

The Impact of the Country of Origin on the Underpricing of ADR IPO in the U.S. Equity Markets

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This study examines the impact of the country of origin on the underpricing of American Depositary Receipts (ADRs) Initial Public Offerings (IPOs) in the U.S. equity markets from 2003 to 2023. Analyzing 161 ADR IPOs from 28 countries, the research finds that ADRs from countries with higher country risk premiums are associated with lower underpricing. GDP correlation and Rule of Law difference have no significant impact on underpricing, whereas longer lock-up periods correlate with higher underpricing, signaling higher quality. Countries such as China, the UK, Ireland, Germany, Israel, and Mexico exhibit high underpricing, while Japan, South Korea, and Singapore show low or negative underpricing. The study concluded that investors are willing to pay more for better protection against financial risk but will not pay more for diversification potential.

Keywords: ADR (American Depositary Receipt), IPO (Initial Public Offering), underpricing, country risk premium, rule of law, GDP correlation, U.S. equity markets

INTRODUCTION

In a world where financial markets are becoming more interconnected, American Depositary Receipts (ADRs) have become a crucial tool for foreign companies aiming to enter the U.S. capital markets. It is a financial instrument that allows U.S. investors to buy shares in foreign companies without dealing with the complexities of international trading. Typically, a U.S. bank issues American Depositary Receipts (ADRs). This bank, known as the depository bank, is responsible for buying the foreign company's shares and issuing the corresponding ADRs to U.S. investors. The custodial bank in the host country holds local shares and provides local administrative services related to the ADRs.

Recently, China, the UK, and Singapore have significantly increased their participation in initial public offerings (IPOs) on the U.S. stock markets, underscoring the global appeal of ADRs. Following U.S. regulatory compliance, ADRs allow foreign companies to list shares on U.S. exchanges like NYSE and NASDAQ. This simplifies cross-border investments and provides U.S. investors with international diversification opportunities. Despite this benefit, the impact of the country of origin on underpricing is unclear, as researchers in the financial ecosystem tend to provide conflicting evidence. Studies (Bell et al., 2008) found that firms from countries with high economic freedom are less underpriced and have better legitimacy. Conversely, other studies (Ejara & Ghosh, 2004; Demaskey & Olson, 2006) reported that ADR

IPOs generally underperform U.S. IPOs, with significant performance variations based on the issuing firm's region and country. Highlights from studies suggest that firms from high-secrecy countries experience lower underpricing (Grossmann et al., 2024) and that ADR IPOs are often timed to exploit market optimism but underperform seasoned U.S. firms (Huo et al., 2018). ADR IPOs' are distinct in performance patterns for ADRs from the Americas, Europe, and the Pacific Rim, underscoring the impact of country of origin (Demaskey & Olson, 2006). Observations of ADRs from Latin American countries show significant negative abnormal returns during currency crises (Esqueda and Jackson, 2012). These studies show that while some ADRs from specific countries exhibit high initial performance and long-term benefits, others face challenges like underpricing and negative returns during economic turmoil. This contrasting evidence underscores the complexity of ADR performance based on country-specific factors.

The key contribution of this paper is a straightforward risk-based explanation for the underpricing. While studies such as Alaganar & Bhar (2001); Fu, et al., (2022); Chowdhury et al., (2021) focus on the benefits of ADRs to companies such as accessing capital from the U.S market, increasing visibility and investor base, they do not explain why investors will be willing to pay more for ADR IPOs compared to U.S. regular based IPO. We provide a simple risk-based explanation using a country risk premium. The study provides robust evidence that ADR IPOs from countries with higher country risk premiums experience markedly low underpricing which investors are willing to accept in exchange for better protection in the U.S. market thereby offering substantial protection benefits against financial risks if they must buy stocks in the issuing country. Unlike studies that use economic freedom, corruption, and economic policy uncertainty (Boulton, 2022) as a single measure of risk, this study is the first to use country risk premium as a comprehensive measure for country risk.

Like the cost of equity on the understanding that investors must be paid higher taking on investment with higher risk, country risk premium is the additional return investors demand to compensate them for higher risk if they must invest in a foreign country instead of the domestic market—the U.S. It encompasses the political instability, geopolitical risk, exchange rate, risk of corruption, legal system, and economic fluctuations. This holistic measure of country risk allows for a deeper exploration of the relationship between the country of origin and ADR IPOs performance beyond traditional measures such as economic freedom and legal institutions. This dimension has been underexplored in the existing literature.

This study contributes by providing a nuanced analysis of the impact of country-specific factors on ADR IPO performance. Its approach to measuring country risk premiums, empirical testing of the bonding hypothesis, and application of Modern Portfolio Theory offer valuable theoretical and practical implications for investors. This research enhances the efficiency and integration of global financial markets by advancing the understanding of the complex interplay between country-specific risks and international equity offerings.

This paper is organized as follows. The next section reviews theoretical background and develops testable hypotheses. Section three presents data and method. Section four discusses the results and is followed by the conclusion.

THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

The performance of American Depositary Receipt (ADR) Initial Public Offerings (IPOs) in U.S. equity markets is influenced by various country-specific factors. This study focuses on three critical variables: GDP correlation, country risk premium, and rule of law index differences. These variables are chosen based on their theoretical significance in financial economics and their potential impact on ADR IPO underpricing. The theoretical background for each variable and develops hypotheses to guide the empirical analysis of this study.

The Modern Portfolio Theory (MPT) emphasizes diversification's importance in reducing risk in an investment portfolio (Markowitz, 1952). According to MPT, investors can achieve optimal diversification by combining assets with low or negative correlations, minimizing overall portfolio risk while maximizing returns. In the context of ADR IPOs, the GDP correlation between the issuing countries and the U.S. economy is a critical factor to consider. GDP correlation measures the degree to which the economic cycles

of two countries move together. A lower GDP correlation implies that the economic activities of the issuing country are less synchronized with those of the U.S., offering potential diversification benefits to investors. MPT suggests that by including assets from countries with lower GDP correlation to the U.S., investors can reduce the overall risk of their portfolio. This is because the economic downturns in one country may not coincide with those in another, thereby smoothing out the returns and reducing volatility. This principle is particularly relevant for ADRs, as they allow U.S. investors to gain exposure to foreign markets without the complexities of direct foreign investments where stocks with low or negative correlation reduce portfolio risk.

Ideally, the study would want to use the correlations of the stock market indices. Still, stock is correlated with economic growth or GDP (Sarkissian and Schill, 2016), and the lack of data from some countries at the time of this research warrant the use of the GDP correlation.

Firms' earnings positively correlated with economic growth influence stock prices (Harvey, 1989). These stock prices contain information about real economic activity and the variations in stock prices can reflect changes in both expected economic growth and the perceived risk of stock cash flows, which can sometimes confound the information about expected economic growth. Despite this, the fundamental valuation of equity suggests that stock prices should generally reflect expectations of real economic activity, indicating a positive correlation between GDP and the stock market. This variable measures economic synchronization between the issuing countries and the U.S.

The Capital Asset Pricing Model (CAPM) and its international extension, the International Capital Asset Pricing Model (ICAPM), further support this notion. According to the ICAPM, the expected return on an asset is a function of its covariance with the global market portfolio (Solnik, 1974). Assets with lower covariance (or correlation) with the U.S. market provide better diversification benefits, leading to a lower required return and, consequently, lower underpricing.

ADRs from countries with lower correlation with the U.S GDP experience lower underpricing is well-supported by existing literature (Alaganar & Bhar, 2001; Kabir et al., 2011; Sarkissian, 2016) on diversification benefits and market behavior theories. Countries with less correlated economies to the US can offer significant diversification benefits, which may translate into lower underpricing. Specifically, ADRs from countries with distinct economic environments, characterized by lower GDP correlation with the US GDP, can benefit from reduced underpricing. Investors will be willing to pay more to add stocks with negative or lower correlation to their portfolio. Based on these theories the hypothesis is stated as

Hypothesis 1: The lower the correlation coefficients of the Gross Domestic Product Changes of issuing countries with the US market, the lower the underpricing.

The country risk premium reflects the additional return investors require to compensate for the higher risk of investing in a particular country compared to a risk-free investment. The International Capital Asset Pricing Model (ICAPM) suggests that investors demand higher returns for taking on additional country-specific risks, such as political instability, economic volatility, and currency risk (Solnik, 1974). Higher country risk premiums indicate a riskier investment environment, which can lead to conservative pricing strategies and lower underpricing.

Country risk premium is rooted in the broader theory of risk and return in financial markets. According to the ICAPM, the expected return on an asset is a function of its exposure to systematic risk factors, including country-specific risks (Harvey, 1989). Investors require higher returns to compensate for these risks, leading to higher underpricing for ADR IPOs from countries with higher risk premiums as suggest by traditional view on risk and return.

The country risk premium encapsulates economic, political, and social risks, providing a comprehensive view of the investment environment and a better measure of country risk. Ideally, investors demand higher returns to compensate for the increased risks associated with investing in these markets, resulting in higher underpricing. However, U.S. investors can achieve significant protection by investing in ADRs from higher-risk countries. Investors may accept lower underpricing in exchange for better protection in the U.S. market since these ADRs are traded within the U.S legal environment, offering better

protection for their investment. Investors are willing to pay more and avoid financial risk by ADRs instead of going to company home country and buying stocks from there. This integration of better protection with country risk premiums offers a novel perspective, differing from existing literature that typically examines these factors separately. Empirical studies such as Boulton (2022), Alaganar & Bhar (2001) have highlighted the significant impact of country risk on IPO valuations and underpricing. This study aims to provide further evidence on the role of country-specific risks in shaping ADR IPO outcomes by testing this hypothesis. The hypothesis states that:

Hypothesis 2: *The higher the country risk premium of the issuing country, the lower the underpricing of ADR IPOs.*

The bonding hypothesis proposed asserts that cross-listed firms are anticipated to have superior corporate governance compared to their non-cross-listed equivalents in domestic markets (Stulz, 2009; Coffee, 1998; Coffee, 2002). This theory in international investment suggests that firms from countries with weaker investor protection can enhance their credibility and valuation by cross-listing on stock exchanges in countries with stronger legal frameworks, such as the United States. This theory also proposed that by subjecting themselves to the rigorous enforcement powers of the U.S. Securities and Exchange Commission (SEC) and adhering to U.S. Federal securities laws, these firms effectively “bond” themselves to higher standards of investor protection, thereby reducing agency costs associated with controlling shareholders (Bancel et al., 2009). Empirical evidence supports this theory, showing that non-U.S. firms listed in the U.S. often command a valuation premium compared to their domestically listed peers, with the premium being particularly pronounced for exchange listings and linked to the firm’s future growth opportunities. The Bonding theory also implies that firms from countries with poor investor protection benefit more from cross-listing, as they gain credibility by aligning with the U.S. legal system (Sarkissian & Schill, 2009).

Additionally, the theory is supported by the observation that firms raising equity after a U.S. listing tend to perform better, as capital raising indicates realizing growth opportunities. The rule-of-law and disclosure standards of the host market serve as proxies for the bonding hypothesis, highlighting the importance of legal and regulatory environments in facilitating this bonding process (Sarkissian, 2016). Furthermore, the theory is contrasted with other explanations for cross-listing, such as market segmentation and investor recognition, but it remains a compelling explanation for why firms might choose to list on foreign exchanges with superior investor protection standards. Overall, the Bonding theory underscores the strategic importance of legal and regulatory environments in international investment decisions, suggesting that firms can leverage cross-listing to enhance their market valuation and investor trust by aligning with more stringent legal standards. This reduces information asymmetry and perceived risk among investors. Consequently, this can lead to smaller underpricing of their securities, as the enhanced credibility reduces the risk premium demanded by investors.

This study supports the Bonding hypothesis by providing a deeper understanding that ADRs from countries with weaker rule of law benefit from the stronger legal frameworks in the U.S., which provide better investor protection and reduce perceived risks. This enhanced investor confidence translates into lower underpricing. In this study, we focus on the differences in the rule of law index between the issuing country and the U.S., to provide empirical evidence that significant differences in the rule of law index result in lower underpricing of ADR IPOs.

The rule of law index measures the extent to which agents have confidence in and abide by the rules of society, including the quality of contract enforcement, property rights, the police, and the courts. Firms from countries with weaker legal frameworks face higher agency costs and information asymmetry, leading to higher underpricing (La Porta et al., 1997). By listing in markets with stronger legal environments, these firms can signal their commitment to better governance practices, reducing information asymmetry and underpricing. Investors are willing to pay more by buying these ADRs from countries with weaker legal frameworks and avoid non-financial risk inherent in the home country if they are to buy stocks from the issuing country. This need for protection drives the lower underpricing observed in ADR IPOs from countries with weaker rules of law, as the U.S. legal framework compensates for the deficiencies in the

issuing country's legal environment. This nuanced understanding highlights the critical role of differences in legal and institutional environments with the U.S. in shaping IPO outcomes (Hopp & Dreher, 2013). The hypothesis is stated below.

Hypothesis 3: *The greater the differences in the rule of law index between the issuing country and the U.S., the smaller the underpricing.*

DATA AND METHOD

Sample Construction

The sample comprises all ADR IPOs listed on major U.S. exchanges (NYSE and NASDAQ) following literature, (Bell et al., 2008) from January 1, 2003, to December 31, 2023 available from Bloomberg. This extended period allows for performance analysis across market cycles and regulatory regimes. This period captures pre- and post-global financial crisis periods, allowing for analysis of temporal effects (Doidge et al., 2013).

We define the following criteria for exclusion; excluding ADRs with offer prices that are less than \$5 to reduce penny stock biases (Zheng, 2007). The study also excluded secondary offerings, seasoned public offerings, equity carve-outs, units, warrants, and rights offerings from the study and considered only level III ADRs (Grossmann et al., 2024). We exclude financial and utility firms from the study to ensure comparability and homogeneity in the analysis. These firms have different regulatory environments, capital structures, and financial reporting standards from firms in other industries. Only active, listed or primary listings were considered with common stock. The presence of such variability may confound the analysis results and complicate the extent to which one can validly conclude about the valuation of ADR IPOs. The final sample size estimation is 161 ADR IPOs from 28 countries. See the sample Screening section table from Bloomberg. This table outlines the criteria used to screen the sample of ADR IPOs and the number of matches for each criterion, resulting in a final sample of 161 ADR IPOs from 28 countries. We matched the offer prices, total proceeds, and offer size with the company's prospectus obtained from the Electronic Data Gathering, Analysis, and Retrieval- EDGAR by U.S. Securities and Exchange Commission.

TABLE 1
SAMPLE SCREENING CRITERIA

Screening Criteria	Matches
Security Universe	1,687,793
Security Types: American Depository Receipts	22,590
Exchanges: NASDAQ; New York Exchange	417
Trading Status; Active	405
Sectors (BICS)-Financial and Utilities excluded	337
Country or Territory of Domicile excluding the US	327
Data period from (2003 -2023)	197
Incomplete records	7
Winsorizing	29
Final Sample	161

Variable Description

Dependent Variables

The study's dependent variable is ADR IPOs' performance, measured by Initial Returns. The initial returns are measured as the percentage change from the offer price to the closing price on the first day of trading (Ritter 1991; Dell'Acqua et al., 2015). It is defined as:

$$R_t = \frac{P_1 - P_0}{P_0} \quad (1)$$

where P_0 is the offer price from the prospectuses, P_1 as the closing price on the first day of trading, R_t as the first day returns. We adjusted the initial returns above using the NASDAQ and SP 500 Index during the same period (Demaskey & Olson, 2006). That is, we used the NASDAQ market returns for the ADRs listed on the NASDAQ market returns, and for ADRs listed on the NYSE, the SP 500 market Index return is used to adjust for the returns.

The market index return is defined as:

$$R_t = \frac{I_t - I_0}{I_0} \quad (2)$$

where I_0 is the market index on the day of the offer (day 1) I_t as the value of the market index on day t, R_t is the return on day t. We then find the excess return also known as the Market Adjusted Initial Returns for ADR_t purchased on the day of the offer and sold on day t. It is defined as seen below:

$$MAIR_t = R_t^{ADR} - R_t^M \quad (3)$$

where R_t^{ADR} is the return of the ADR on day t as noted above, R_t^M as the return of the market index on day t also noted above and $MAIR_t$ as the excess or Market Adjusted Initial Return on day t.

Tested Variables

The study's independent variables are GDP Correlation, country risk premium and differences in the rule of law between the U.S and the issuing country. The description of the variables is seen below.

GDP Correlation

GDP is the measure of economic activities in a country. It is a significant macroeconomic factor influencing ADR IPO activities. The idea is that the number of ADRs IPOs follows the economic cycle closely. When GDP growth rate is high, the volume of IPOs is also expected to be high because an increase in output leads to expansionary demand shocks in the economy. This hypothesis is supported by the notion that firms are more likely to go public during periods of economic growth (Angelini & Foglia, 2018). The findings that macroeconomic conditions, including GDP, have a lasting effect on IPO activities support the hypothesis that GDP growth rate correlations between countries could affect IPO performance and valuation. We use the GDP growth rates extracted from the World Bank database available online <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG> and compute the correlation between the issuing countries and the U.S. GDP growth rates.

Country Risk Premium

The concept of country risk premium is intricately linked to the broader understanding of how country-specific factors influence financial markets and investment decisions. Country risk, which encompasses political, financial, and economic risks, plays a significant role in determining the valuation of foreign investments, such as IPOs and American Depository Receipts (ADRs). For instance, the valuation of U.S.-listed foreign IPOs is significantly affected by country risk measures, with economic freedom and corruption being particularly influential factors (Wu et al, 2017). This study focuses on a holistic approach to measuring the risk of the issuing country by capturing the increment return an investor will receive if an investor chooses to invest in another country to compensate for the higher risk of investing in that country's market compared to a domestic market such as the U.S market for a typical U.S investor. It is the difference between the return on a country's stock market and the risk-free rate (typically government bonds). In practice, the country risk premium serves as the hurdle rate.

The country risk premium is related to political instability, geopolitical risk, exchange rate, risk of corruption, legal system, and economic fluctuations. This is a holistic approach to measuring a country's risk, unlike those focusing on economic freedom and high accounting level enforcement. These are just one aspect of risk country risk. Higher country risk premiums suggest a bad investment environment and are ideally expected to increase underpricing due to higher perceived risk. This data was sourced from the Bloomberg database for various ADR countries for different listing years. The computation is stated below from Bloomberg.

$$CPR = \text{Returns on country's Stock Market} - \text{Risk Free Rate}$$

Difference in the Rule of Law Index

This measures the extent to which agents have confidence in and abide by the rules of society, including the quality of contract enforcement, property rights, the police, and the courts. The estimate provides the country's score on the aggregate indicator, measured on a standard normal distribution scale from -2.5 to 2.5, with higher scores indicating a stronger rule of law. In this study, We use the difference between the US and the ADR country's rule of law. Where a large difference occurs means the company is benefiting greatly from doing an IPO in the USA and therefore it is expected this benefit will be translated into less underpricing. A smaller difference in the rule of law will imply that the benefit to investors is not as large and therefore the expected underpricing is more in line with the US-based IPO underpricing. This information is available from the Data Bank World Bank database <https://databank.worldbank.org/source/world-development-indicators#>. This is consistent with studies that investigated the association of country risk with IPO valuation, highlighting how economic freedom and corruption levels impact IPO valuations. Other studies that support this notion include Hopp & Dreher (2013).

Control Variables

The study controlled for the following variables described below.

Total Assets

Total Assets represents the total assets of the firm at the time of the IPO—total assets in millions of US dollars. We used the log of total assets for this analysis. Data was extracted from the company's prospectuses (financials) during IPO from Electronic Data Gathering, Analysis, and Retrieval (EDGAR) from the Security and Exchange Commission-US. For the firms that do not report their financials in US dollars Total Assets were converted using the prevailing exchange rate at the time of IPO. According to literature (Chen et al., 2018; Ejara & Ghosh, 2004; Huo et al., 2018; and Zheng, 2007), larger firms are expected to have lower IPO underpricing due to more established operations and reduced information asymmetry.

Firm's Age

Age is the number of years since the firm was founded. It is measured in years which is the difference between the year of incorporation and the IPO date. Older firms are expected to have lower IPO underpricing due to a longer track record and more available historical data (Chen et al., 2018). The information of the firm's age was taken from Bloomberg and verified by what is contained in the company's prospectuses using Electronic Data Gathering, Analysis, and Retrieval (EDGAR) from the Security and Exchange Commission-US. The firm's age is an important variable, in analyzing the determinants of IPO underpricing at the Bombay Stock Exchange, finding a negative relationship between the firm's age and underpricing (Bansal and Khanna, 2013).

Global Financial Crisis

This is a period of significant financial market turmoil. We used a dummy variable (1 if the IPO occurred during 2007-2008 financial crisis, 0 otherwise). IPOs during financial crises are expected to have

higher underpricing due to increased market volatility and investor uncertainty. Studies such as Mauer et al. (2015) discuss the impact of the Global Financial Crisis on IPO underpricing and performance. They explore the valuation effects of global diversification during high-volatility periods, revealing that operating flexibility is more valued during crises. These studies highlight the influence of macroeconomic factors, the valuation effects of diversification, and the benefits of global diversification during periods of financial crisis.

Economic Classification (Developed and Emerging)

Classification of the country where the ADR firm is based. A dummy variable (0 for developed economies, 1 for emerging economies) is used. IPOs in developed economies are expected to have lower underpricing due to more mature financial markets and better regulatory frameworks. The study used the Bloomberg classification with the World Economic Outlook 2023 classification. Economic classification and its effects on ADR returns are explored in the literature by comparing the impacts of various variables on ADR returns in emerging and developed markets, noting that exchange-rate volatility affects ADR prices in developed markets. Literature discusses the impact of economic classification on IPO underpricing and performance with different results (Ejara & Ghosh, 2004; Demaskey & Olson, 2006; Boulton et al., 2017). These studies highlight the differences in performance, volatility, and underpricing between developed and emerging markets, emphasizing the importance of considering the economic classification of the issuing firms.

Lead Underwriter Reputation for IPO

This represents the reputation of the lead underwriter managing the IPO. The lead underwriters were taken from ADR company prospectuses and ranked following the Jay R. Ritter ranking available at <https://site.warrington.ufl.edu/ritter/ipo-data/>. IPOs managed by reputable underwriters are expected to have lower underpricing due to higher investor confidence and better due diligence (Loughran & Ritter, 2004). Other studies (Chen et al., 2009; Boucher et al., 2023; Sherman, 2000; Cumming et al., 2024) used underwriters' reputations in their studies with different performance results.

Greenshoe Size (GS)

The size of the greenshoe option, allows underwriters to buy additional shares at the offering price. It is measured as percentage of the total shares offered. This data was taken from ADR company prospectuses from the Electronic Data Gathering, Analysis, and Retrieval (EDGAR) from the Security and Exchange Commission-US. A larger greenshoe option is expected to reduce underpricing by providing more price support post-IPO. The greenshoe option is associated with the higher initial performance of IPOs. Specifically, IPOs of companies that exercise the greenshoe option tend to have higher levels of underpricing on the first trading day (Dell'Acqua et al., 2015).

Lock-Up Period

The lock-up period is when insiders are restricted from selling their shares post-IPO. This period from ADR prospectuses is mostly 180 days. A longer lock-up period is expected to reduce underpricing by signaling confidence in the firm's future performance. The information on lock-up was extracted from the Electronic Data Gathering, Analysis, and Retrieval- EDGAR by the U.S. Securities and Exchange Commission. It was noted that shorter lock-up periods impact the initial performance of Malaysian IPOs, with longer lock-up periods signaling risks and quality (Mohd-Rashid et al., 2014).

Debt to Equity Ratio

It reflects the financial leverage and risk profile of a company. Financial analysts use this ratio to assess a company's leverage position and financial risk, which can influence investor perceptions and demand during an IPO. The debt-to-equity ratio could similarly impact institutional demand and investor interest, as it is a proxy for financial risk and information asymmetry. A higher leverage, reflected in a higher debt-to-equity ratio, may increase the level of underpricing due to the greater uncertainty investors perceive

about the firm's value (Álvarez-Otero, 2022; Boucher et al., 2023). We used the debt-to-equity ratios from Bloomberg or from company prospectuses. A higher value indicates higher risk, which is expected to increase underpricing as investors demand higher returns for additional risk.

Primary Exchange of ADR

The stock exchange is the primary exchange where the ADRs are listed. In this study, we refer to the NYSE and NASDAQ, and listing on these exchanges has different requirements for the ADRs to meet. The price or return of stocks depends on the type of exchange (Miller, 1999). Also, the primary exchange of ADRs and its influence on equity share price behavior was investigated, analyzing the impact of SEC Form 20-F filings on non-U.S. firms' equity share markets; findings suggest that these filings convey price-relevant information for non-U.S. firms (Senteney et al., 2017). In this study, categorical variables are used to estimate. Listing on a well-regarded exchange is expected to reduce underpricing due to better regulatory oversight and liquidity. It is denoted by a dummy variable $NASDAQ=1$, $NYSE=0$. The information on primary exchange was extracted from Bloomberg.

Volatility

Volatility plays a significant role in underpricing ADR IPOs. High volatility can increase the uncertainty and perceived risk associated with the new stock. Investors may demand a higher discount (underpricing) to compensate for this increased risk, leading to greater initial returns on the ADR IPO. This is because underpricing incentivizes investors to participate in the ADR IPO despite the higher risk. Volatility, particularly idiosyncratic risk is used to assess the impact of firm-level risk variation on IPO long-run performance, with findings that IPOs do not underperform when adjusted for firm-specific risk (Chowdhury et al., 2021; Beaulieu et al., 2020). The study information on volatility was extracted from Bloomberg.

These variables collectively influence the level of ADR IPO underpricing by affecting the perceived risk, information asymmetry, and investor demand for the IPO. A summary of the variables is provided in Table 2.

TABLE 2
EXPLANATION OF VARIABLES

Variables	Measurement
Dependent Variables	
$MAIR_{D1}$	The initial return adjusted for market performance on day 1
Tested variables	
GDP. Corr	The correlation between the GDP of the issuing country and the U.S economy
Country Risk Premium	It is the additional return required by investors to compensate for the risk of investing in a particular country. The difference between the return on a country's stock market and the risk-free rate
Dif. Rule of Law	This is the difference in rule of law index of the issuing country and U. S
Control Variables	
Total Assets	The firm's size is measured by the log of total assets at the time of IPO. Larger firms are generally perceived as less risky, which may reduce underpricing.
Age	The age of the firm at the time of the IPO. Older firms may have more established track records, potentially reducing underpricing.

FC Dummy	Financial crisis period for IPO using a dummy variable, 0 for the period 2007-2008 and 1 otherwise.
EC Dummy	A categorical variable representing the economy where the ADR IPO is issued. I=developed economies, 0= for emerging economies
Underwriters' Reputation	The lead underwriter's reputation for IPOs
Greenshoe	Greenshoe Size measured as the overallotment option. The exercise of the GS option may affect the initial level of underpricing
Lock up period	Lock-up Period; The period during which insiders are restricted from selling their shares post-IPO.
DTE Ratio	This represents the financial leverage and risk profile of a company.
Volatility	They measure of volatility prices in the market
NASDAQ Dummy	This is the primary Exchange. A dummy variable NASDAQ=1, NYSE=0

Method

The study calculates the mean, median, standard deviation, and range for all countries and by IPO year. We further group the countries into regions and economies to explore the effect of the country of origin within different regions or economic conditions. Next, Pearson correlation analysis is conducted to check for multicollinearity among the Tested variables.

Finally, an Ordinary Least Squares (OLS) regression model is used to test the hypothesis that the country of origin affects the initial performance of ADR IPOs. The OLS regression analysis is performed to determine the impact of the country of origin on underpricing.

The linear regression model is specified as follows:

$$MAIR_{D1} = \alpha + \beta_1 GDP\ Corr_i + \beta_2 LnTotal\ Assets_i + \beta_3 AGE_i + \beta_4 FC_{Dummy}_i + \beta_5 UR_i + \beta_6 GS_i + \beta_7 L\ KP_i + \beta_8 Vol_i \beta_9 EC_Dummy_i + \beta_{10} NASDAQ_Dummy_i + \epsilon_i \quad (4)$$

$$MAIR_{D1} = \alpha + \beta_1 CPR_i + \beta_2 LnTotal\ Assets_i + \beta_3 AGE_i + \beta_4 FC_{Dummy}_i + \beta_5 UR_i + \beta_6 GS_i + \beta_7 L\ KP_i + \beta_8 Vol_i \beta_9 EC_Dummy_i + \beta_{10} NASDAQ_Dummy_i + \epsilon_i \quad (5)$$

$$MAIR_{D1} = \alpha + \beta_1 Dif.\ RoL_i + \beta_2 LnTotal\ Assets_i + \beta_3 AGE_i + \beta_4 FC_{Dummy}_i + \beta_5 UR_i + \beta_6 GS_i + \beta_7 L\ KP_i + \beta_8 Vol_i \beta_9 EC_Dummy_i + \beta_{10} NASDAQ_Dummy_i + \epsilon_i \quad (6)$$

RESULTS

IPOs Descriptive Statistics

The descriptive statistics in Table 3 provide valuable insights into the sample's overall performance and variability of IPOs. The positive mean (IR) is 8.54%, (MAIR) is 8.57% and median values IR 4.10%, MAIR, 4.19% indicate that, on average, IPOs provide favorable initial returns, benefiting investors. However, the high standard deviation IR 29.79%, MAIR, 29.77%, and the wide range of returns highlight the significant variability in IPO performance, reflecting the diverse outcomes across different IPOs.

The positive skewness suggests that while most IPOs have modest initial returns, there are a few IPOs with exceptionally high returns, likely driven by heightened investor attention and positive market sentiment. The kurtosis values close to 3 indicate that the distribution of initial returns is relatively normal but with slightly heavier tails, suggesting the presence of higher returns for some IPOs.

The minimum IR is -90%, and the minimum MAIR is -89%, indicating that some IPOs experienced substantial initial losses. Conversely, the maximum IR and MAIR are both 96%, showing that some IPOs had exceptionally high initial returns.

Table 3 provides descriptive statistics for IPO initial returns (IR) and market-adjusted initial returns (MAIR), including mean, median, standard deviation, minimum, maximum, skewness, and kurtosis, summarizing the overall performance and variability of IPOs.

TABLE 3
IPOS UNDERPRICING- DESCRIPTIVE STATISTICS

Descriptive Statistics	IR	MAIR
Mean	8.54%	8.57%
Median	4.10%	4.19%
Standard Deviation	29.79%	29.77%
Minimum	-90%	-89%
Maximum	96%	96%
Skewness	0.124927121	0.123250225
Kurtosis	2.151307854	2.099355375
Ist Quartile	-0.043495146	-0.051397732
3rd Quartile	0.200241562	0.220371318

ADR IPO Underpricing by Country and Regional Classification

Table 4 comprehensively analyzes IPO underpricing categorized by country and regional classification. The result shows that the Asia Pacific region exhibits moderate underpricing, with 104 IPOs totaling an average IR of 6.45% and MAIR of 6.58%. Within this region, China stands out with higher underpricing, showing an average IR of 8.27% and MAIR of 8.36%. This suggests that Chinese IPOs are perceived as riskier or more attractive to investors, leading to higher initial returns. Conversely, Japan presents a unique case with negative underpricing, indicated by an average IR of -7.80% and MAIR of -8.22%. This negative underpricing could imply that Japanese IPOs are priced more conservatively or face lower investor demand, possibly due to different market dynamics or investor perceptions.

TABLE 4
IPOS UNDERPRICING BY COUNTRY AND REGIONAL CLASSIFICATION

Countries/Regions	No. IPO	Underpricing (IR)		Underpricing MAIR	
		Average of Returns (IR)	Std Dev of Returns (IR)	Average of MAIR	Std Dev of MAIR
Asia Pacific	104	6.45%	32.59%	6.58%	32.61%
Australia	3	-2.02%	15.37%	-0.21%	15.79%
China	80	8.27%	36.35%	8.36%	36.35%
Hong Kong	6	5.49%	12.20%	5.73%	12.62%
Japan	4	-7.80%	4.99%	-8.22%	5.16%
Macau	1	6.67%	0.00%	7.78%	0.00%
Singapore	5	-0.99%	13.19%	-1.37%	13.37%
South Korea	2	-3.86%	2.47%	-3.92%	2.68%
Taiwan	3	6.47%	11.17%	7.22%	11.53%
West Asia	1	11.92%	0.00%	11.88%	0.00%
Turkey	1	11.92%	0.00%	11.88%	0.00%

Latin America & Caribbean	8	6.78%	18.68%	6.26%	18.62%
Argentina	1	12.37%	0.00%	12.21%	0.00%
Brazil	1	7.18%	0.00%	7.32%	0.00%
Cayman Islands	1	-34.78%	0.00%	-34.87%	0.00%
Mexico	5	13.89%	12.49%	13.09%	12.75%
Middle East & Africa	8	17.98%	27.10%	17.77%	26.71%
Israel	7	21.51%	27.21%	21.38%	26.66%
United Arab Emirates	1	-6.67%	0.00%	-7.49%	0.00%
Western Europe	40	12.37%	23.43%	12.27%	23.41%
Belgium	2	8.17%	11.92%	7.04%	11.51%
Denmark	3	1.98%	2.35%	2.01%	2.72%
France	9	0.93%	15.93%	1.21%	15.68%
Germany	5	21.45%	28.60%	20.72%	28.69%
Ireland	1	40.53%	0.00%	41.97%	0.00%
Italy	1	-4.35%	0.00%	-6.70%	0.00%
Luxembourg	1	16.85%	0.00%	16.66%	0.00%
Netherlands	1	35.29%	0.00%	34.48%	0.00%
Norway	1	9.25%	0.00%	10.66%	0.00%
Spain	1	0.20%	0.00%	0.15%	0.00%
Sweden	2	27.22%	8.40%	26.24%	9.35%
Switzerland	1	-7.53%	0.00%	-7.19%	0.00%
United Kingdom	12	17.70%	29.20%	17.81%	29.25%
Total	161	8.54%	29.79%	8.57%	29.77%

The data reveals moderate underpricing in the Latin America & Caribbean region, with an average IR of 6.78% and MAIR of 6.26%. Mexico, in particular, shows higher underpricing, with an average IR of 13.89% and MAIR of 13.09%. This higher underpricing may reflect greater perceived risks or stronger investor demand for Mexican IPOs, which could be influenced by the country's economic conditions and market environment.

The Middle East & Africa region demonstrates the highest underpricing among the regions analyzed, with an average IR of 17.98% and MAIR of 17.77%. Israel, a notable country within this region, exhibits significant underpricing, with an average IR of 21.51% and MAIR of 21.38%. This substantial underpricing suggests that Israeli IPOs are perceived as highly risky or in high demand among investors, leading to higher initial returns.

Western Europe shows relatively high underpricing, with an average IR of 12.37% and MAIR of 12.27%. Germany and the United Kingdom stand out within this region with particularly high underpricing. Germany's IPOs have an average IR of 21.45% and MAIR of 20.72%, while the United Kingdom's IPOs show an average IR of 17.70% and MAIR of 17.81%. These figures indicate strong investor demand or perceived risks associated with IPOs from these countries, which could be attributed to their economic stability, market conditions, and investor confidence.

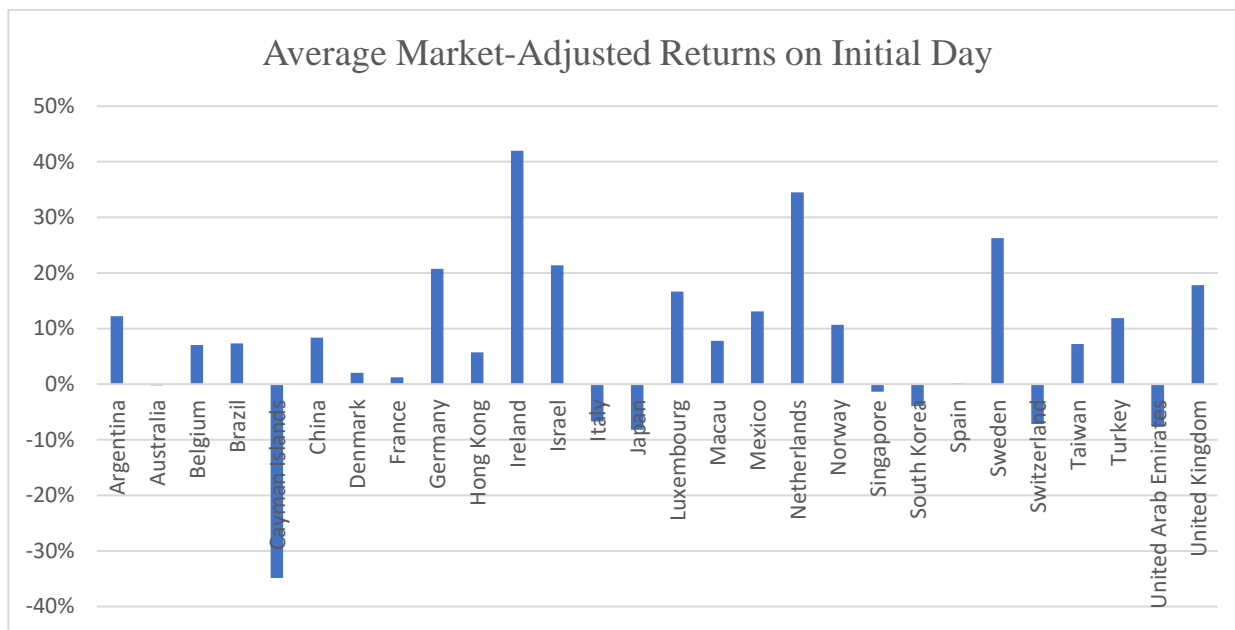
The result aligns with existing literature on IPO underpricing. For instance, Bell et al., (2012) suggest that the legal protection of investors in the IPO firm's home country predicts performance, indicating that countries with stronger legal frameworks may experience lower underpricing. Hopp & Dreher (2013) highlight that legal and institutional factors significantly influence underpricing variations across countries, with better transparency and enforcement levels leading to lower underpricing. Boulton et al., (2017) find that country-level accounting conservatism reduces IPO underpricing by mitigating information asymmetries, suggesting that countries with higher accounting conservatism tend to have lower

underpricing. Additionally, Ejara & Ghosh (2004) show that ADR IPOs from developed markets perform better than those from emerging markets, which aligns with the observation that developed countries like Germany and the United Kingdom have higher underpricing than some emerging markets. The results underscore the significant impact of country and regional factors on IPO underpricing. Countries with higher perceived risks or stronger investor demand tend to exhibit higher underpricing. This analysis provides valuable insights for investors and policymakers, highlighting the importance of considering geographical and regional factors when evaluating IPOs.

Table 4 provides the average underpricing (IR) and market-adjusted initial returns (MAIR) for IPOs by country and regional classification, highlighting differences in IPO performance across various countries and regions.

Figure 1 is a graph of the market-adjusted initial returns on the first day (MAIR D-1) for various countries comparing the underpricing of ADR IPOs. The initial returns show a wide range of values across different countries, indicating significant differences in how the market initially receives ADR IPOs. Countries such as China, UK, Ireland, Germany, Israel, and Mexico exhibiting high underpricing, while Japan, South Korea, and Singapore show low or negative underpricing.

FIGURE 1
AVERAGE MARKET ADJUSTED RETURNS ON INITIAL DAY



Correlation Results

Table 5 presents the correlation matrix, which shows the relationships between various Tested variables used in the study. The table includes the correlation coefficients, p-values, and significance levels for each pair of variables. GDP Correlation positively correlates with Differences in Rule of Law (0.140, p=0.076), indicating a weak but significant relationship at the 10% level. Differences in Rule of Law is positively correlated with GDP Correlation (0.140, p=0.076) and negatively correlated with Lock-up Period (-0.208, p=0.008), indicating a significant relationship at the 5% level. It is also positively correlated with Country Risk Premium (0.134, p=0.092), significant at the 10% level, and strongly correlated with Economic Classification Dummy (0.883, p=0.000), indicating a very strong relationship at the 1% level. Underwriter Reputation is positively correlated with Total Assets (0.340, p=0.000), indicating a strong relationship at the 1% level. There is no significant correlation with other variables.

TABLE 5
CORRELATION MATRIX

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1) GDP Correlation	1.000												
(2) Dif. Rule of Law	0.140 (0.076)**	1.000											
(3) Underwriter	-0.032 (0.691)	-0.018 (0.817)	1.000										
(4) Lock up period	-0.082 (0.300)	-0.208** (0.008)	0.080 (0.316)	1.000									
(5) LN_Total Assets	-0.032 (0.685)	-0.061 (0.442)	0.340*** (0.000)	0.138 (0.081)*	1.000								
(6) Volatility	0.015 (0.853)	-0.037 (0.645)	-0.024 (0.767)	-0.019 (0.807)	-0.128 (0.105)	1.000							
(7) DTR Ratio	0.101 (0.206)	-0.025 (0.752)	0.147 (0.063)**	0.003 (0.973)	0.095 (0.232)	-0.080 (0.312)	1.000						
(8) Country Risk Premium	-0.042 (0.598)	0.134 (0.092)*	-0.065 (0.414)	0.044 (0.579)	-0.097 (0.223)	-0.063 (0.429)	0.070 (0.382)	1.000					
(9) Greenshoe	0.046 (0.559)	0.006 (0.942)	0.053 (0.502)	0.057 (0.469)	0.060 (0.451)	-0.033 (0.682)	0.019 (0.809)	-0.099 (0.215)	1.000				
(10) FC Dummy	0.036 (0.647)	0.269*** (0.001)	-0.237*** (0.003)	-0.148* (0.061)	-	-0.039 (0.625)	-0.124 (0.118)	0.207 (0.009)	-0.084 (0.292)	1.000			
(11) Age	0.046 (0.558)	-0.011 (0.885)	0.034 (0.669)	0.048 (0.544)	0.006 (0.937)	0.112 (0.157)	-0.068 (0.395)	-0.069 (0.383)	0.058 (0.466)	-0.002 (0.977)	1.000		
(12) EC Dummy	0.251*** (0.001)	0.883*** (0.000)	0.011 (0.895)	-0.185 (0.019)	-0.016 (0.838)	-0.070 (0.376)	0.031 (0.698)	0.096 (0.228)	0.010 (0.897)	0.034 (0.672)	-0.031 (0.697)	1.000	
(13) NASDAQ Dummy	-0.054 (0.497)	-	-0.158 (0.045)**	0.139 (0.078)*	-0.054 (0.494)	-0.042 (0.599)	-0.030 (0.708)	0.005 (0.951)	0.051 (0.521)	-0.123 (0.120)	-0.061 (0.439)	-0.350 (0.000)	1.000

This table presents the Pearson correlation coefficients between various Tested variables, indicating the relationships and potential multicollinearity among the variables used in the regression analysis.

*** $p < .01$, ** $p < .05$, * $p < .1$

Lock-up Period is negatively correlated with Differences in Rule of Law (-0.208, $p=0.008$) and positively correlated with Total Assets (0.138, $p=0.081$), significant at the 10% level. There is no significant correlation with other variables. Total Assets positively correlates with Underwriter Reputation (0.340, $p=0.000$) and Lock-up Period (0.138, $p=0.081$). There is no significant correlation with other variables. Volatility shows no significant correlation with any other variables. Debt-to-Equity Ratio is positively correlated with Underwriter Reputation (0.147, $p=0.063$), significant at the 10% level. There is no significant correlation with other variables.

Country Risk Premium is positively correlated with Differences in Rule of Law (0.134, $p=0.092$). There is no significant correlation with other variables. Greenshoe Size shows no significant correlation with any other variables.

Financial Crisis Dummy is positively correlated with Differences in Rule of Law (0.269, $p=0.001$), significant at the 1% level, and negatively correlated with Total Assets (-0.185, $p=0.019$), significant at the 5% level. It is also positively correlated with Country Risk Premium (0.207, $p=0.009$), significant at the 1% level. There is no significant correlation with other variables. Firm Age shows no significant correlation with any other variables. Economic Classification Dummy is strongly correlated with Differences in Rule of Law (0.883, $p=0.000$) and positively correlated with GDP Correlation (0.251, $p=0.001$), significant at the 1% level. There is no significant correlation with other variables.

NASDAQ Dummy is negatively correlated with Differences in Rule of Law (-0.335, $p=0.000$), significant at the 1% level, and negatively correlated with Underwriter Reputation (-0.158, $p=0.045$), significant at the 5% level. It is positively correlated with Lock-up Period (0.139, $p=0.078$), significant at the 10% level, and negatively correlated with Economic Classification Dummy (-0.350, $p=0.000$), significant at the 1% level. There is no significant correlation with other variables.

Overall, the correlation results indicate that most variables have low to high correlations with each other, suggesting that multicollinearity is a significant issue. This is common in financial data and therefore we treat significance of individual coefficients in the regression model with caution.

Regression Results for the Initial Returns

Table 6 presents the regression results with the market-adjusted initial returns (MAIR D1) as the dependent variable, examining the impact of various Tested variables on the initial performance of ADR IPOs. The table includes two models, Model 1 and Model 2, and 3, 4,5 for specific Tested variables with t-statistics of regression coefficients reported below the coefficients. Numbers in parentheses represent the p-values, and asterisks indicate significance levels at 1%, 5%, and 10%. The regression analysis of the market-adjusted initial returns (MAIR D1) reveals several significant findings that have important implications for investors. The results indicate that country risk premiums, and lock-up periods, significantly impact the initial performance of ADR IPOs.

TABLE 6
REGRESSION RESULT WITH INITIAL PERFORMANCE

Regression results with MAIR D1 as dependent variable (N=161)	Model 1	Model 2	GDP Correlation Model 3	Country Risk Premium Model 4	Dif, Rule of Law Model 5
Explanatory Variables	Model 1	Model 2	Model 3	Model 4	Model 5
GDP Coorr	-0.022 -0.380 (0.708)		-0.011 -0.190 (0.852)		
Country Risk Premium	-0.023 -3.060 (0.003)***	-0.022 -3.080(0.002)***		-0.023 -3.050 (0.003)***	
Dif. Rule of Law	0.012 0.190 (0.847)	0.007 0.260 (0.794)			0.014 0.23 (0.822)
Underwriters	0.013 1.180 (0.24)		0.013 1.170 (0.244)	0.013 1.170 (0.225)	0.013 1.150 (0.251)
Lock up Period	0.473 2.36 (0.020)**	0.496 2.560 (0.011)**	0.407 1.990 (0.048)**	0.474 2.38 (0.019)**	0.410 2.010 (0.047)**
Ln_Total Assets	0.002 0.290 (0.769)		0.003 0.510 (0.613)	0.002 0.300 (0.766)	0.003 0.510 (0.610)
Volatility	0.000 -0.590 (0.556)		0.000 -0.450 (0.656)	0.000 -0.590 (0.556)	0.000 -0.470 (0.640)
DTE Ratio	0.000 0.35 (0.724)		0.000 0.200 (0.981)	0.000 0.300 (0.764)	0.000 0.200 (0.988)
Greenshoe	0.000 -0.850 (0.399)	0.000 -0.076 (0.448)	0.000 -0.056 (0.576)	0.000 -0.860 (0.393)	0.000 -0.058 (0.564)
FC Dummy	-0.092 -0.870 (0.388)	-0.118 -1.370 (0.174)	-0.140 -1.530 (0.128)	-0.084 -0.920 (0.359)	-0.153 -1.440 (0.154)

Age	-0.001 -0.740 (0.461)	-0.001 -0.860 (0.393)	-0.001 -0.580 (0.566)	-0.001 -0.770 (0.445)	-0.001 -0.590 (0.553)
EC Dummy	-0.009 -0.070 (0.942)		-0.009 -0.017 (0.868)	0.007 0.130 (0.896)	-0.034 -0.030 (0.766)
NASDAQ Dummy	-0.041 -0.760 (0.446)	-0.059 -1.210 (0.229)	-0.050 -0.910 (0.363)	-0.042 -0.790 (0.433)	-0.051 -0.930 (0.355)
Constant	-0.003 -0.020 (0.986)	0.114 1.040 (0.298)	-0.181 1.030 (0.303)	-0.011 -0.060 (0.303)	-0.181 1.050 (0.296)
F-test	1.938	1.938	1.241	2.161	1.242
R-squared	0.14	0.236	0.084	0.138	0.085
Prob > F	0.044	0.034	0.265	0.019	0.264

*** $p < .01$, ** $p < .05$, * $p < .1$

The country risk premium coefficient is -0.023 with a p-value of 0.003 in Model 1, and -0.022 with a p-value of 0.002 in Model 2, indicating a significant negative impact on initial returns. Higher country risk premiums are associated with lower underpricing, indicating that ADR IPOs from countries with higher economic and political risks may offer lower initial returns due to conservative pricing strategies. This finding contradicts studies that suggest that higher country-level accounting enforcement a proxy for country risk leads to lower IPO underpricing. Also, economic freedom countries are associated with higher IPO valuations, and returns are not supported (Wu et al. , 2017). By this lower underpricing investors are willing to accept lower returns and pay more in exchange for better protection against financial risk in the home country since they receive the same protection in the U.S market.

The coefficient for differences in the rule of law is 0.012 with a p-value of 0.847, suggesting that differences in the rule of law do not significantly impact initial returns. Similarly, in Model 2, the coefficient for differences in the rule of law is 0.007 with a p-value of 0.794, indicating that differences between the issuing country and the U.S. have no significant impact on underpricing. This finding contradicts the findings (Grossmann et al., 2024) that suggest ADRs from countries with higher secrecy experience lower underpricing and that legal and institutional factors significantly influence IPO underpricing, with better transparency and enforcement levels leading to lower underpricing (Hopp & Dreher, 2013).

It is also observed that the lock-up period significantly positively impacts initial returns. The lock-up period coefficient is 0.473 with a p-value of 0.02 in Model 1, and 0.496 with a p-value of 0.011 in Model 2. The results indicate that longer lock-up periods are associated with higher initial returns. This finding supports that longer lock-up periods signal higher quality and positively influence initial returns. For investors, this suggests that longer lock-up periods can signal firm quality and stability, potentially leading to better initial performance. Investors can use the length of the lock-up period as an indicator of the firm's commitment to long-term performance and stability.

The F-test for Model 1 is 1.938 with a p-value of 0.044, and for Model 2, it is 1.938 with a p-value of 0.034, indicating that both models are statistically significant. The R-squared values are 0.14 for Model 1 and 0.236 for Model 2, suggesting that the models explain 14% and 23.6% of the variance in initial returns, respectively.

CONCLUSION

This study analyzes the impact of the country of origin on the underpricing of ADR IPOs in U.S. equity markets from 2003 to 2023 with a focus on two major U.S. exchanges: NASDAQ and NYSE. The findings confirm that the country of origin significantly influences the performance of ADR IPOs, with notable differences between country-specific factors, such as country risk premium significantly influencing ADR IPO underpricing. The findings reveal that ADRs from countries with higher country risk premiums exhibit lower underpricing indicating that investors are willing to accept lower returns or pay more for better protection in the U.S. market. Longer lock-up periods correlate with higher initial returns, signaling higher quality.

Significant regional differences in underpricing are observed. The Middle East and Africa region demonstrates the highest underpricing, and Western Europe shows relatively high underpricing. In contrast, the Asia Pacific region exhibits low underpricing. Countries such as China, the UK, Ireland, Germany, Israel, and Mexico exhibit high underpricing, while Japan, South Korea, and Singapore show low or negative underpricing.

The study also identifies several factors that do not significantly impact the underpricing of ADR IPOs, including GDP correlation, differences in the rule of law, underwriter reputation, total assets, volatility, greenshoe size, financial crisis dummy, economic classification dummy, and NASDAQ dummy. These findings suggest that while these factors may influence other aspects of ADR IPO performance, they do not play a crucial role in determining the underpricing.

The study concludes that investors are not willing to pay more for diversification potential, but they are willing to pay more for protection against financial risks. These findings contribute to the existing literature by providing robust evidence of the critical role of country-specific factors in shaping ADR IPO outcomes.

This study equips investors ultimately contributing to more informed decision-making and a more efficient and integrated global financial market.

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