichtl, Wolfgang Drobetz, Andreas Neuhierl, Viktoria-Sophie Wendt	Data snooping in equity premium prediction	International Journal of Forecasting	Elsevier	2021
2	Elena Andreou, Eric Ghysels	Predicting the VIX and the volatility risk premium: The role of short-run funding spreads Volatility Factors	Journal of Econometrics	Elsevier	2021
3	Patrick Launhardt, Felix Miebs	Aggregate implied cost of capital, option-implied information and equity premium predictability	Finance Research Letters	Elsevier	2020
4	Tuan Hoa, Yen Nguyen, Bhavik Parikh, Dinh-Tri Vo	Does foreign exchange risk matter to equity research analysts when forecasting stock prices? Evidence from U.S. firms	International Review of Financial Analysis	Elsevier	2020
5	Anwen Yin	Equity premium prediction and optimal portfolio decision with Bagging	North American Journal of Economics and Finance	Elsevier	2020

6	Ilias Tsiakas, Jiahao Li, Haibin Zhang	Equity premium prediction and the state of the economy	Journal of Empirical Finance	Elsevier	2020
7	Christina Christou, Rangan Gupta	Forecasting equity premium in a panel of OECD countries: The role of economic policy uncertainty	The Quarterly Review of Economics and Finance	Elsevier	2020
8	Yaojie Zhang, Feng M, Yin Liao	Forecasting global equity market volatilities	International Journal of Forecasting	Elsevier	2020
9	Zhiyuan Pan, Davide Pettenuzzo, Yudong Wang	Forecasting stock returns: A predictor-constrained approach	Journal of Empirical Finance	Elsevier	2020
10	Yugui Zhang, Jie Zhu, Xiaoneng Zhu	Investing for the long run when expected equity premium is nonnegative	Pacific-Basin Finance Journal	Elsevier	2020
11	Matthijs Breugem, Roberto Marfè	Long-run versus short-run news and the term structure of equity	Finance Research Letters	Elsevier	2020
12	Jaroslav Horvath	Macroeconomic disasters and the equity premium puzzle: Are emerging countries riskier?	Journal of Economic Dynamics & Control	Elsevier	2020
13	Charles Cao, Timothy Simin, Han Xiao	Predicting the equity premium with the implied volatility spread	Journal of Financial Markets	Elsevier	2020
14	Nima Nonejad	Predicting equity premium by conditioning on macroeconomic variables: A prediction selection strategy using the price of crude oil	Finance Research Letters	Elsevier	2020
15	Athanasios P. Fassas	Risk aversion connectedness in developed and emerging equity markets before and after the COVID-19 pandemic	Heliyon	Elsevier	2020
16	O Bustos, A. Pomares-Quimbaya	Stock market movement forecast: A Systematic review	Expert Systems with Applications	Elsevier	2020
17	Zhifeng Dai, Huiting Zhou, Jie Kang, Fenghua Wen	The skewness of oil price returns and equity premium predictability	Energy Economics	Elsevier	2020
18	Ferdinand Othieno, Nicholas Biekpe	Estimating the conditional equity risk premium in African frontier markets	Research in International Business and Finance	Elsevier	2019
19	Yudong Wang, Zhiyuan Pan, Li Liu, Chongfeng Wu	Oil price increases and the predictability of equity premium	Journal of Banking and Finance	Elsevier	2019
20	Loukia Meligkotsidou, Ekaterini Panopoulou,	Out-of-sample equity premium prediction: a complete subset quantile regression approach	European Journal Finance	Taylor & Francis	2019

21	Ioannis D. Vrontos & Spyridon D. Vrontos Ji Ho Kwon	Tail risk and the consumption CAPM	Finance Research Letters	Elsevier	2019
22	Matthias X. Hanauer, Jochim G. Lauterbach	The cross-section of emerging market stock returns	Emerging Markets Review	Elsevier	2019
23	Efthymia Symitsi, Lazaros Symeonidis, Apostolos Kourtis, Raphael Markellos	Covariance forecasting in equity markets	Journal of Banking and Finance	Elsevier	2018
24	Nima Nonejad	Déjà vol oil? Predicting S&P 500 equity premium using crude oil price volatility: Evidence from old and recent time-series data	International Review of Financial Analysis	Elsevier	2018
25	Min Zhu, Rui Chen, Ke Du, You-Gan Wang	Dividend growth and equity premium predictability	International Review of Economics and Finance	Elsevier	2018
26	Syed Ali Raza, Isma Zaighum, Nida Shah	Economic policy uncertainty, equity premium and dependence between their quantiles: Evidence from quantile-on-quantile approach	Physica A	Elsevier	2018
27	Adam Stivers	Equity premium predictions with many predictors: A risk-based explanation of the size and value factors	Journal of Empirical Finance	Elsevier	2018
28	Nick Baltas, Dimitrios Karyampas	Forecasting the equity risk premium: The importance of regime-dependent evaluation	Journal of Financial Markets	Elsevier	2018
29	Xiaoxiao Tang, Feifang Hu, Peiming Wang	Out-of-sample equity premium prediction: A scenario analysis approach	Journal of Forecasting	Wiley Online Library	2018
30	Rangan Gupta, John W. Muteba Mwamba, Mark E. Wohar	The role of partisan conflict in forecasting the U.S. equity premium: A nonparametric approach	Finance Research Letters	Elsevier	2018
31	Zheyao Pan, Kam Fong Chan	A new government bond volatility index predictor for the U.S. equity premium	Pacific-Basin Finance Journal	Elsevier	2017
32	Simon C. Smith	Equity premium estimates from economic fundamentals under structural breaks	International Review of Financial Analysis	Elsevier	2017
33	Jiahan Li, Ilias Tsiakas	Equity premium prediction: The role of economic and statistical constraints	Journal of Financial Markets	Elsevier	2017

34	Andres Algaba, Kris Boudta	Generalized financial ratios to predict the equity premium	Economic Modelling	Elsevier	2017
35	Daniel Buncic, Martin Tischhauser	Macroeconomic factors and equity premium predictability	International Review of Economics and Finance	Elsevier	2017
36	Efstathios Avdis, Jessica A. Wachter	Maximum likelihood estimation of the equity premium	Journal of Financial Economics	Elsevier	2017
37	Xiao-Ming Li	New evidence on economic policy uncertainty and equity premium	Pacific-Basin Finance Journal	Elsevier	2017
38	Gueorgui I. Kolev, Rasa Karapandza	Out-of-sample equity premium predictability and sample split-invariant inference	Journal of Banking and Finance	Elsevier	2017
39	Paulo Maio	Cross-sectional return dispersion and the equity premium	Journal of Financial Markets	Elsevier	2016
40	Fabian Baetje, Lukas Menkhoff	Equity premium prediction: Are economic and technical indicators unstable?	International Journal of Forecasting	Elsevier	2016
41	Stelios Bekiros, Rangan Gupta, Anandamayee Majumdar	Incorporating economic policy uncertainty in U.S. equity premium models: A nonlinear predictability analysis	Finance Research Letters	Elsevier	2016
42	Nuno Silva	Equity premia predictability in the Euro Zone	The Spanish Review of Financial Economics	Elsevier	2015
43	Jushan Bai, Guofu Zhou	Fama–MacBeth two-pass regressions: Improving risk premia estimates	Finance Research Letters	Elsevier	2015
44	Dirk G. Baur, Gunter Löffler	Predicting the equity premium with the demand for gold coins and bars	Finance Research Letters	Elsevier	2015
45	Pablo, Javier Aguirreamalloa, Isabel Fernandez Acín	Required Market Risk Premium among countries in 2012	The Journal of Finance and Data Science 1	Elsevier	2015
46	Jessica A. Wachtera, Missaka Warusawitharana,	What is the chance that the equity premium varies over time? Evidence from regressions on the dividend-price ratio	Journal of Econometrics	Elsevier	2015
47	Loukia Meligkotsidou, Ekaterini Panopoulou, Ioannis D. Vrontos Andspyridon D. Vrontos	A Quantile Regression Approach to Equity Premium Prediction	Journal of Forecasting	Wiley Online Library	2014

48	Andrei Rădulescu, Daniel Traian Pele	An econometric model for estimating the equity risk premium	Procedia Economics and Finance	Elsevier	2014
49	Michael Donadellia, Lauren Pershaba	Understanding emerging market equity risk premia: Industries, governance and macroeconomic policy uncertainty	Research in International Business and Finance	Elsevier	2014

Table 1 shows that 49 articles were reviewed only 3(6,12%) articles not Elsevier were for example two from the Journal of Forecasting, and one from the European Journal Finance. The publisher both are Wiley Online Library and Taylor & Francis. The others are articles from journals' Elsevier publication such as one from the Quarterly Review Economics and Finance, three from International Journal of Forecasting, three from Journal of Empirical Finance, three from Pacific-Basin Finance Journal. eight from Finance Research Letters, one from Journal of Economic Dynamic & Control, four from Journal of Financial Markets, two from Journal of Econometrics, five from International Review of Financial Analysis, one from North American Journal of Economics and Finance, one from Heliyon, one from Experts Systems with Applications, one from Energy Economics, two from Research in International Business and Finance, three from Journal of Banking and Finance, one from Emerging Market Review, one from Physica-A, one from Economic Modelling, one from Journal of Financial Economics, one from the Spanish Review of Financial Economics, one from the Journal of Financial Data Science 1, and one from Procedia Economics and Finance.

Table 2. Title, Objectives, Finding, and Recommendation

No.	Title	Objectives	Findings	Recommendation
1	Data snooping in equity premium prediction	To analyze the performance of a comprehensive set of equity premium forecasting strategies	There are several strategies superior based on Ferreira and Santa-Clara's (2011) SOP method	Working with parameter not changing or very slowly changing., time varying parameter is clearly important.
2	Predicting the VIX and the volatility risk premium: The role of short-run funding spreads Volatility Factors	To predict the VIX, the S&P500 Realized Volatility (RV) and the Variance Risk Premium (VRP) with short-run funding and long-run corporate government bond	Short funding spreads volatility factors SRF_VF has significant predictors with almost 20% adjusted r square present VRP and BAA-Aaa. SRFUN volatility is significant to equity premium (RV)	The factors driver of VIX and VRP that are short funding spreads volatility factors with log (P/D) and SRFUN_VF with the SGED distribution can be linked to a production-based asset pricing model
3	Aggregate implied cost of capital, option-implied information and equity premium predictability	To construct the aggregate ICC using option-implied information	O-ICC yields consistent in- and out-of-sample results and compares favorably to the considered set of established predictors.	Analysis ICC can be a stronger link to future returns
4	Does foreign exchange risk matter to equity	To study the relationship between the foreign exchange	This research find that the target price forecast error is	Mediating variable of firm size between target

	<p>research analysts when forecasting stock prices? Evidence from U.S. firms</p>	<p>risk and target price forecast error using U.S. firm-level data for the sample period between 1999 and 2014.</p>	<p>higher when foreign exchange risk is higher. The relationship is more robust for smaller firms and less pronounced among financial firms. Collectively, the findings suggest that analysts make fewer errors when forecasting for firms that are more capable of managing foreign exchange risks.</p>	<p>price accuracy and foreign exchange risk. Interview to analyst how they input foreign risk in model and what challenges they face when forecasting the firm that is exposed foreign exchanges significantly</p>
5	<p>Equity premium prediction and optimal portfolio decision with Bagging</p>	<p>To propose using the statistical method of Bagging to forecast the equity premium out-of-sample for multivariate regression models.</p>	<p>The source of economic gains for Bagging primarily comes from the fact that it encourages the investor to manage portfolio by flexibly utilizing actively short selling or leveraging to better time the market following correctly prognosticated trends</p>	<p>Other strategies for better times are measured to enter the market</p>
6	<p>Equity premium prediction and the state of the economy</p>	<p>To predict the U.S. equity premium out of sample based on forming an equally weighted combination of the forecasts generated by the dividend yield and the short rate.</p>	<p>The cyclical variation in the predictive information of economic fundamentals, which can be used to improve and simplify out-of-sample equity premium prediction substantially.</p>	<p>This paper uncovers cyclical variation in their predictive information to take advantage by forming a forecast combination.</p>
7	<p>Forecasting equity premium in a panel of OECD countries: The role of economic policy uncertainty</p>	<p>To investigate whether the news-based measure of economic policy uncertainty (EPU) could help in forecasting the equity premium (excess returns) in ten (Canada, France, Germany, Italy, Japan, The Netherlands, South Korea, Spain, United Kingdom (UK), and United States (U.S.)) Organization for Economic Cooperation and</p>	<p>While time series-based predictive regression models fail to beat the historical average benchmark, the panel data models consistently beat the benchmark in a statistically significant fashion. In general, our results highlight the importance of pooling information when trying to forecast excess stock returns based on a news-based measure of domestic EPU, as well as that of the U.S..</p>	<p>As part of future research, given that excess returns are non-normal, it would be interesting to extend the work of Bekiros, Gupta, and Majumdar (2016) for the U.S. economy, based on quantile predictive regressions, to other economies. In addition, using the panel predictive framework, it would also be worthwhile to</p>

		Development (OECD) countries		study the role of EPU in forecasting stock returns of developing countries, like the BRICS (Brazil, Russia, India, China, and South Africa) for instance, however, this can only be performed at a lower (quarterly) frequency due to issues of data availability associated with the measure of uncertainty for South Africa. Finally, one could also analyze the role of uncertainty in volatility forecasting (Ma, Ji, & Pan, 2019) and energy markets (Ji, Liu, Nehler, & Uddin, 2018).
8	Forecasting global equity market volatilities	To propose a parsimonious way to combine multiple market information flows and assess whether cross-national volatility flows contain important information content that can improve the accuracy of international volatility forecasting.	Providing strong evidence that the use of the cross-national information reflected by the simple and parsimonious standard indices enhances the predictive accuracy of global volatilities at all forecasting horizons. Alternative volatility measures, estimation window sizes, and forecasting evaluation tests confirm the robustness of our results. Finally, our strategy of constructing common diffusion indices is also feasible for international market jumps.	This feasible strategy of constructing common diffusion indices is feasible for International Market Jumps.
9	Forecasting stock returns: A	To develop a novel method to impose	Relative to standard unconstrained predictive	This model can be examined to the

	predictor-constrained approach	constraints on univariate predictive regressions of stock returns.	regressions, the approach leads to significantly larger forecast gains. This research also shows how a simple equal-weighted combination of our constrained forecasts leads to further improvements in forecast accuracy, generating forecasts that are more accurate than those obtained using current constrained methods.	presence of model instabilities and structural breaks.
10	Investing for the long run when expected equity premium is nonnegative	To investigate the implication of the nonnegative equity premium (NEP) constraint on the optimal portfolio choice of a long-horizon investor	Imposing the NEP constraint provides less negative correlation between innovation realized returns and expected returns, making stocks riskier in the long run	This framework can be extended more variables and assets during the investment horizon and take other economic constraints.
11	Long-run versus short-run news and the term structure of equity	To identify the role of asymmetry in the available information about short-run and long-run news in asset pricing model with time-varying economic growth.	When available information concerns long-run news, the equity slope is positive. When available information primarily concerns short-run news, the equity slope is negative	Other information can be looked at for term structure equity.
12	Macroeconomic disasters and the equity premium puzzle: Are emerging countries riskier?	To show the distinct exposure of Advanced Economies and Emerging Economies to disaster risk and the implications for asset pricing.	Advanced countries are also more likely to experience a global disaster, whereas disasters in emerging countries tend to be more idiosyncratic. It shows that country-group heterogeneity in disaster length and magnitude has the most significant impact on equity premium.	Time-varying probability of disasters can explain the equity volatility puzzle; long term bonds and compare the implied term premia between country group; time-varying disaster risk is important to make sufficient volatility and long run predictability of stock returns observes in the U.S. data.
13	Predicting the equity premium	To investigate call-put implied volatility	Call-put implied volatility spread (IVS) can robustly	The future research suggest that when

	with the implied volatility spread	spread (IVS) and many well-known predictors of the U.S. equity premium at return horizons up to six months over the period from 1996:1 to 2017:12.	predict equity risk premium. IVS strongly predict in recession and dividend yield strongest during expansion	recession exogen variables such as IVS and expansion fundamental or endogen variable such as dividend yield may be strongly in emerging market
14	Predicting equity premium by conditioning on macroeconomic variables: A prediction selection strategy using the price of crude oil	To investigate the combination of crude oil and other financial and macroeconomic variables.	This research obtains point prediction accuracy improvements close to 10% relative to the benchmark and commonly used alternatives using this prediction selection strategy.	Predicting equity premium with combination price crude oil and other financial and macroeconomic variables can be used by the longer horizon and International non-U.S.
15	Risk aversion connectedness in developed and emerging equity markets before and after the COVID-19 pandemic	To investigate the dynamic connectedness across the variance risk premium in international developed and emerging equity markets based on a Bayesian time-varying parameter vector autoregressive methodology.	Following the COVID-19 outbreak though, the total investors' risk aversion connectedness – as expected – strengthens, but more importantly, its dynamics alter, indicating that the risk aversion of emerging markets is an important contributor to the connectedness of international markets.	Risk aversion is a crucial contributor to the connectedness of international markets and can safeguard financial stability
16	Stock market movement forecast: A Systematic Review	To study aims to fill this gap by providing an updated systematic review of the forecasting techniques used in the stock market, including their classification, characterization, and comparison.	The most popular source of information to forecast the stock market is technical indicators. Those have proven to be the most predictive data of all. So far, most works on social networks have focused on analyzing sentiment. These works can be enriched by analyzing the topics discussed in the social networks, in such a way that the models can have a complete and more precise idea of what is happening in the country and the world.	It finds a new source of information that complement the technical analysis to predict stock markets; finding optimal technical indicators; spoken on the networks, which leads to the models having the complex ideas of what is happening in the world.

17	The skewness of oil price returns and equity premium predictability	To show that the three-order moment of oil price returns can predict the aggregate stock market returns.	Empirical results indicate those the stock market returns forecasts generated by the skewness of oil price returns are statistically and economically significant for out-of-sample performance. We add the skewness of oil price returns as an additional predictor into the univariate macro model and obtain greater forecast gains. When using the multivariate information method, this prediction improvement also exists. Substantial evidence demonstrates that the forecasting power is higher in recession. In addition, our finding is robust when considering the alternative aversion coefficient and transaction cost.	Look for new indicators and new method.
18	Estimating the conditional equity risk premium in African frontier markets	To estimate the forward-looking coefficients of risk aversion and the equity risk premia in frontier equity markets in Africa	In addition to accounting for the covariation between the lagged values of the Stochastic Discount Factor and asset returns, it is crucial to account for the time-varying estimates of the coefficients of risk aversion to mimic the volatility structure in the different markets.	The presence of risk aversion coefficients that take on both positive and negative values at different times provides insight into the different hedging attributes of the African stock markets through the diversification benefits that could arise from such insights are an open question that lay the ground for further work in this area
19	Oil price increases and the	To contribute to the literature by finding that a new predictor	Increases in oil prices, rather than changes in oil prices, can predict stock	Fiscal policy and monetary policy such as relieving

	predictability of equity premium	reflecting oil price increases has solid predictive content for monthly stock returns both in and out of sample	returns. The revealed stock return predictability is both statistically and economically significant. The success of oil-macro models in forecasting stock returns is robust to an extensive battery of robustness tests. Oil price increases predict stock returns by affecting future industrial production and discount rates.	the fiscal burden and or easing the credit crunch to improve future cash flows and investment profitability are not helpful
20	Out-of-sample equity premium prediction: a complete subset quantile regression approach	To extends the complete subset linear regression framework to a quantile regression setting. We employ complete subset combinations of quantile forecasts in order to construct robust and accurate equity premium predictions	It shows that our approach delivers statistically and economically significant out-of-sample forecasts relative to both the historical average benchmark, the complete subset mean regression approach and the single-variable quantile forecast combination approach. Our recursive algorithm that selects, in real-time, the best complete subset for each predictive regression quantile succeeds in identifying the best subset in a time- and quantile-varying manner.	Interesting future research is to extend our framework to a quantile on quantile one such as (Gupta, 2018) to capture the entire dependence between the equity premium distribution and the distribution candidate predictors.
21	Tail risk and the consumption CAPM	To investigate the market tail risk can be the conditioning information for consumption-based asset pricing model.	This research finds that Value at Risk (VaR) is the conditioning variable that enables consumption CAPM to explain the substantial cross-section variation of stock returns. Asset's riskiness is determined by the correlation with consumption growth conditional on the tail risk of the aggregate market.	Other measures consumption asset pricing models and examine the VaR in other countries
22	The cross-section of emerging market stock returns	First, to determine the magnitude of anomaly variables based on broad samples of emerging	It is documented that the factor definitions of the Fama and French (2015) five-factor model are less robust compared to	There are remaining questions about the best-proxied category value,

		<p>market stock. Second, to analyze the incremental power for the anomaly variables. Third, to investigate the real-time predictive power of return forecasts based on Fama and Macbethm Haugen Bakerm and Lewellen U.S. market.</p>	<p>alternative factor definitions. In contrast, the anomalous returns associated with cash flow-to-price, gross profitability, composite equity issuance, and momentum are pervasive as they show up in equal- and value-weighted portfolio sorts as well as in cross-sectional regressions. In contrast to financial theory and in line with previous findings, we do not find a positive cross-sectional relationship between risk and return.</p>	<p>profitability, and investment.</p>
23	<p>Covariance forecasting in equity markets</p>	<p>To compare the performance of popular covariance forecasting models in the European Equity index</p>	<p>Overall, a parsimonious Vector Heterogeneous Autoregressive (VHAR) model that involves lagged daily, weekly, and monthly realized covariances achieves the best performance out of the competing models.</p>	<p>Predict covariance in an emerging market.</p>
24	<p>Déjà vol oil? Predicting S&P 500 equity premium using crude oil price volatility: Evidence from old and recent time-series data</p>	<p>To examine the relationship between oil price volatility and the equity premium</p>	<p>Using this prediction selection strategy, we obtain point prediction accuracy improvements close to 10% relative to the benchmark and commonly used alternatives.</p>	<p>Relating the predictive power than changes afforded by oil price volatility to characterize the actual economic state and/or predict equity market plunge</p>
25	<p>Dividend growth and equity premium predictability</p>	<p>To predict equity premium with dividend growth using a large set of fundamental economic variables</p>	<p>The dividend yield has an unstable predictive power in-sample and No. predictive power out-of-sample. Differently, dividend growth is significantly predictable.</p>	<p>Dividend growth and equity premium predictability in Asia Pacific markets are long overdue,</p>
26	<p>Economic policy uncertainty, equity premium, and dependence between their quantiles: Evidence</p>	<p>To examines the relationship between economic policy uncertainty and equity</p>	<p>This empirical evidence suggests the existence of a negative association between equity premium and EPU predominately in all G7</p>	<p>For future research, daily observations, use GARCH (1,1) technique or can utilize Dynamic Model Averaging</p>

	from a quantile-on-quantile approach	premium in G7 countries over the monthly data from January 1989 to December 2015 using a novel technique namely QQ regression proposed by Sim and Zhou (2015)	countries, especially in the extreme low and extremely high tails. However, differences exist among countries and across different quantiles of EPU and the equity premium within each country. The existence of this heterogeneity among countries is due to the differences in terms of dependency on economic policy, other stock markets, and the linkages with other country's equity market.	(DMA) analysis on the quantile predictive regression model because suggested Gupta (2018). Examining context BRICS countries is for EPU and equity premium quantile on quantile
27	Equity premium predictions with many predictors: A risk-based explanation of the size and value factors	To investigate whether a direct mechanism can be found that demonstrates that the size and value factors of Fama and French (1993) are indeed ICAPM factors, as some have suggested.	The results are that small stock portfolios and high book-to-market stock portfolios have predictive power for future market returns, making them potential ICAPM risk factors.	Size and value can explain future growth GDP and equity premium; there is a question what intervening variables can be related to growth GDP and the equity premium
28	Forecasting the equity risk premium: The importance of regime-dependent evaluation	Does econometric predictability across the business cycle imply predictability at all times?	When periods of high volatility and market downturns are happening, the econometrically superior with constraints Campbell and Thompson (2008) and Pettenuzzo (2014) forecasting models lead to large economic losses compared to the unconstrained model.	Optimal combination of unconstrained and constrained forecasting models in a dynamic framework, driven by market regime indicators; Ang and Bekaert (2002, 2004), Guidolin and Timmermann (2008), Tu (2010), and Zhu and Zhu (2013) can guide in that respect.
29	Out-of-sample equity premium prediction: A scenario analysis approach	To propose two methods of equity premium prediction with single and multiple predictors respectively and evaluate their out-of-	Modeling the stochastic process of the three scenarios by the first-order Markov chain improves the predictability of equity risk premium	The research for equity premium is better for different scenarios and taking the stochastic features of the scenarios

		sample performance using U.S. stock data with 15 popular predictors for equity premium prediction and three scenarios that are a low, normal, and high investment.		over time into account.
30	The role of partisan conflict in forecasting the U.S. equity premium: A nonparametric approach	To investigate the information on partisan conflict matters in forecasting the U.S. equity premium, especially when accounting for omitted nonlinearities in their relationship via a nonparametric predictive regression approach over the monthly period 1981:01–2016:06.	This result is found to be robust when we use a quantile predictive regression framework to capture nonlinearity, mainly when the market is found to be in its bullish mode (i.e., upper quantiles of the conditional distribution of the equity premium). Unlike as suggested by a linear predictive model, the nonparametric functional-coefficient regression that includes the partisan conflict index significantly enhances the out-of-sample excess stock returns predictability.	Partisan conflict also affect equity market volatility and forecast the volatility using partisan conflict as part of future research.
31	A new government bond volatility index predictor for the U.S. equity premium	To propose a new predictor constructed under the state-preference asset pricing framework to forecast the U.S. monthly equity premium.	The innovation in the GBVX delivers statistically and economically significant in-sample and out-of-sample predictive results over the recent 2000–2015 sample period.	The Bond volatility index is perfect for monthly equity premium, but another horizon is not been predicted yet.
32	Equity premium estimates from economic fundamentals under structural breaks	To compares three estimates of the conditional equity premium using dividend and earnings growth rates to measure the expected rate of capital gain from 1871-1950 and 1950-2013	Wall Street Crash, the great deprecation, World War II, the recession of the early 1990 and the recent financial crisis, the major global events are driving permanent shifts in the underlying distribution of the equity premium.	The fundamental variables constantly change to predict equity premium depending on globalization.
33	Equity premium prediction: The role	To investigate the predictability of the	This framework is better than the historical mean.	Economic fundamentals

	of economic and statistical constraints	equity premium using a kitchen sink regression that directly conditions on a large set of economic fundamentals	The dynamic mean-variance strategy generates 2.7% per year above the benchmark. Conditioning on technical indicators adds little or no value	contain essential information about future returns.
34	Generalized financial ratios to predict the equity premium	To predict the equity premium using the information in the GPDR.	We find that the resulting Generalized Price-Dividend Ratio (GPDR) improves the forecasting precision for the U.S. intra-year equity premium from January 1976 until December 2014.	GPDR is can predict (excess) stock returns in an international time-series or cross-sectional context
35	Macroeconomic factors and equity premium predictability	To predict equity premium with combination technical indicators and standard fundamental Goyal and Welch (2008) macroeconomic factors	It finds that in particular proposed forecast combination approach, which combines forecasts of the most relevant Neely et al. (2014) and macroeconomic factors and further imposes positivity constraints on the equity premium forecasts generates statistically significant and economically sizeable improvements over the best performing model of Neely et al. (2014).	A challenge for future research is to find complementary between the short interest predictors and the more traditional GW based fundamental predictors.
36	Maximum likelihood estimation of the equity premium	To propose an alternative estimator, based on maximum likelihood, that considers information contained in dividends and prices.	Applying to the postwar sample, our method leads to an economically significant reduction from 6.4% to 5.1%. Simulation results show that our method produces more reliable estimates under a wide range of specifications.	New method to estimate equity premium because maximum likelihood might not be a reliable guide
37	New evidence on economic policy uncertainty and equity premium	To investigate EPU and the equity premium in China	EPU in China has a positive impact on equity premium differently in U.S. has negative	It appears new hypothesis, Asian Countries, Emerging countries, Frontiers countries have positive to equity

				premium. If it is positive, why? and if it is negative why? EPU factor loading shows that more uncertain government policy would be more misevaluation co-movement stock market
38	Out-of-sample equity premium predictability and sample split-invariant inference	To predict out of sample equity premium on the choice of sample split date	The equity premium is well forecast by only a few traditional predictors on an out of sample basis	Using a split sample to see heterogeneous treatment effects are a bad idea.
39	Cross-sectional return dispersion and the equity premium	To examine whether stock return dispersion (RD) provides valuable information about future stock returns	RD has greater forecasting power for big and growth stocks than small and value stocks, respectively. I discuss a theoretical mechanism showing to the negative correlation between RD and the equity premium.	Return dispersion is negative relation to equity premium and sensitivity to big and growth stock. Is it similar to International market?
40	Equity premium prediction: Are economic and technical indicators unstable?	To examine the possible instability of economic and technical indicators for predicting the U.S. equity premium thoroughly	the economic indicators lose power, but the technical indicators remain powerful or even increase in predictive power	Further research may motivate research on the robustness of this research finding and their origins
41	Incorporating economic policy uncertainty in U.S. equity premium models: A nonlinear predictability analysis	To predict equity premium US with Information on economic policy uncertainty does matter in predicting the U.S. equity premium, especially when accounting for structural instabilities and omitted nonlinearities in their relationship, via a quantile predictive regression approach over the monthly period 1900:1–2014:2	Unlike as suggested by a linear mean-based predictive model, the extended quantile regression model incorporating the EPU proxy, enhances significantly enhances the out-of-sample stock return predictability. The observation is implementing when the market is neutral exhibits a slide or mildly upward trending behavior, yet not when the market appears to turn highly bullish.	Incorporating Dynamic Moving Average analysis on quantile predictive regression

42	Equity premia predictability in the Euro Zone	To study the equity premium predictability in eleven EuroZone countries	The models based on the OECD variables outperform the historical average, particularly during the early stages of the recent financial crisis. We also show that the forecasts, based on these predictors, provide substantial utility gains for a mean-variance investor.	Further research could propose BRICS, ASEAN, NAFTA, and else for predictability zone.
43	Fama–MacBeth two-pass regressions: Improving risk premia estimates	To provide the asymptotic theory for the widely used Fama and MacBeth (1973) two-pass risk premia estimates in the usual case of many assets.	We demonstrate analytically and using simulations that the standard OLS and GLS estimators can contain large bias when the time series sample size is small, but our proposed OLS and GLS estimators can reduce the bias significantly.	It can be used for another new economic predictor
44	Predicting the equity premium with the demand for gold coins and bars	To investigate the predictive power of the demand for gold coins and bars as a proxy for the risk premium consistent with the safe-haven property of gold.	The gold demands variables reflect the behavior of retail investors and thus also represent a new class of predictors. Our analysis shows that the demand for gold is positively correlated with future stock returns and enhances the predictive power of the dividend yield and other variables.	Retail investors can be a new class of variables.
45	Required Market Risk Premium among countries in 2012	To identify the Equity Premium or Market Risk Premium (MRP) used in 2012 for 82 countries. It got 7192 answers for 93 countries, but we only report the results for 82 countries with more than five answers	ex-ante equity premia have been high, market prices have been consistently undervalued, and the ex-post risk premia have also been high. Many investors use historical data and textbook prescriptions to estimate the required and the expected equity premium, the undervaluation, and the high ex-post risk premium are self-fulfilling	How much market participant influence expected equity premium

46	<p>What is the chance that the equity premium varies over time? Evidence from regressions on the dividend-price ratio</p>	<p>To investigate the evidence on excess stock return predictability in a Bayesian setting in which the investor faces uncertainty about both the existence and strength of predictability.</p>	<p>prophecies. When it applies the method to the dividend-price ratio, it finds that even investors who are quite skeptical about the existence of predictability sharply modify their views in favor of predictability when confronted by the historical time series of returns and predictor variables. Correctly considering the stochastic properties of the regressor dramatically impact inference, particularly over the 2000–2005 period.</p>	<p>Exploring alternative distributional assumptions and their consequences for inference on returns is an interesting topic for further.</p>
47	<p>A Quantile Regression Approach to Equity Premium Prediction</p>	<p>propose a quantile regression approach to equity premium forecasting</p>	<p>using a time-varying weighting scheme delivers statistically and economically significant out-of-sample forecasts relative to both the historical average benchmark and the combined predictive mean regression modeling approach.</p>	<p>High order moment combines quantile forecast.</p>
48	<p>An econometric model for estimating the equity risk premium</p>	<p>To estimate the relation between the equity risk premium and the fundamental macroeconomic and financial</p>	<p>According to results the equity risk premium in the United States is going to gradual increase, an evolution determined by the FED monetary policy perspectives, but also by the narrowing of the private consumption gap.</p>	<p>Monetary policy and equity risk premium still unclear</p>
49	<p>Understanding emerging market equity risk premia: Industries, governance and macroeconomic policy uncertainty</p>	<p>To examine the behavior of emerging stock market excess returns in an industry-by-industry context, with an aim to clarify the roles of</p>	<p>It finds that correlations between industrial stock (Dai, Zhou, et al., 2021) market excess returns and a measure of global economic policy uncertainty are consistently negative and</p>	<p>There is currently little space in emerging markets to exploit cross-industry portfolio diversification benefits.</p>

different industrial stock markets in generating higher emerging markets' ERP.	follow similar patterns. Our empirical evidence as a whole suggests that industrial stock markets are more highly related both within and across countries and regions than has been suggested previously. Contrary to much existing empirical work,
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Table 2 shows many predictors that influence the equity premium with the constant model. The variables are mostly from outside equity such as macroeconomic, monetary and fiscal policy, industry, technical indicators, and news. The Subject researches mostly are from U.S. It is scarce to discuss emerging and frontier markets. The most economic relates to equity premium because of economic crisis or fluctuation. For further research time-varying paramaters are recommended. Thus, combination of several predictors such as monetary policy, dynamic model, economic policy uncertainty, technical indicators, and banking sector such as credit risk is a good recommendation for future research.

3. Results and Discussion

We have reviewed 48 articles a reviewed article. It was 30 articles from U.S. In addition, six studies used the proposed method without mentioning the country. 2 articles used the eurozone, G7, and emerging markets. Meanwhile, the frontier market, OECD, 22 international countries, emerging markets & advanced markets, China, and 82 countries were used by 1 article each. This study reviewed 48 research articles and one review article that discussed predictors of the equity premium. In 2020, it was the most years of 14, but in 2021 there were only two researches. In 2014-2019, only 33 studies were focused on equity premium predictability were reviewed.

This study found that in the past seven years, research on predictability premium equity is where commodities are predictors of premium equity. The skewness value of crude oil market price can predict premium equity during a market recession (Cain et al., 2017). Crude oil prices strengthen macroeconomic and financial variables in predicting premium equity (Nonejad, 2020). Oil prices have a negative effect on stock returns in-sample and out-of-sample (Wang et al., 2019). Gold Bar and Coin can predict the expected equity premium (Baur & Löffler, 2015). During a recession, three order moments of crude oil prices can predict the equity premium (Dai, Zhou, et al., 2021). Also, Economic Policy Uncertainty (EPU) has a negative relationship with equity premium using the QQ approach (Raza et al., 2018). EPU measurement is more consistent using panel data than time-series predictive regression (Christou & Gupta, 2020) EPU affects expected equity premium in a nonlinear way (Bekiros et al., 2016)). EPU has a positive relationship with equity premia in the U.S. but is different in China, a negative relationship (X.-M. Li, 2017). There is a correlation between industries, and it has a negative relationship with global economic policy uncertainty in emerging markets (Donadelli & Persha, 2014).

The Vector Heterogeneous Autoregressive Model is the best, and the worst is the Multivariate Garch. All models are wrong in times of global crisis (Symitsi et al., 2018). HAR Mean and HAR PC were tested in 22 countries and have better performance than other predictors (Zhang et al., 2020). Constrained predictive regression is better at predicting predictive regression (Zhiyuan Pan et al., 2020). When volatility is high, and the market falls, the models of Campbell and Thompson (Campbell & Thompson, 2008) and Pettenuzzo (Pettenuzzo et al., 2014) become more significant than economic predictors (Baltas & Karyampas, 2018) PLS is used to predict out-of-sample premium equity (Stivers, 2018). Conditional asset pricing is more consistent for a forward-looking approach to estimating risk estimates than traditional risk premiums (Othieno & Biekpe, 2019). Fama & Macbeth's two-pass regression uses asymptotic theory to reduce bias (Bai & Zhou, 2015). Equity premium can be predicted by quantile regression (Meligkotsidou et al., 2014). Disaster risk does not affect emerging markets as big as the AE market (Horvath, 2020).

The combination of Neely et al. (Neely et al., 2014) and GW (Welch & Goyal, 2008) added with the SW diffusion index (Stock & Watson, 2002) resulted in better accuracy performance(Buncic & Tischhauser, 2017). MLE can better explain prices and dividends regarding expected equity premium (Avdīs & Wachter, 2017) the development of the EGT framework (Elliott et al., 2013) plus MVPP (Meligkotsidou et al., 2014)

using quantile predictive regression (Meligkotsidou et al., 2021). A single predictor can predict low, normal, and high investment scenarios with low, average and high GDP growth indicators. However, Multi Predictors can only predict low and average growth (Tang et al., 2018) Panel-based approach yields can better assess the volatility factor (Andreou & Ghysels, 2021). Equity premium can predict the money in a broad sense, personal consumption, real exchange rates (Rădulescu & Pele, 2014). Forecasting the target price will have a bigger error when the exchange rate has a big risk, especially for small companies and the financial industry (Ho et al., 2020). The Government Bond Volatility Index can predict to equity premium (Zheyao Pan & Chan, 2018).

Economic indicators in the U.S. worked well before the 1970s but lost their predictive ability even depending on the last crisis. In contrast, technical indicators send economic value (Baetje & Menkhoff, 2016). Economic indicators can predict the out-of-sample of premium equity with kitchen sink regression in the short term (Li & Tsiakas, 2017). There is a big disadvantage when using the price dividend ratio, but the Bayesian estimation makes it better at testing out-of-sample. In the 2000-2005 period, the probability of predictability has increased in 2000-2005 period (Wachter & Warusawitharana, 2015). Technical indicators have been a popular approach in the past five years in predicting equity movements with the suggestion of adding social networks and blogs (Bustos & Pomares-Quimbaya, 2020) GDPR is a bridge between technical and fundamental in influencing equity premiums 1,3,6, and 12 (Algaba & Boudt, 2017). The invariant sample selection was used as the accuracy of out-of-sample prediction (Kolev & Karapandza, 2017) Call-put implied volatility spread and option-implied information cost of capital (Launhardt & Miebs, 2020) have better performance among other predictors (Cao et al., 2020). Normalized composite leading indicators (NLCI) have the best performance among other indicators (Silva, 2015). The decline in equity premium expectations from 1951 to 1981 stems from FED policies (Smith, 2017). The economic advantage of the Bagging method proposed is that investors are active in managing their portfolios by short-selling and leveraging at better times (Yin, 2020).

Fundamentally, based on dividend yield information, it is better to predict a period of expansion. Still, it is better to predict a recession based on overall information (short-term interest rates) (Tsiakas et al., 2020). PER does not quite well predict the equity premium for the S&P 500 index. Predictors in Welch and Goyal (Welch & Goyal, 2008) fail to exceed the mean out-of-sample predictions except for dividend price ratio and earnings growth (Dichtl et al., 2021). Under the present value framework, dividend growth can predict equity premium more than dividend yields (Zhu et al., 2018).

Furthermore, risk and return are not positively related, and Fama and French (Fama & French, 2015) are no better than alternative factors such as mispricing in emerging markets (Hanauer & Lauterbach, 2019) The nonparametric approach can explain a bullish market (Gupta et al., 2018). Lettau & Ludvigson (2001) no longer get special attention in expanding the current period. Still, value at risk as a conditioning variable can make CAPM explain the cross-section of stock returns (Kwon, 2019). Risk aversion from emerging markets contributes to the international market (Fassas, 2020). Return Dispersion can predict a decrease in excess market return over other predictors and negatively affects equity premium (Maio, 2016).

Trend equity premium from 2014 to 2021 regarding 48 articles and a review article are following discussion. In 2021, the evaluation model and volatility indexes were discussed. In 2020, macroeconomic factors, risk aversion, dispersion commodity and economic policy uncertainty were main discussed. In 2019, Frontier market, commodity price and value at risk became the major discussion. In 2018, Fundamental economic, scenario analysis and non-liner model such as quantile were favourite. In 2017, Economic such as macro, fundamental, ratio, model and policy still were centered in equity premium. In 2014-2016, model-regression linear, quantile, dynamic, technical were dominant for topic research.

The results of this study suggest that future research can make a predictor model during a crisis with an accuracy above 80% using technical analysis of indicators and news and add asymmetry of short and long runs, creating a time-varying model that can produce superior profits outside the sample. Family covariance is very poor at predicting times of global crisis, and this could be further research adding variables to confirm. The model with the regime is highly recommended for further research. A combination of methods is recommended for further research as well. Predicting the long-term premium equity is still a gap. The volatility of both implied and index can be discussed differently. Also, future research can focus on the predictive power of oil price volatility towards market troughs in emerging markets, especially the Asia Pacific. Retail investors are attractive because gold and soybeans can predict premium equity.

Economic Policy Uncertainty is still predicted with a quantile approach. Dynamic Model Averaging and GARCH are recommended, especially in emerging markets. The common diffusion index for market jumps still needs to be explored in emerging markets. Disaster risk is not applicable in emerging markets; why? Investigate those economic fundamentals that are not time-varying in emerging markets. The anomaly

model is compelling at predicting stocks in emerging markets. Is that the case for equity premiums, and why? It can be tested with the dynamic Averaging method. Investor sentiment and risk aversion can be used as mediators to become variables to achieve effective financial stability. It is important to classify stocks based on growth and size, but the clustering is still not alternative distribution. Furthermore, behavior analysis becomes attractive because of the assumption that analysts do not evaluate exchange rate risk, interest rate risk, and climate risk—optimization of monetary policy to influence premium equity in emerging markets. Then there is very little ERP research in the frontier market. Use of other methods to see the macroeconomic impact of EPU and ERP. The credit crunch policy helps predict future stocks a little, so it must look for variables to strengthen it.

5. Conclusions

In conclusion, this study has identified that price of crude oil can predict premium equity and strengthen the predictions of macroeconomic and financial variables. First, the skewness distribution of oil prices predicts the equity premium during a recession in the US. Apart from oil, gold bullion and coins can predict it and have a positive relationship in compared to the price of crude oil, which has a negative relationship during a market recession. Secondly, EPU has a negative relationship with equity premium. EPU measurement to predict premium equity is more consistent with panel data than with time-series predictive regressions. Third, all models poorly predict when the global crisis occurs. Moreover, Campbell & Thompson (2008) and Pettenuzzo et al. (2014) models can predict better than other economic predictors. Fourth, market declines in emerging markets are different from those in developed markets. Some of the methods used to strengthen predictors for premium equity are PLS, quantile regressions, MLE, a combination of Neely et al. (2014), Greenbaum et al. (2019) and Welch & Goyal (2008), and the SW diffusion index (Stock & Watson, 2002); a variety of economic, technical indicators, and GDPR; EGT framework development (Elliott et al., 2013) plus MVP (Meligkotsidou et al., 2014) with quantile predictive regression.

However, the multi-predictors fail to predict when growth is high unless a single predictor is used. Yield-based panels can also assess volatility factors well. Finally, rolling window and return dispersion can predict premium equity. Furthermore, equity premium predictability comes from macro, derived from the money supply in a broad sense, personal consumption, and exchange rates. GDP and exchange rate greatly affect the equity premium predictors, small companies, and the financial industry. However, economic indicators in the U.S. have lost their predictions. Even technical indicators have become better at predicting. Dividend growth is a better predictor of dividend yields. Emerging markets have different returns and risks from advanced markets. The investment and profitability in emerging markets cannot explain a company's returns. Value at risk and risk aversion plays a vital role in this market.

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