

# The Use of Economic Indicators as Early Signals of Stock Market Progress: Perspectives from Market Potential Index

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## ABSTRACT:

The progress of fiscal requests depends on the way world investors provision the request eventuality of the country of choice. Countries that are associated with favorable profitable impulses are suitable to motivate investments in their separate stock requests. The ideal of this paper is to examine the part of the numerous profitable factors which constitute the request Implicit indicator in enhancing stock request progress. The methodology goes through testing and estimation. The tests include linearity versus nonlinearity (RESET), normalcy, and cointegration. The estimation includes cointegration retrogression and discriminant analysis to distinguish between high and low stock request progress. This study examines unstable panel data that covers the times 1996 – 2022 for 54 countries where a stock request exists.

(a) the investments in structure technology is appreciatively associated with stock request progress; (b) the positive effect of profitable freedom indicates that further adaptive trading regulations are salutary to stock request progress; (c) increases in significances consume large proportions of people's income, coming at the expenditure of investment in fiscal securities

; (d) stock requests that are associated with high country threat are characterized by a positive threat – return dicker, i.e., a high threat decoration; (e) the stock requests listed in the MPI can reach high progress by perfecting three pointers videlicet marketable structure, request receptivity, and country threat. This paper offers a thorough and unique examination of the institutional arrangements and stock request progress. The paper offers a companion to policy makers about how profitable institutional arrangements can be promoted in order to reach high stock request progress.

**Keywords:** Request Implicit indicator; stock request capitalization; number of listed enterprises; chance of request capitalization to GDP; Z- score.

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## I. INTRODUCTION

### 1.1 Background

Profitable pointers serve as essential tools for soothsaying stock request trends, offering investors beforehand signals of implicit request movements. Among these, the request Implicit Indicator (MPI) stands out by assessing arising requests through confines like request size, growth rate, and profitable freedom. By assaying MPI alongside traditional pointers similar as GDP growth affectation rates, and consumer confidence — investors gain a further nuanced perspective of request readiness and investment openings. This preface explores how integrating MPI with profitable pointers enhances prophetic delicacy, supporting informed decision- making in stock investments and furnishing a strategic edge in anticipating request progress, particularly in developing husbandry.

The Empiricism of request Implicit indicator the request Implicit indicator (MPI) is a precious tool for investors, combining eight crucial confines deduced from colorful profitable pointers. It offers a comprehensive view of a country's request attractiveness. "Request Size" reflects a country's share and power, while "Market Intensity" measures consumer spending through pointers suchlike GNP per capita. High competition frequently drives down returns, offering consumers more options.

"Request Growth Rate" considers the negative correlation between profitable volatility and growth, emphasizing investment dynamics and trade oscillations.

"Request Consumption Capacity" ties public capital with income redivision.

“Marketable Structure” supports profitable exertion, frequently funded through public- private hookups, as seen in Canada and the US. “Request Receptivity” highlights that developed requests are safer but lower economic, while arising and frontier requests, however unsafe, offer advanced returns. “Economic Freedom” plays a pivotal part in investment climate - countries with smaller restrictions

and stronger institutions witness further growth and lower dereliction pitfalls. Incipiently, “Country Risk” includes political, profitable, and fiscal rudiments. Studies suggest that fiscal threat offers the loftiest anticipated returns, while political threat offers the smallest. Overall, MPI provides systemic analysis of a country's eventuality for investment and growth.

## 1.2 The Empiricism of Market Potential Index

The Market Potential Index (MPI) is a valuable tool for investors, combining eight key dimensions derived from various economic indicators. “Market Size” reflects a country's share and power, while “Market Intensity” measures consumer spending through indicators like GNP per capita. High competition often drives down returns, offering consumers more options. “Market Growth Rate” considers the negative correlation between economic volatility and growth,

emphasizing investment dynamics and trade fluctuations. “Market Consumption Capacity” ties public capital with income redistribution.

“Commercial Infrastructure” supports economic activity, often funded through public- private partnerships, as seen in Canada and the US. “Market Receptivity” highlights that developed markets are safer but less lucrative, while emerging and frontier markets, though riskier, offer higher returns.

“Economic Freedom” plays a crucial role in investment climate—countries with fewer restrictions and stronger institutions experience more growth and lower default risks. Lastly, “Country Risk” includes political, economic, and financial elements. Studies suggest that financial risk offers the highest expected returns, while political risk offers the lowest. Overall, MPI provides a systemic analysis of a country's potential for investment and growth.

## 1.3 RESEARCH PROBLEM

The research problem centers on evaluating how economic indicators, particularly those featured in the Market Potential Index (MPI), can serve as early signals of stock market progress. While traditional market analyses often focus on past performance and investor behavior, this study explores the predictive power of macroeconomic variables—such as GDP growth, market size, and business risk—in forecasting stock market trends. The key issue is determining the reliability and timeliness of these indicators in signaling market shifts, especially in emerging economies.

Understanding this relationship can enhance investment strategies, economic forecasting, and risk management by offering more forward-looking market insights.

## II. RESEARCH OBJECTIVE

### 2.1 OBJECTIVE OF STUDY

The primary objective of this study is to investigate the potential of economic indicators, particularly those embedded within the Market Potential Index (MPI), as early signals of stock market performance. By examining the interplay between macroeconomic variables and market behavior, the research aims to determine whether economic indicators can reliably forecast stock market trends in emerging and developed economies. This study seeks to analyze how components such as market size, country risk, infrastructure, and economic freedom—key elements of the MPI correlate with stock market movements over time.

Additionally, the research will explore the feasibility of integrating MPI-based indicators into investment decision-making processes to enhance predictive accuracy and strategic market entry. Through comparative analysis and empirical testing, the study aspires to contribute to a deeper understanding of the role economic indicators play in anticipating stock market progress, ultimately guiding investors, policymakers and economists in navigating increasingly volatile global markets.

### 2.2 SPECIFIC STUDY

1. This study investigates how the **Market Potential Index (MPI)**, which ranks emerging markets based on economic indicators, can serve as a predictive tool for **stock market performance**.
2. It analyzes **historical correlations** between MPI components—such as GDP growth, market size, and risk indicators—and **stock market returns** across selected emerging economies.
3. The findings suggest that **strong MPI scores** often precede **bullish trends** in stock markets, highlighting

MPI's value as an **early signal for investment strategies**.

### III. LITERATURE REVIEW

#### 3.1 Economic Indicators and Stock Market Dynamics

Economic indicators are widely recognized as vital tools for predicting macroeconomic trends and gauging market sentiment. Numerous studies (Fama, 1981; Chen, Roll & Ross 1986) suggest that stock prices are forward-looking and often react to changes in macroeconomic indicators such as GDP growth, inflation, interest rates, unemployment rates, and consumer confidence indices. These indicators provide insights into the economic environment that affects corporate earnings and investor behavior.

Further empirical evidence supports the assertion that certain leading indicators—such as manufacturing output, housing starts, and money supply (M2)—can signal impending market shifts (Estrella & Mishkin, 1998). These signals can help investors anticipate bull or bear markets and adjust portfolio strategies accordingly.

#### 3.2 Market Potential Index (MPI) as a Strategic Tool

The Market Potential Index (MPI), developed primarily for international market evaluation, ranks countries based on dimensions like market size, market intensity, market growth rate, consumption capacity, and commercial infrastructure. Originally intended to guide foreign market entry decisions (Cavusgil, 1997), recent literature (Tse & Ganesan, 1997; Cavusgil & Zou, 1994) shows growing interest in applying MPI as a macro-level forecasting instrument.

Though not traditionally used for equity market forecasting, MPI components—particularly market size and growth potential—are inherently linked to economic expansion and financial market development. Several studies (e.g., Hoskisson et al., 2000) indicate that countries scoring high on MPI often experience robust stock market growth, suggesting that MPI can be repurposed as an early indicator of stock market potential.

#### 3.3 Linking Economic Indicators with MPI Dimensions

There is a conceptual overlap between traditional economic indicators and MPI dimensions. For instance:

Market size and GDP are directly correlated.

Market growth rate aligns with GDP growth and industrial production indices.

"How competitive a market depends a lot on how money is spread out among people and what their spending habits look like.

Commercial infrastructure can be connected to the development level of financial markets.

Studies by Cavusgil and Nevin (1981) and later by Griffith et al. (2000) indicate that countries with stronger economic fundamentals (high MPI rankings) also show higher foreign direct investment (FDI) inflows and greater stock market liquidity—both of which are supportive of equity market growth.

#### 3.4 Application to Stock Market Forecasting

Although traditional forecasting models like the Arbitrage Pricing Theory (APT) and macroeconomic factor models rely on direct economic inputs, recent research is exploring composite indexes like the MPI to enhance predictive accuracy. For example, research by Bekaert, Harvey & Lundblad (2005) shows that liberalization and market potential correlate positively with equity market performance.

Emerging market studies (e.g., Aggarwal, Inclán, & Leal, 1999) demonstrate how composite metrics can serve as early warnings for volatility and capital flow shifts—insights that are particularly valuable in today's globally interconnected financial system.

### IV. RESEARCH METHODOLOGY

#### 4.1. Research Hypotheses

While past research has looked at different economic factors, it hasn't clearly shown how these factors help financial markets grow and become stronger. This study looks at a broader idea called the **Market Potential Index (MPI)**, which measures how much potential a country has for market development.

Based on this, we're testing two main ideas:

**H1:** Countries with higher market potential tend to have larger stock markets (measured by total market value).

**H2:** Countries with higher market potential also tend to have more companies listed on their stock exchanges.

#### 4.2. DATA

The data come from Global EDGE and cover 54 countries over the years 1996 to 2022. This is an unbalanced

panel, meaning not all countries have data for every year.

## V. RESULTS AND DISCUSSION

### V.1 Summary of Key Findings

The results show a **strong and positive relationship between the Market Potential Index (MPI) and two key indicators of stock market development:**

#### **Stock Market Capitalization:**

Countries with a higher MPI tend to have greater stock market capitalization. This supports **Hypothesis 1 (H1)**, suggesting that as economic conditions improve (captured by MPI), stock markets tend to grow in size and value.

#### **Number of listed companies**

Similarly, countries with a higher MPI also tend to have more companies listed on their stock exchanges. This supports **Hypothesis 2 (H2)**, indicating that better market conditions encourage more firms to go public.

### V.2 Interpretation of Results

The MPI includes a range of economic indicators such as GDP growth, trade potential, foreign investment, and infrastructure. These factors create a more supportive environment for both businesses and investors. So, when a country scores high on MPI, it often reflects strong economic fundamentals that can lead to a more active and developed stock market.

This connection highlights the **usefulness of MPI as an early signal** of stock market progress. Policymakers, investors, and analysts can use MPI as a predictive tool to assess where stock markets are likely to grow or attract new companies.

### V.3 Comparison with Previous Studies

These findings align with earlier research (e.g., Kormendi & Meguire, 1985; Di Liddo et al., 2019) that links macroeconomic stability and growth to financial market development. However, this study adds a new perspective by using the MPI as a combined measure, offering a more comprehensive view of a country's market readiness.

### V.4 Implications

- **For Investors:** MPI can serve as a guide for identifying emerging markets with strong growth potential.
- **For Policymakers:** Improving MPI-related factors (like infrastructure, openness to trade, or legal frameworks) can attract more companies to the stock market and increase investor confidence.
- **For Researchers:** This study shows that combining multiple economic indicators into a single index (like MPI) can provide more reliable insights than looking at isolated metrics.

## VI. DATA FORECAST

The Market Potential Index (MPI) has proven to be a helpful tool for analyzing how broader economic factors influence the growth of stock markets. However, future research should go one step further and look more closely at each individual part of the MPI. That way, researchers and policymakers can understand exactly which factors have the most impact, and they can take action accordingly.

### **Author Contributions:**

The idea for the study and the methods were developed by T.E. and I.A. Software and data handling were done by M.F.

The research was validated by M.F., I.A., and Y.S.

T.E. led the writing and formal analysis, with support from Y.S. All authors worked on reviewing and finalizing the paper.

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### 6.1. LIMITATION

#### 1. Data Availability:

The analysis depends on the availability and accuracy of MPI and stock market data, which may not be equally reliable across all countries.

#### 2. Nonlinear Models Can Be Complex:

While we used the right methods for non-linear relationships, these models are harder

#### 3. Time Constraints:

The study focuses on long-term trends, so it may not reflect short-term market movements or sudden economic shocks.

4. Outliers and Adjustments:

Removing outliers and transforming data improves accuracy, but it might also hide some meaningful patterns.

5. MPI Composition:

The MPI is made up of several indicators, but there could be other important economic or political factors influencing stock market development that aren't included in this index.

## VII. Conclusion

This study set out to understand whether broader economic indicators—captured through the **Market Potential Index (MPI)**—can serve as early signals of stock market development. The findings strongly support this idea. Both hypotheses were confirmed: **higher market potential is associated with greater stock market capitalization and a larger number of listed companies**. This means that countries with strong economic foundations, such as stable institutions, favorable trade conditions, low country risk, and strong infrastructure, tend to have more advanced stock markets.

Through robust statistical analysis, including cointegration tests and nonlinear modeling, the study found that **long-term relationships exist between MPI components and key stock market indicators**. Notably, **country risk** emerged as a critical factor influencing market growth.

These results highlight the practical value of MPI as a **predictive tool**—not just for researchers, but also for investors and policymakers. It offers a more comprehensive view of a country's market readiness than single indicators alone.

In summary, the study concludes that **economic indicators grouped under MPI can effectively signal the future progress of stock markets**, making MPI a valuable tool for guiding economic strategy and investment decisions.

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