

# WHAT DRIVES IPO ACTIVITY? EVIDENCE FROM EXCHANGES WORLDWIDE

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## **Abstract:**

This study investigates the factors driving Initial Public Offering (IPO) activity across 79 stock exchanges globally from 2002 to 2024. We examine how market liquidity, GDP growth, and financial development influence IPO frequency and size, distinguishing between advanced and emerging markets. Using panel regression analysis with high-dimensional fixed effects, we find that market liquidity and GDP growth consistently drive IPO frequency, while financial development primarily influences the size of offerings, particularly in emerging markets. Additionally, we introduce the novel Listing Stringency Index (LSI) and show that while stricter listing requirements correlate with larger IPO sizes, they do not necessarily increase IPO activity. The study also highlights a significant but temporary IPO surge during the COVID-19 recovery period, driven by exceptional market conditions. Our results provide critical insights for policymakers and market participants seeking to foster public capital markets and improve IPO market resilience.

**Keywords:** IPO activity, going public decision, market liquidity, IPO boom in Covid-19, financial development, emerging markets, listing requirements

## **INTRODUCTION**

This paper explores the determinants of IPO activity in global stock exchanges, focusing on the period from 2002 to 2024. We aim to identify key factors influencing the frequency and size of IPOs across a diverse set of advanced and emerging economies. IPOs represent a crucial channel for firms to raise capital, and understanding the underlying drivers can provide insights into market dynamics and help guide policymaking. Previous studies have largely focused on specific market conditions, and few have analyzed global trends across different economies (Pagano, Panetta, & Zingales, 1998).

In this study, we review the literature on IPO activity, market conditions, and regulatory environments, and we introduce a comprehensive methodology involving panel regressions (Ritter, 1991). This allows us to assess the impact of various market and macro-financial factors on IPO activity. Our research extends the current literature by focusing on both the frequency of IPOs and the amount of capital raised, providing a holistic view of IPO dynamics globally.

This paper makes several important contributions to the literature on IPO activity. First, it provides a global perspective by analyzing IPO dynamics across 79 stock exchanges, covering both advanced and emerging economies. Unlike previous studies that typically focus on individual markets, this broad scope allows for a more comprehensive understanding of IPO drivers on a global scale. Second, the introduction of the Listing Stringency Index (LSI)—which measures the regulatory environment of exchanges—represents a novel contribution. This index enables us to systematically assess how listing requirements influence IPO activity across different markets. Our findings reveal that while stricter listing requirements lead to larger IPO sizes, they do not necessarily increase IPO frequency, offering new insights into the relationship between regulation and market behavior (Loughran & Ritter, 2004). Third, the study provides a detailed examination of structural asymmetries between advanced and emerging markets. It demonstrates that emerging markets are more responsive to improvements in liquidity and financial development, whereas advanced economies are more sensitive to volatility and economic conditions. This distinction underscores the need for tailored policy approaches depending on the level of market development (Beck, Demirguc-Kunt, & Levine, 2000). Fourth, the study highlights the temporary IPO surge during the COVID-19 recovery period, showing how extraordinary global events—such as a pandemic—can drive short-term fluctuations in IPO activity (Liu, 2021). Finally, by analyzing both IPO

frequency and size simultaneously, this paper offers a more comprehensive view of IPO dynamics, bridging the gap between market participation and the capital raised. These contributions enhance the understanding of IPO market behavior and provide valuable insights for policymakers, exchanges, and market participants seeking to foster public capital markets.

We find that, while the effect of market returns and volatility on IPO frequency and size varies across regions, market liquidity and GDP growth consistently emerge as the most robust determinants of IPO activity. Additionally, our innovative Listing Stringency Index (LSI) reveals that while stricter listing requirements lead to larger IPO sizes, they do not necessarily stimulate more frequent IPO activity. The COVID-19 pandemic also introduced an unusual surge in IPO activity, offering a temporary deviation from typical market patterns.

## METHODOLOGY

The central research question of this study is: What are the key drivers of IPO activity across global stock exchanges, and how do these drivers differ between advanced and emerging markets? More specifically, this paper seeks to identify the factors that influence both the frequency and size of IPOs in different market contexts, considering variables such as market liquidity, GDP growth, financial development, and listing requirements. This question is relevant to both theory and practice because understanding IPO dynamics is crucial for the functioning of capital markets, where IPOs serve as an important mechanism for raising capital, promoting firm growth, and fostering market development (Pagano et al., 1998).

This study adopts a panel regression framework to investigate the determinants of IPO activity. The framework involves two key dimensions of IPO activity:

1. *IPO Frequency*: This is defined as the ratio of new IPOs to the total number of listed companies (NIPO/NListed), normalized to account for variations in the size of stock exchanges. This measure allows for cross-country and cross-exchange comparisons of IPO activity.
2. *IPO Size*: This is captured as the capital raised per IPO, measured by the logarithm of capital raised divided by the number of IPOs ( $\log(KIPO/NIPO)$ ). This metric provides insights into the scale of the IPOs taking place across exchanges.

The study uses a panel regression model with high-dimensional fixed effects, which allows for the analysis of time-series and cross-sectional data, controlling for unobserved heterogeneity across exchanges and regions. The model helps address variation in IPO activity that arises from regional differences, economic cycles, and institutional environments (Ritter, 1991; Loughran & Ritter, 2004).

To explore the drivers of IPO activity, the study applies fixed-effects panel regressions with the following dependent variables: PO frequency and IPO size.

We examine a range of explanatory variables grouped into two categories:

- **Exchange-Level Factors:**
  - Market Returns (R), measured by the percentage change in the aggregate market index for each exchange.
  - Market Volatility ( $\sigma$ ), defined as the standard deviation of monthly returns over the previous 12 months.
  - Market Liquidity (TurnOver), calculated as the turnover velocity, which measures the ratio of value traded to market capitalization.
  - Listing Stringency Index (LSI), derived from survey data on listing requirements, reflecting the regulatory environment for IPOs.
- **Country-Level Macroeconomic Factors:**
  - Real GDP Growth ( $\Delta GDP$ ), reflecting overall economic activity.
  - Inflation ( $\Delta CPI$ ), as a measure of price stability.

- Financial Development Index (FDIndex), a composite measure of financial sector development.
- Geopolitical Risk Index (GPRC), reflecting global political tensions.
- Additional macroeconomic variables, such as lending rates and bond yields, are included to control for broader economic conditions.

The fixed-effects model is applied to account for unobserved heterogeneity between exchanges (e.g., market characteristics that remain constant over time) and to control for regional shocks that could affect IPO activity. Region-time fixed effects are also introduced to capture the influence of shared global or regional events, such as the COVID-19 pandemic, on IPO trends across different exchanges and time periods.

The panel regression method with fixed effects is ideal for this study because it allows for controlling the variation between exchanges and regions, capturing unobserved factors that may influence IPO activity. It also helps manage the large dataset, incorporating global exchanges over an extended time period (2002-2024). The inclusion of region-time fixed effects further isolates the effect of regional and global shocks, such as the COVID-19 period, ensuring that long-term IPO drivers are not confounded by short-term anomalies. This method provides reliable and robust results that offer meaningful insights into the factors driving IPO activity.

This research contributes to the theoretical literature by addressing a significant gap in the understanding of global IPO dynamics. While previous studies often focus on specific exchanges or countries, this study provides a broad analysis across 79 exchanges, offering a global perspective on IPO drivers. The introduction of the Listing Stringency Index (LSI) contributes a novel institutional dimension, allowing for a better understanding of how regulatory requirements influence IPO outcomes, which has been underexplored in the existing literature (Pagano et al., 1998).

From a practical standpoint, the study's findings are crucial for policymakers, exchanges, and market participants. Policymakers can use the results to design more effective policies to stimulate IPO activity, such as improving market liquidity, relaxing regulatory barriers, and promoting economic stability. For exchanges, the insights into the Listing Stringency Index provide guidance on how listing requirements can balance market access with investor protection, ensuring that regulations foster both market quality and inclusivity. The study also offers valuable lessons for emerging economies, where improving market liquidity and financial development is key to encouraging IPOs and expanding capital markets.

## **FINDINGS**

The empirical analysis reveals several key insights regarding IPO activity across global stock exchanges. Market liquidity and GDP growth consistently emerge as the strongest drivers of IPO frequency. Liquidity, measured as turnover velocity, positively correlates with the likelihood of new listings, as liquid markets reduce transaction costs, enhance pricing efficiency, and make public issuance more attractive for firms. GDP growth is similarly positively associated with IPO frequency, as expanding economies encourage firms to seek capital in public markets. This finding holds true across both advanced economies (AEs) and emerging and developing economies (EMDEs).

When examining the size of IPOs, financial development plays a crucial role, particularly in EMDEs. Our results suggest that in markets with more developed financial systems, companies tend to raise more capital through IPOs, as investors have more confidence in the stability and transparency of the financial infrastructure. However, the relationship between market returns and IPO frequency is more nuanced. While returns are positively correlated with IPO frequency in the full sample, their impact becomes less significant once regional and time fixed effects are introduced, suggesting that market sentiment and cycles are crucial factors that vary by region.

The Listing Stringency Index (LSI), which captures the regulatory framework of exchanges, shows that stricter listing requirements are linked to larger IPO sizes. However, this relationship does not extend to

IPO frequency, indicating that while more stringent listing standards may signal higher-quality markets to investors, they do not necessarily encourage more frequent IPO activity. In fact, exchanges with more relaxed listing requirements tend to see more firms entering the market, particularly smaller or growth-oriented companies.

Finally, the study captures a temporary surge in IPO activity during the COVID-19 recovery period. This surge can be attributed to extraordinary market conditions, such as unprecedented liquidity injections, low interest rates, and government stimulus measures (Liu, 2021). While this IPO boom was short-lived, it highlights the sensitivity of IPO markets to global economic shocks and policy interventions.

## **CONCLUSIONS**

This paper highlights the critical drivers of IPO activity across global stock exchanges, providing a comprehensive understanding of how market conditions, regulatory frameworks, and economic factors shape IPO outcomes. The results demonstrate that market liquidity and GDP growth are the most consistent and significant predictors of IPO frequency. For IPO size, financial development plays a pivotal role, particularly in emerging markets, where improving the depth of financial systems can facilitate larger offerings.

The Listing Stringency Index (LSI) reveals a trade-off between regulatory stringency and IPO frequency. While stricter listing requirements contribute to larger IPO sizes, they do not necessarily increase the number of IPOs. Policymakers and exchanges must therefore balance regulatory requirements to ensure both accessibility and market quality.

Furthermore, the findings underscore the importance of regional dynamics in shaping IPO markets. Emerging markets are more sensitive to liquidity and institutional improvements, while advanced economies are more impacted by volatility and macroeconomic conditions. The study also underscores the role of external shocks, such as the COVID-19 recovery period, in temporarily boosting IPO activity, illustrating the short-term vulnerability of IPO markets to broader economic shifts.

For practical implications, the study provides valuable insights for policymakers, exchanges, and market participants. Policymakers should focus on fostering market liquidity and financial development to promote IPOs, particularly in emerging markets. Exchanges can use the LSI to refine their regulatory frameworks, ensuring that listing requirements attract high-quality firms while maintaining accessibility for smaller companies.

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