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Data-Driven Economic Intelligence Framework for Future Market Analysis and Policy Planning

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Abstract

As more economic data and market intelligence become available, there is greater scope for enhancing future market analysis and policy formulation. Economic data analysis, market forecasting, risk assessment, and policy analysis are currently undertaken separately, hence their inability to act as integrated tools for decision-making. In this study, a Data-Driven Economic Intelligence Framework is proposed where economic data analysis, market intelligence, forecasting, scenarios analysis, and policy formulation are brought together under one integrated analytical framework. The framework assesses four factors; Economic Activity, Market Outlook, Risk Level, and Policy Readiness which will be used to compute Economic Intelligence Index. Four scenarios, Baseline, Growth, Risk, and Policy Adjustment, will be used to analyze future economic conditions. The findings of this illustration show that the Growth scenario shows high economic activity and market outlook while the Risk scenario exhibits poor market performance and high-risk level. The Policy Adjustment scenario indicates improved market environment as well as policy readiness in the best case. It is evident from the results obtained that integrated economic intelligence would help in detecting risk, analyzing market opportunities, forecasting and implementing policies. The suggested framework serves as an effective structure for decision-making in changed economic environment by governments, investors, and companies. Further research on validating the framework using actual data and improvement in forecasting via artificial intelligence and real-time economic information would be valuable.

Keywords: Economic Intelligence, Data Analytics, Market Forecasting, Economic Risk, Policy Planning, Scenario Analysis, Decision Support.

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Introduction

The abundance of data about the economy, finance, business and markets has changed the process of observing and analyzing economic conditions. Nowadays, governments, financial institutions, companies and investors largely rely on vast amounts of data for assessing new market dynamics, risks and making strategic decisions. Standard economic analysis tends to be based on indicators that have existed previously and regular analysis, which does not always allow understanding the fast changes in market dynamics, investment environment, consumer demand, inflation and economic uncertainty. It seems like there is an opportunity to use various sources of data and make useful insights from them for economic analysis in the future. It is especially important to apply economic and financial information on a large scale when it comes to macroeconomic forecasting and nowcasting (Bok et al., 2018).

The emergence of the necessity of real-time and high-frequency data has caused a need for analysis tools that are able to recognize economic trends at early stages, before they turn into a serious problem. Interest rate changes, inflation, employment, industry, trade, investment, financial market performance, and consumer behavior have the potential to affect each other and generate some complicated economic consequences. Analysis of such factors separately might prevent us from recognizing their combined effect on future market situation. Thus, an economic intelligence framework would help to collect, process, interpret and forecast economic information in a systematic way. It would help to recognize market opportunities and risks better and provide more solid grounds for strategic economic planning. Increasingly, economic forecasting becomes capable of using large amounts of information coming from news and other text sources to find the signals which might affect future economic situation (Ardia et al., 2019).

There are various issues faced by conventional economic analysis in helping to make policies for the future. Economic indicators are considered individually, but decision-makers need to understand their interconnection. In addition, past information may fail to be indicative of the future if there are structural changes in the economy, technological advancement, financial turbulence, or unexpected shocks from the outside. This calls for the use of analytical tools that would consider many economic indicators and analyze the changing trends and alternative futures. The use of a data-driven approach would help in overcoming these difficulties by incorporating economic intelligence indicators into the process of market analysis and policy-making. Economic policy uncertainty becomes especially relevant due to this reason since it affects economic decision-making and markets (Baker et al., 2016).

The necessity of such a framework becomes even more crucial because there is a close link between market analysis and policy planning. The changes in market environments may have impacts on government revenues, investments, employment, production, and economic stability, whereas policy measures may change the behavior of markets. Such a framework which connects economic indicators with the market forecast and the policy evaluation can offer a more holistic ground for decision-making. While the traditional approach focuses on measuring current economic performance, the suggested one pays attention to generating forward-looking intelligence which helps to identify potential risks, evaluate opportunities and develop policies accordingly. Economic environments may also become fragile due to the interaction between financial and economic risks; hence, identifying such potentials becomes relevant for forward-looking economic assessment (Adrian et al., 2019).

However, the rising complexity of economic data also calls for sophisticated techniques that are capable of detecting non-linearities, multidimensional structure, and predictive patterns. Machine learning techniques offer tools to the economist to make predictions, classifications, and estimates that would supplement traditional econometric techniques (Athey & Imbens, 2019). Specifically, machine learning techniques have proved their worth in making macroeconomic forecasts through extracting predictive information from complex data (Goulet Coulombe et al., 2022).

The objective of this research is to establish a Data-Driven Economic Intelligence Framework to be used in future market and policy analysis. The framework incorporates economic intelligence, market intelligence, risk assessment, forecasting, and policy intelligence into one cohesive analysis process. The economic intelligence framework looks at economic activity, markets, economic risks, and policy readiness as interrelated facets of economic intelligence. Additionally, the framework utilizes scenario analysis to determine the effects of various economic scenarios on future market performance and policy needs.

The research has three primary objectives. The first objective is to develop a framework that will help in transforming economic and market data into economic intelligence. The second objective is to use indicator analysis and different economic scenarios to forecast future market conditions. Finally, it intends to show how economic intelligence can be used in formulating policies and how economic risks, market opportunities, and issues that require policy intervention can be detected through intelligence.

The key contribution of the research is the creation of a framework for data gathering, economic intelligence formation, market prediction, scenario analysis, and policy-making. Such a framework allows for a systematic approach to

interpreting numerous economic aspects in contrast to the focus on separate indicators. Furthermore, the framework incorporates a forward-looking perspective as it examines potential market situations under various scenarios. Such a framework may be useful for the process of formulating prompt actions by policymakers, as well as for the strategic planning and risk management of companies and investors.

The rest of the paper is structured as follows. Section 2 will deal with the notions of economic intelligence and evidence-based decision making and define the research problem. Section 3 will introduce the suggested Data-Driven Economic Intelligence Framework. Section 4 will describe the analytical approach, indicators used, data integration, forecasting and scenario analysis. Section 5 will present the future market intelligence and scenarios. Section 6 will deal with policy making and strategic implications. Section 7 will interpret the findings and discuss their wider significance. Conclusion and suggestions for further research will be provided in Section 8.

Economic Intelligence and Data-Driven Decision Making

The concept of economic intelligence includes the gathering, integration, and interpretation of economic information to make sound decisions. Economic intelligence integrates economic indicators like economic growth, inflation rates, investments, employment, trade, financial position, and market activity to have a better insight about the economic situation. While traditional analysis mostly focuses on the present situation, economic intelligence takes into account not only the present but also future aspects. This allows decision-makers to assess the connections between various economic indicators and detect the trends that might affect future market performance. Integrating various economic information can also help identify new trends, risks, and changes in structures. Textual economic information is another source as text can be converted into economic indicators (Gentzkow et al., 2019).

Data-Driven Economic Analysis

Through data analytics, a lot of economic and market data can be processed in a systematic way. This makes it possible to uncover trends, correlations, risks, and potential opportunities. By combining several indicators, it is possible to gain a much more comprehensive view of economic conditions compared to examining them individually. Data analytics can also be used for forecasting by relying on historical trends and available data to consider potential future scenarios. The systematic processing of economic data will enhance consistency in economic assessments and minimize reliance on individual observations. Moreover, it will be possible to compare economic conditions consistently over different periods and markets. Machine learning techniques can also contribute to economic analysis by making it easier to find predictive relationships in data (Chernozhukov et al., 2018).

Market and Policy Intelligence

Market intelligence deals with gaining insight about future market conditions, investment potential, business activities, and economic risks. On the other hand, policy intelligence turns these insights into information useful for the purposes of government planning and intervention. The connection between the two is vital since policy decisions affect market conditions, but market changes may necessitate policy decisions. Consequently, an integrated process would enhance economic planning. This is because such an integrated process will enable policymakers to analyze possible impacts of policies, identify interventions needed, and come up with responses depending on the changes in market conditions.

Communication about economic information and policy decision-making can be analyzed computationally in order to gain further information on how the two are related (Hansen et al., 2018).

Integration of Economic Information

Economic intelligence system is one that integrates information from various sources. The macroeconomic indicators contain information on the economic situation, financial market contains market views and uncertainties, and business, trade and consumer information gives insight into economic activities. This integration enables the study of the relationships between the economic environment and market developments in a systematic manner. This also facilitates the creation of composite intelligence indicators.

Integration of macroeconomic and financial information is especially important since economic cycles and financial information have an impact on each other. There have been several instances of macrofinancial relations in history where the financial information has given insights on business cycles and economic environment (Jordà et al., 2017).

Forward-Looking Economic Intelligence

The forward-looking type of economic intelligence goes further than the analysis of past performance through forecasting and scenarios. Historical data may help detect the existing trends, and contemporary information may serve as a signal of upcoming changes. All these tools can be used to generate alternative scenarios that correspond to

favorable, stable, or unfavorable economic conditions. The comparison of different scenarios helps managers understand the risks and opportunities of the chosen economic or policy strategy. It is especially vital to use the forward-looking perspective in an uncertain environment with fast-changing market conditions.

Forecasting performance may be estimated in relation to the vast sets of time series and alternative forecasting techniques, which gives managers the opportunity to compare different types of forecasting (Makridakis et al., 2020). The deep-learning technique may also be considered a forward-looking forecasting tool (Lim & Zohren, 2021).

Furthermore, the choice and estimation of forecasting models should also be sensitive to shifts in the economy and abnormal periods.

The application of data-driven intelligence is further extended through financial-market forecasting, which is made possible by machine learning models capable of capturing information from large pools of economic and financial factors to enhance asset price and market analysis (Gu et al., 2020).

Another area where uncertainty plays a role is geopolitics, which can impact future economic and market outcomes. Therefore, the measurement of geopolitical risk can be a further intelligence dimension for scenario analysis and risk assessment (Caldara & Iacoviello, 2022).

Research Gap

In the existing economic analysis, the data analysis, market forecasting, and policy analysis have been kept as different tasks. In the traditional forecasting process, there is also very little scope for considering different future scenarios and related economic risks. There is thus a need for an integrated model that integrates all the above concepts such as economic data, market intelligence, forecasting, scenario analysis, and policy planning. The current study attempts to fulfill this need through the development of a data-based economic intelligence model for future market analysis and policy planning.

Proposed Data-Driven Economic Intelligence Framework

The suggested framework consolidates economic data, analysis, forecasting, and policy intelligence under one decision-making system. The suggested framework is aimed at turning various pieces of economic information into intelligence that will help identify future market conditions, economic risks, and policy needs. The framework includes four main layers: data collection, data analysis and intelligence development, market analysis and forecasting, and policy intelligence.

Data Sources and Economic Information Layers

The first level acquires data from several economic sources. Information on growth, inflation, employment, and output is obtained from macroeconomic data. Investment and market data provide information from the financial markets, whereas production, business, and sector data come from the business/industry source. Demand, consumption, import and export data are gathered from consumer and trade data sources.

Data Processing and Intelligence Generation

The second level involves the transformation of unorganized information into organized economic intelligence. Information is gathered, cleaned up, and integrated to ensure consistency. Economic indicators can then be generated out of the information that has been collected and arranged in such a way. Patterns and abnormal movements are discovered.

Market Analysis and Forecasting Layer

The third level is the application of intelligence to future market analysis. The trend analysis of the market is carried out to determine any changes in the economy and market environment. Demand and investment environments are analyzed to determine the potential opportunities, forecasting is used to determine the future economic environment, while risk assessment identifies any vulnerabilities in the market.

Policy Intelligence Layer

The last stage involves turning market intelligence into policy information. Various policy scenarios are generated, and their possible economic impact is evaluated. Proper policy reactions can be determined depending on the market situation and risks. The generated intelligence can help make better decisions for policymakers and improve economic planning.

Integration and Feedback Mechanism

The model works as a continuous information cycle rather than a process that is done once in a lifetime. Information that is created from the analysis of the market and policies is continuously compared against new observations of the economy so that changes in expected results are observed. These changes between the forecasted and observed can then be used to adjust the economic indicators that will inform future analysis.

Scenario-Based Decision Support

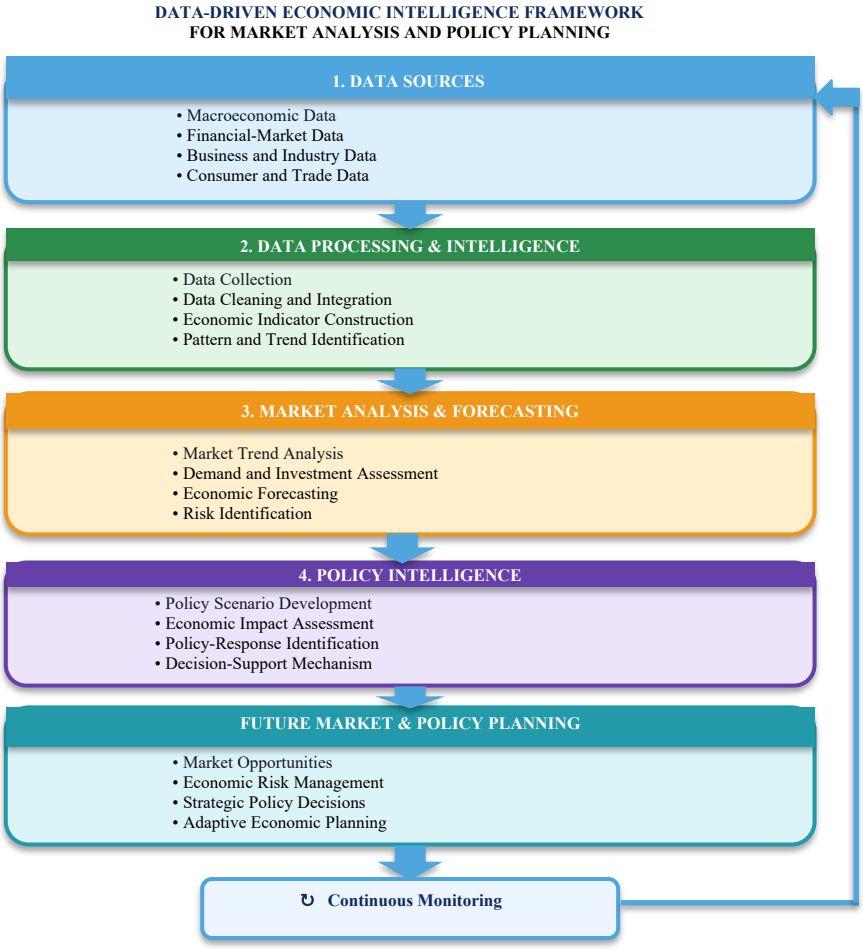


Fig. 1: Data-Driven Economic Intelligence Framework for Market Analysis and Policy Planning

The value addition that scenario analysis brings to the framework is its ability to allow testing of various future economic conditions before the policy action is executed. Scenario analysis includes baseline, growth, risk, and policy adjustment scenarios, which give various portrayals of possible market conditions. The various scenarios may be analyzed based on economic activity, market condition, level of risk, and policy preparedness.

Fig. 1 shows the proposed framework in a sequential format. Economic information from various sources is first combined and analyzed in order to produce economic intelligence. This intelligence forms the basis of market analysis, forecasting, and risk identification. These products are further transformed into policy intelligence that facilitates scenario building and impact analysis. Constant monitoring ensures that any new economic information feeds back into the model.

Analytical Methodology

Methodology forms a systematic framework in transforming economic and market data into measurable economic intelligence. There are four key indicators that are used in measuring economic performance, market performance,

economic risks, and preparedness. The four indicators are then included in an Economic Intelligence Index, which is later used in making forecasts of markets and policy scenarios.

Economic Intelligence Indicators

Four indices are employed in order to capture the key economic intelligence dimensions. These include the Economic Activity Index (EAI), which gauges the intensity of economic activity through the measures of economic growth, employment, production and business conditions. There is also the Market Intelligence Index (MII), which gauges market conditions using measures of investment, demand, financial markets and business outlook. The third index is Economic Risk Index (ERI), which gauges the risks associated with inflation, financial instability, uncertainty and outside economic pressures. The fourth index is Policy Readiness Index (PRI).

Data Integration and Intelligence Score

All the four indices are combined to form the Economic Intelligence Index (EII). As a higher ERI means greater economic risk, the reciprocal of it is considered when the indices are combined to form EII. It is given by equation (1):

$$EII = w_1 EAI + w_2 MII + w_3(100 - ERI) + w_4 PRI \qquad (1)$$

Equation (1) represents the overall Economic Intelligence Index, where EAI represents economic activity, MII represents market intelligence, ERI represents economic risk, and PRI represents policy readiness. The terms $w_1, w_2, w_3,$and $w_4$represent the respective weights assigned to the four indicators. This inverse of ERI is used because higher economic risk implies that the intelligence score must decrease. Higher value of EII reflects favorable economic environment, promising market, low risk, and proper policy preparedness.

Market Forecasting Approach

The model takes into consideration both past economic data as well as present-day market indicators to forecast future situations. Past tendencies are analyzed to see any variations in economic activity and market behavior. Short-term forecasting gives a prediction about the immediate future of the market while medium-term forecasting helps in predicting possible changes in investment, demand, economic activity, and risks.

Scenario-Based Policy Analysis

Scenario analysis is employed in order to analyze various possible future economic situations. There are four scenarios taken into account, which include Baseline, Growth, Risk and Policy-Adjustment. In particular, Baseline scenario involves standard economic situation. Growth scenario implies more dynamic economic situation and market performance. Risk scenario involves higher economic uncertainty as well as poor market situation. Policy-Adjustment scenario takes into account the positive impact of proper policy actions.

Future Market Intelligence and Scenario Results

Current Economic Intelligence Assessment

Market conditions are analyzed by using the economic intelligence analysis which analyzes four major components including Economic Activity, Market Outlook, Risk Level and Policy Preparedness. The findings suggest that the economic conditions are quite different among the various alternatives. Under the Growth scenario, there is a higher economic activity and market outlook whereas under Risk scenario, performance is relatively low along with economic risk. The findings of the Policy Adjustment scenario reveal that policies could positively influence market conditions.

Market Trend and Forecast Results

In terms of market forecast analysis, economic performance in the future will be determined by the relationship among economic activity, market expectations, risks, and policy capability. While the Growth scenario gives the highest market expectations at 86, backed up by an Economic Activity score of 84, the Risk scenario has the lowest market expectations at 47 and economic activity at 51. The difference between the two scenarios shows the need for constant economic surveillance in order to detect changes in the market situation at the earliest possible time.

Comparative Scenario Analysis

Table 1 shows the comparative performance of the four scenarios. The Baseline scenario is that of normal economic conditions, whereas the Growth scenario is indicative of favorable economic development. The Risk scenario represents economic uncertainty and adverse economic conditions. The Policy Adjustment scenario indicates the improvement that can be attained with policy changes.

Table 1: Economic Intelligence Performance Across Market Scenarios

Scenario	Economic Activity	Market Outlook	Risk Level	Policy Readiness
Baseline	72	70	58	68
Growth	84	86	42	81
Risk	51	47	79	55
Policy Adjustment	78	80	49	88

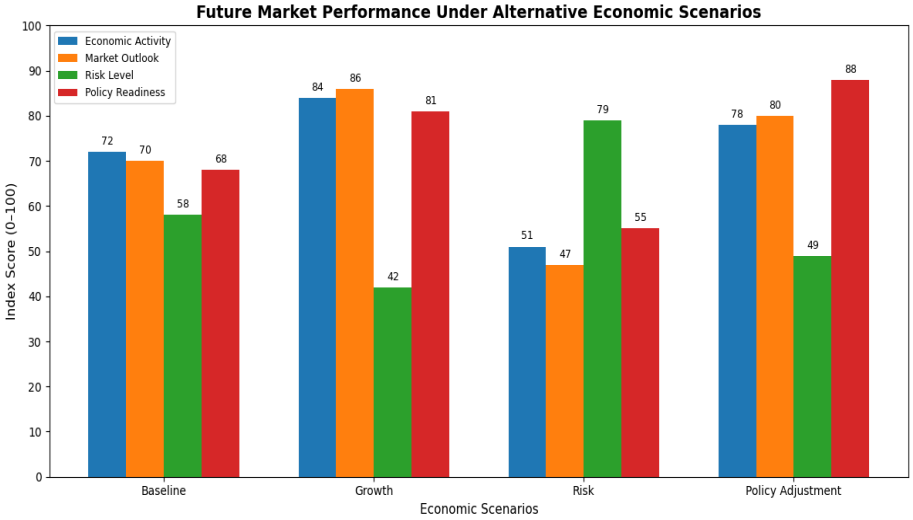


Fig. 2: Future Market Performance Under Alternative Economic Scenarios

The Growth scenario, according to fig. 2, indicates that it is the best scenario in terms of economic activity and market outlook, while the Risk scenario indicates that it is the worst scenario in terms of market conditions and risk level. The Policy Adjustment scenario is better in terms of economic activity and market outlook but achieves the highest score in terms of policy readiness.

Economic Risk and Opportunity Assessment

The findings reveal that there are both threats and opportunities in the future economic environment. The threat scenario should receive more focus since it has a high degree of risk and lower market outlook. On the other hand, the growth scenario reveals more opportunities due to the high level of economic activity and market outlook. Finally, the policy adjustment scenario gives a balanced approach where there is risk reduction and better policy preparation.

Policy Planning and Strategic Implications

With the above economic intelligence model, there will be a systematic approach to transform the market data into sound economic policy decision-making process. Through the constant tracking of economic activities, market trends, risk factors, and policy readiness, it will be possible for policymakers to detect any emerging trends and act on them before they become an economic problem.

Data-Driven Policy Prioritization

The use of economic intelligence could allow policy makers to detect areas that require urgent policy action. Deterioration in economic conditions or economic outlook could signal the need for policies promoting investments, production, employment or demand. Likewise, a high level of risk may make policies related to financial stability, inflation control and external sectors more relevant. Comparison of intelligence indicators between different scenarios would ensure efficient utilization of scarce policy resources.

Early-Warning Mechanisms for Economic Risks

The model can act as an early warning system because it is constantly tracking any changes taking place in economic and market variables. Inflation, decreased investment, weak demand, financial instability, and increased uncertainty may be detected through changes in the Economic Activity, Market Sentiment, and Risk indicators. This helps the policy makers to examine the reasons behind such changes and implement measures to prevent further economic problems.

Investment and Market Development Strategies

Intelligence approach may also assist in making decisions about investments and the development of the market. The positive state of the economy and the prospects of the market show where to make investments and develop business; high-risk level shows that there should be some caution in regard to certain sectors and markets. Based on this information, policy makers can create better investment environment, improve infrastructure, and stimulate innovation and more promising sectors.

Adaptive Policy Planning

Economic circumstances constantly change, thus making it difficult to use static approaches to policy formulation in an environment that is full of uncertainties. This model facilitates adaptive policy planning through the process of scenario comparison and updates on intelligence indicators as more data comes in. For instance, the move from a Growth scenario to a Risk scenario would necessitate increased monitoring and adjustment, while a move towards a Policy Adjustment scenario would facilitate the continued implementation of policies.

The structure enhances the linkage between economic information, market information, forecasting, and economic actions. The incorporation of scenario planning and constant monitoring gives the policymakers a mechanism for detecting risks, recognizing opportunities, setting priorities, and developing strategies to deal with future economic situations.

Discussion

Interpretation of Forecasting Results

Forecasting suggests that future market conditions are different in alternative economic situations. The Growth situation demonstrates more active economic development and good market situation. The Risk situation indicates poor market performance and high level of economic vulnerability. The Policy Adjustment situation shows better market situation and better policy preparedness. These results suggest that economic intelligence may give important forecasting information about the possible changes in the future market situation.

Economic Intelligence and Market Performance

These comparative results show that there is a positive correlation between economic intelligence and market performance. An increase in economic activities, market outlook, economic risk, and policy preparedness are related to better economic conditions. More specifically, the Growth scenario has shown high levels of Economic Activities and Market Outlook along with low economic risk. These results demonstrate that using a combination of economic indicators gives a better insight into market performance compared to one economic indicator.

Advantages Over Conventional Economic Analysis

Conventional economic analysis tends to concentrate on past measures and individual economic variables. On the contrary, the suggested model combines various data measures, market information, risk factors, forecasting and policy scenarios into one comprehensive model. Such an approach is much more forward looking in its nature. Moreover, the model can be revised in a continuous way and thus help detect the change in economic conditions at a quicker pace.

Practical Usefulness for Governments, Investors, and Businesses

The framework is useful to various economic actors. The government can use economic intelligence to anticipate threats, test alternatives, and make decisions. Investors can make use of market intelligence and risk intelligence to make investment decisions. Businesses can utilize economic forecasting and market signals to do demand planning and business expansions. As such, the framework serves as an analytical tool to improve economic decision making.

Framework Limitations

However, there are some drawbacks associated with this framework. The quality of the economic intelligence is subject to the availability, reliability, accuracy and consistency of the data provided. Moreover, unexpected economic surprises such as structural changes or government policy intervention can negatively impact the forecasting process. The weight of the Economic Intelligence Index can also affect the results obtained. Thus, future studies will need to verify the framework on the basis of larger real-life databases.

Conclusion and Future Scope

This research has created a framework for economic intelligence on an evidence-based basis for market analysis and policies in the future. The results show that it is possible to structure economic intelligence by considering economic

activities, market outlook, economic risks, and policy preparedness in order to understand the economic trends. It was found in the comparative analysis that the Growth scenario indicated higher economic activities and market outlook while the Risk scenario indicated lower market conditions and higher economic risks. The Policy Adjustment scenario showed the possibility of improving market conditions with better policy preparedness. It is important to note that the proposed framework contributes in the way of linking multiple economic databases to data processing, market forecasting, scenario analysis, and policy intelligence in one analytical framework. In this way, it is possible to convert economic information into economic intelligence rather than use information for only descriptive purposes.

The proposed framework carries substantial implications in terms of making evidence-based decisions, early warning about economic risks, planning investments, and adjusting policies accordingly. Policy makers will be able to consider various scenarios about the economy and apply interventions based on changes in market conditions. It will help to enhance economic planning.

Further research can enrich the proposed framework by means of incorporating Artificial Intelligence (AI), real-time economic data, and predictive analytics. The use of AI models can help to make better patterns and forecasts. Real-time economic data will help to monitor continuously economic and financial conditions. Predictive analytics will provide more assistance to warning systems and forecasting of scenarios. Further research can also verify the proposed framework by means of using datasets at the country or sector level.

References

Adrian, T., Boyarchenko, N., & Giannone, D. (2019). Vulnerable growth. *American Economic Review*, *109*(4), 1263-1289. https://doi.org/10.1257/aer.20161923

Ardia, D., Bluteau, K., & Boudt, K. (2019). Questioning the news about economic growth: Sparse forecasting using thousands of news-based sentiment values. *International Journal of Forecasting*, *35*(4), 1370-1386. https://doi.org/10.1016/j.ijforecast.2018.10.010

Athey, S., & Imbens, G. W. (2019). Machine learning methods that economists should know about. *Annual review of economics*, *11*(1), 685-725. https://doi.org/10.1146/annurev-economics-080217-053433

Baker, S. R., Bloom, N., & Davis, S. J. (2016). Measuring economic policy uncertainty. *The quarterly journal of economics*, *131*(4), 1593-1636. https://doi.org/10.1093/qje/qjw024

Bok, B., Caratelli, D., Giannone, D., Sbordone, A. M., & Tambalotti, A. (2018). Macroeconomic nowcasting and forecasting with big data. *Annual Review of Economics*, *10*(1), 615-643. https://doi.org/10.1146/annurev-economics-080217-053214

Caldara, D., & Iacoviello, M. (2022). Measuring geopolitical risk. *American economic review*, *112*(4), 1194-1225. https://doi.org/10.1257/aer.20191823

Chernozhukov, V., Chetverikov, D., Demirer, M., Duflo, E., Hansen, C., Newey, W., & Robins, J. (2018). Double/debiased machine learning for treatment and structural parameters. *The Econometrics Journal, 21*(1). https://doi.org/10.1111/ectj.12097

Gentzkow, M., Kelly, B., & Taddy, M. (2019). Text as data. *Journal of Economic Literature*, *57*(3), 535-574. https://doi.org/10.1257/jel.20181020

Goulet Coulombe, P., Leroux, M., Stevanovic, D., & Surprenant, S. (2022). How is machine learning useful for macroeconomic forecasting. *Journal of Applied Econometrics*, *37*(5), 920-964. https://doi.org/10.1002/jae.2910

Gu, S., Kelly, B., & Xiu, D. (2020). Empirical asset pricing via machine learning. *The review of financial studies*, *33*(5), 2223-2273. https://doi.org/10.1093/rfs/hhaa009

Hansen, S., McMahon, M., & Prat, A. (2018). Transparency and deliberation within the FOMC: A computational linguistics approach. *The Quarterly Journal of Economics*, *133*(2), 801-870. https://doi.org/10.1093/qje/qjx045

Jordà, Ò., Schularick, M., & Taylor, A. M. (2017). Macrofinancial history and the new business cycle facts. *NBER macroeconomics annual*, *31*(1), 213-263. https://doi.org/10.1086/690241

Lenza, M., & Primiceri, G. E. (2022). How to estimate a VAR after March 2020. *Journal of Applied Econometrics, 37*(4), 688-699. https://doi.org/10.1002/jae.2895

Lim, B., & Zohren, S. (2021). Time-series forecasting with deep learning: a survey. *Philosophical transactions of the royal society a: mathematical, physical and engineering sciences*, *379*(2194). https://doi.org/10.1098/rsta.2020.0209

Makridakis, S., Spiliotis, E., & Assimakopoulos, V. (2020). The M4 Competition: 100,000 time series and 61 forecasting methods. *International Journal of Forecasting*, *36*(1), 54-74. https://doi.org/10.1016/j.ijforecast.2019.04.014