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Assessing the Effectiveness of Peter Lynch's Investment Strategy Across Developed and Emerging Markets: A Systematic Review

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Abstract

The aim of this article is to systematically review empirical research concerning Peter Lynch's "Growth At a Reasonable Price" (GARP) strategy across international jurisdictions to determine the boundaries of its predictive power and validate its efficacy across varying degrees of market maturity. In terms of methodology, a rigorous systematic review was conducted utilizing advanced semantic search techniques across open research graphs to identify quantitative evaluations of Lynchian metrics, primarily the Price/Earnings-to-Growth (PEG) ratio and the low P/E effect, within public equity markets over a minimum three-year horizon. The synthesis reveals that the GARP strategy frequently exhibits heightened efficacy in emerging markets, generating statistically significant alpha due to substantial information asymmetry. Conversely, in highly efficient developed markets, the strategy's success strictly depends on the integration of business failure prediction models to systematically filter out insolvent "value traps". Furthermore, empirical evidence highlights a non-linear, U-shaped relationship between the PEG ratio and stock returns, challenging the presumed universality of Lynch's linear assumptions. The originality of the work lies in bridging a significant research gap by transitioning the evaluation of Lynch's methodology from historic, US-centric contexts to a comprehensive global framework. The study exposes critical methodological limitations in the existing literature and demonstrates that the GARP framework must be treated as a flexible analytical system requiring precise, context-specific calibration to local market regimes.

Keywords: value investing; Peter Lynch; PEG ratio; Efficient Market Hypothesis; market anomalies

JEL classification: G11; G14; G15

1. Introduction

The evolution of modern investment theory is characterized by a transition from the classical value investing paradigm, established by Graham and Dodd, toward the more synthesized "Growth At a Reasonable Price" (GARP) framework. While classical value investing prioritizes the identification of securities trading at a significant discount to their intrinsic value, the GARP model seeks a computable equilibrium between

fundamental valuation and sustainable earnings expansion. Central to this approach is the "reasonable price" mechanism, which serves as a quantitative filter to mitigate the risk of overpaying for growth. This paradigm was most notably operationalized by Peter Lynch, whose longitudinal performance data at the Fidelity Magellan Fund provides a statistically significant anomaly within the framework of the Efficient Market Hypothesis (EMH). Between 1977 and 1990, Lynch achieved a geometric mean annual return of 29.2%, nearly doubling the 15.8% return of the S&P 500 benchmark. This persistent generation of alpha challenges standard assumptions regarding liquidity constraints, particularly given the fund's 700-fold expansion in Assets Under Management (Lynch & Rothchild, 1993).

However, while these results are empirically profound, the underlying research has historically focused on the institutional specificities of the United States equity markets. The replication of the GARP strategy in international contexts presents a significant research gap. Empirical evidence suggests that Lynch's approach requires rigorous econometric modification when applied to different market structures. For instance, research into the Australian industrial sector reveals that while a "low P/E effect" is present, the efficacy of the strategy is strictly dependent on multi-model consensus; integrating the Altman (1968) Z-score with the Castagna and Matolcsy (1981) business failure models was necessary to increase risk-adjusted returns to approximately 12.5% per annum and avoid "value traps" (Kelly et al., 2008). In emerging markets, the limitations of the classical Lynch model are even more pronounced. Lew (2016) identified a non-linear, U-shaped correlation between the PEG ratio and stock returns in the South Korean KOSPI market, which directly contradicts Lynch’s assumption of a linear inverse relationship.

Consequently, without a systematic synthesis of international empirical data, the GARP strategy cannot be validated as a universal investment tool. The objective of this article is to provide a systematic review of empirical research concerning the Peter Lynch/GARP strategy across international jurisdictions to determine the boundaries of its predictive power. Specifically, this study aims to evaluate the predictive capacity of fundamental Lynchian metrics (such as PEG and low P/E) across varying degrees of market maturity, and to identify the exogenous variables that correlate with the persistence of alpha in international applications. By comparing abnormal returns found in less efficient developed markets to the baseline established by US-centric studies, this review will determine the statistical necessity of risk-filtering mechanisms in mitigating the "value trap" risk inherent in global equity mandates.

2. Theoretical Framework

In the methodology popularized by Peter Lynch, relative valuation serves as the primary analytical filter to distinguish between mere corporate expansion and genuine investment opportunity. While the traditional Price-to-Earnings (P/E) ratio provides a snapshot of current market sentiment, it remains a mathematically incomplete metric when decoupled from the underlying momentum of corporate earnings. A high P/E ratio may be justified by exceptional growth, whereas a low P/E ratio might signal a value trap in a stagnant enterprise; thus, the P/E must be contextualized within the firm's growth velocity to determine intrinsic value (Lynch, 1989).

The deconstruction of the Price/Earnings-to-Growth (PEG) ratio reveals a logical framework centered on valuation equilibrium. Mathematically, Lynch posits that a fairly valued company should exhibit a P/E ratio commensurate with its earnings growth rate, establishing a PEG value of 1.0 as the benchmark for "fair value". At this equilibrium, the market pays exactly for the growth rate, reflecting a 1:1 ratio between the capitalization multiple and the secular growth percentage. When the PEG ratio falls below 1.0, the market is discounting the company's growth potential; specifically, a PEG of 0.5 or lower represents a signal of deep undervaluation, where the investor acquires future earnings at a significant discount (Lynch, 1989; Lew, 2016).

For mature entities characterized by moderated growth—specifically "stalwarts" and "slow growers"—Lynch introduces the "Yield-adjusted PEG" variant. By incorporating the dividend yield into the denominator (P/E / [Growth Rate + Dividend Yield]), the formula accounts for the total return profile of the asset. This modification is critical because, for dividend-paying firms, the yield acts as a functional substitute for capital appreciation. Consequently, the yield-adjusted metric ensures that the total return justifies the P/E ratio, maintaining a threshold of 1.0 or lower for entry (Lynch, 1989). Ultimately, the strategic utility of the PEG ratio is strictly contingent upon the appropriate categorization of the enterprise under analysis.

Lynch's classification system functions as a rigorous framework for managing risk-reward expectations by segmenting companies based on their lifecycle stage and revenue scale, allowing investors to apply tailored valuation standards to different asset types (Lynch, 1989). Rather than viewing the market as a monolith, this taxonomy identifies three primary categories. "Fast growers" are the primary engines of portfolio appreciation, typically small to mid-cap entities maintaining an Earnings Per Share (EPS) growth rate of 20% or higher, designed to provide substantial upside potential provided they maintain conservative debt levels (Lynch, 1989). "Stalwarts" act as portfolio stabilizers; these large-cap enterprises with multi-billion dollar annual revenues exhibit steady EPS growth between 10% and 19%. While lacking explosive potential, they offer a buffer during market contractions and are often sold after achieving a 30–50% gain (Lynch, 1989). Finally, "Slow growers" are mature, large-cap firms defined by single-digit growth (under 10%) and consistent dividend distributions, held primarily for yield rather than capital appreciation (Lynch, 1989).

Table 1 synthesizes the primary metrics associated with this classification system, which subsequently determines the critical balance sheet filters required for the comprehensive financial durability analysis.

Table 1: Lynch's Equity Classification and Primary Valuation Metrics

Company Category	Expected EPS Growth Rate	Revenue Characteristics	Target Valuation Metric
Fast Growers	20% +	Small to Mid-cap	PEG < 1.0 (Ideal < 0.5)

Stalwarts	10% – 19%	Multi-billion USD	Moderate P/E (PEG ≈ 1.0)
Slow Growers	< 10%	Large/Legacy	Yield-adjusted PEG < 1.0*

*Note: For Slow Growers, the yield-adjusted variant is mandatory to account for the total return profile (Lynch, 1989).

Source: own study based on (Lynch, 1989).

A cornerstone of the Lynchian approach is the "homework" phase—an exhaustive verification of financial health that transcends simple valuation multiples. Lynch argues that a favorable PEG ratio is irrelevant if the underlying balance sheet lacks the structural integrity to sustain growth or survive cyclical downturns (Lynch, 1989). Within the universal filters applied to non-financial entities, three variables are paramount. First, the inventory-to-sales ratio serves as a leading indicator of earnings distress; an inventory buildup outpacing sales growth is a significant warning signal, as it leads to manufacturing inefficiencies and future markdowns that erode margins (Lynch, 1989). Second, Lynch's "gold standard" for capitalization is a net cash position, where total cash and cash equivalents exceed total debt. Furthermore, he prefers "funded debt" (long-term bonds) over "bank debt," as the former cannot be called in by a lender during a liquidity crisis (Lynch, 1989). Third, the free cash flow-to-price metric acts as a valuation safety margin, ensuring that accounting earnings are backed by tangible liquidity available for expansion, dividends, or debt reduction (Lynch, 1989).

Furthermore, the strategy acknowledges industry-specific nuances for financial institutions. For these entities, Lynch prioritizes Return on Assets (ROA) with a mandatory threshold of ≥ 1% and a robust Equity-to-Assets ratio to ensure adequate capital buffers (Kelly et al., 2008). Table 2 summarizes these required balance sheet controls. The integration of these rigorous metrics with growth dynamics represents the essence of the GARP philosophy, ensuring that expansion is supported by enduring financial stability.

Table 2: Universal Fundamental and Balance Sheet Filters

Filter Category	Metric	Threshold / Logic
Standard Criteria	Debt Position	Net Cash (Cash > Total Debt)
Standard Criteria	Inventory-to-Sales	Inventory Growth < Sales Growth
Industry Specific	ROA (Financials)	≥ 1.0%

Industry Specific	Equity-to-Assets	Strong Capitalization (Qualitative)

Source: own study based on (Lynch, 1989).

The synthesis of Lynch's theoretical framework reveals a strategy designed to identify "multi-baggers" by operating at the intersection of operational momentum and valuation discipline. However, a modern academic assessment must acknowledge the "PEG Paradox" identified in recent empirical literature. While Lynch (1989) advocates for a linear preference for low PEG ratios, Lew (2016) identifies a "U-shaped relationship" between PEG and returns, suggesting that extremely low PEG values may occasionally capture distressed firms rather than undervalued opportunities. This highlights the absolute necessity of Lynch's balance sheet "homework" to filter out potential value traps. Crucially, his implementation strategy is rooted in a profound empirical skepticism of analyst forecasts, which he characterizes as mere "guessing" (Lynch, 1989). To mitigate the volatility of single-year data and avoid speculative projections, the methodology relies on historical 3-, 4-, and 5-year EPS growth averages. This reliance on verifiable historical performance ensures the valuation is anchored in the company's demonstrated operational reality rather than optimistic market sentiment, providing the necessary analytical structure for the subsequent empirical evaluation across diverse market cycles.

3. Methodology of literature review

This section outlines the methodological rigor applied to objectively and systematically evaluate the efficacy of Peter Lynch's investment strategy across international capital markets. Implementing a systematic review approach is strategically vital for the study's credibility, as it mitigates selection bias and ensures full reproducibility of the results. In analyzing the "Growth At a Reasonable Price" (GARP) strategy across markets with varying structures and liquidity, a rigorous empirical framework is required to separate anecdotal evidence from statistically significant market anomalies, providing a foundation for synthesizing data and verifying the universality of Lynch's model.

The literature collection process utilized advanced semantic search techniques, which, unlike traditional keyword-based methods, enable a deeper contextual analysis of academic texts. The central research query was formulated as: "Assessing the effectiveness of Peter Lynch's strategy in different markets." Source identification leveraged open research graphs—specifically the Semantic Scholar and OpenAlex databases, encompassing between 126 and 138 million articles. The selection of these open databases over closed ecosystems like Scopus was driven by the necessity to maximize the review's inclusivity across diverse global jurisdictions. Furthermore, LLM-based analytical tools, notably the Elicit platform, were employed to generate an initial pool of 500 articles, facilitating precise mapping of the GARP paradigm. The application of semantic search significantly enhances identification precision; crucially, it captures studies analyzing fundamental parameters (such as the correlation between the PEG ratio and future returns) even if they do not explicitly mention Peter Lynch. This methodological choice incorporates vital empirical data that traditional search models would omit, directly improving the comprehensiveness of the source selection process.

The collected material underwent rigorous screening at both the abstract and full-text levels, applying strict empirical criteria. The overarching requirement was the presence of quantitative tests verifying the effectiveness of Lynchian metrics (e.g., the PEG ratio, the low P/E effect) within public equity markets. Table 3 details the specific inclusion and exclusion criteria utilized during this process.

Table 3: Inclusion and Exclusion Criteria for the Systematic Review

Criterion Category	Description / Requirement
Focus on Lynch's Strategy	Direct analysis of PEG and P/E ratios, or company classification based on growth dynamics (Lynch, 1989).
Quantifiable Performance Outcomes	Mandatory reporting of hard data, including return rates, Jensen's Alpha, or the Sharpe ratio.
Multiple Market Conditions	Inclusion of studies across developed and emerging markets (e.g., KOSPI, Australian equity markets).
Clear Methodology	Precise documentation of statistical methods, such as OLS regression, Student's t-tests, or unit root tests (ADF).
Equity Focus	Analysis strictly limited to public equity market instruments, explicitly excluding private equity.
Investment Horizon	A minimum empirical data analysis period of 3 years.

Source: own study.

The rationale for establishing a minimum investment horizon of three years stems from the necessity to capture complete market cycles. This ensures an objective evaluation of the strategy during both bull (e.g., 2003–2006) and bear (e.g., 2001–2002) markets, aligning with the empirical frameworks presented by Kelly et al. (2008). Such an approach safeguards the review against the inclusion of purely theoretical or anecdotal studies. Furthermore, the prerequisite for testing risk-adjusted outcomes verifies whether the reported alpha results from a genuine market anomaly rather than mere exposure to systematic risk. Following the identification of the final literature pool, a structured extraction of key variables for comparative analysis was conducted.

The final methodological stage involved a systematic extraction of variables to construct a comparative analytical framework across diverse global markets. Key variables extracted included the geographic and temporal context (e.g., the Australian market from 1998–2006 or the South Korean KOSPI), specific Lynchian valuation criteria (PEG, P/E, Price-to-Book Ratio, and Return on Assets), and structural performance metrics such as risk-adjusted returns (Jensen's Alpha), volatility (Beta), sample size, and portfolio composition (Kelly et al., 2008; Lew, 2016). During this process, particular emphasis was

placed on studies utilizing value-weighted portfolios, an approach that robustly verifies the correlation between valuation multiples and subsequent returns (Lew, 2016). Analyzing multi-jurisdictional data facilitates the identification of significant market anomalies. For instance, evidence from the South Korean market revealed a non-linear, U-shaped distribution for the PEG ratio, establishing the Price-to-Book Ratio (PBR) as a superior predictor of future returns compared to classical Lynchian metrics (Lew, 2016). Such findings fundamentally challenge the presumed universality of Lynch's parameters, underscoring the necessity for local adaptation and establishing the empirical foundation for the results presented in the subsequent section.

4. Results

This section evaluates the empirical validity of Peter Lynch's investment methodology across diverse geographical and economic regimes. By synthesizing data from both emerging and developed markets, this research identifies the specific conditions under which Lynch's fundamental parameters—primarily the PEG ratio and the low P/E effect—generate statistically significant alpha.

Emerging markets serve as a critical testing ground for Lynch-based strategies due to their characteristic volatility, high information asymmetry, and substantial growth trajectories. In these environments, the lack of institutional analyst coverage often allows for the early identification of high-growth equities, directly supporting Lynch's hypothesis regarding the advantages of foundational fundamental observation. Empirical evidence from the Indonesian market provides a robust endorsement of this approach; according to Wirawan and Sumirat (2021), a portfolio constructed using Lynch's criteria achieved an annualized return of 24.04% and a cumulative return of 613% over the study period. This performance significantly outpaced benchmarks, with systematic rebalancing improving risk-adjusted metrics, generating an exceptional Sharpe ratio (up to 9.75) and markedly elevating Jensen's Alpha to 57%. Such results suggest that Lynch's focus on Growth at a Reasonable Price (GARP) effectively captures the expansionary phase of firms within the Indonesian Stock Exchange.

Furthermore, research by Ye (2013) on the Chinese Shanghai Stock Exchange demonstrates that Lynch-based strategies outperformed the market benchmark in four out of five examined years. However, the study identifies a 2006 government intervention as a significant exogenous variable, indicating that while fundamental selection is powerful, emerging market outcomes remain highly susceptible to regulatory shocks. Additional data from Thailand (Sareewiwatthana, 2012) and South Africa (I'Ons & Ward, 2012) confirm the replicability of this effect, with South African data showing abnormal returns of 13.7% using the PEG ratio alone. Collectively, these results demonstrate that low informational efficiency in emerging markets creates a highly fertile environment for the PEG ratio to function as a superior predictive tool.

Conversely, developed markets present a more rigorous challenge to value-based strategies due to higher informational efficiency and stricter adherence to the semi-strong form of the Efficient Market Hypothesis (EMH). In these contexts, alpha generation is typically more modest and requires sophisticated filtering to persist. For instance, in the Australian industrial sector, Kelly et al. (2008) identified a persistent low P/E effect, with portfolios yielding 11.52% per annum more than implied by risk. A critical contribution

of their research was the integration of business failure prediction models (BFPM), such as the Altman Z-score. By systematically filtering out "value traps"—firms with low P/E ratios facing insolvency—risk-adjusted returns increased to approximately 12.5%. This empirical finding robustly supports Lynch's insistence on rigorous balance sheet analysis to supplement baseline valuation metrics. European contexts, such as the Swedish market (Pettersen, 2011), provide complementary evidence of the strategy's viability, though the results remain notably more modest compared to those in emerging economies. This indicates a clear inverse correlation between market maturity and alpha potential: as market efficiency increases, the "raw" Lynch strategy requires additional quality and solvency filters to maintain its competitive edge, necessitating a geographically diversified approach adjusted for developed exchanges.

A comparative evaluation of Lynch's methodology against other classic value-oriented frameworks, specifically those of Benjamin Graham and Warren Buffett, reveals a clear performance hierarchy. Data establishes that Lynch-based portfolios, yielding an annualized return of 24.04%, significantly outperformed both the Buffett-style approach (9.42%) and Graham's "deep value" strategy (8.3%) (Wirawan & Sumirat, 2021). This success is largely attributable to the PEG ratio, which effectively captures earnings growth momentum. While Graham emphasizes asset protection and Buffett focuses on sustainable competitive advantages, Lynch's GARP approach proves better suited for high-growth, high-volatility regimes where deep-value strategies risk falling into stagnant "value traps". Table 4 synthesizes these cross-jurisdictional findings.

Table 4: Empirical Performance of Lynch-based Strategies Across Global Markets

Study	Market Context	Market Type	Key Strategy Metric	Key Performance Outcome
Wirawan & Sumirat (2021)	Indonesia (IDX)	Emerging	PEG < 1.0 & Rebalancing	24.04% Annualized Return
Ye (2013)	China (SSE)	Emerging	Growth Fundamentals	Beat Market 4/5 Years
Kelly et al. (2008)	Australia (ASX)	Developed	Low P/E + BFPM	Approx. 12.5% Risk-adjusted Return
I'Ons & Ward (2012)	South Africa (JSE)	Emerging	PEG Ratio	13.7% Abnormal Return
Sareewiwatthana (2012)	Thailand (SET)	Emerging	Fundamental Screens	Significant Alpha vs. SET Index
Pettersen (2011)	Sweden (OMXS)	Developed	P/E and Growth	Confirmed Value Anomaly

Source: own study based on (Wirawan & Sumirat, 2021; Ye, 2013; Kelly et al., 2008; I'Ons & Ward, 2012; Sareewiwatthana, 2012; Pettersen, 2011).

The data synthesized in Table 4 illustrates a high degree of global consistency. However, critical nuance is provided by Lew (2016), whose analysis of the South Korean KOSPI market found that the PEG ratio exhibits a non-linear, U-shaped relationship with stock returns. Notably, Lew (2016) identified the Price-to-Book Ratio (PBR) as providing the clearest evidence of a market anomaly, even exceeding the predictive power of classical PEG or P/E ratios. This indicates that while Lynch's parameters are robust tools for generating superior returns, their efficacy is maximized when systematically tailored to specific local market inefficiencies, laying the empirical groundwork for the subsequent discussion on market anomalies.

5. Discussion

The strategic universality of the Growth At a Reasonable Price (GARP) framework remains a subject of rigorous econometric debate. While Lynch's foundational principles were established within the deep liquidity and transparency of US equity markets, contemporary empirical evidence suggests that alpha-generating potential is significantly mediated by market maturity and informational architecture. The persistence of abnormal returns across divergent jurisdictions indicates that the market's ability to price future earnings trajectories is not uniform, raising fundamental questions regarding the semi-strong form of the Efficient Market Hypothesis (EMH).

In emerging markets, the GARP strategy frequently exhibits heightened efficacy due to substantial information asymmetry and a relative scarcity of institutional analyst coverage. Empirical data from Indonesia indicates that Lynch-style portfolios achieved an annualized return of 24.04% (Wirawan & Sumirat, 2021), while analysis of the Chinese market demonstrates the strategy's capacity to outperform benchmarks in four out of five years (Ye, 2013). However, these gains remain susceptible to exogenous shocks and regulatory volatility, suggesting that in regimes characterized by lower informational efficiency, fundamental filters like the PEG ratio serve as high-resolution tools for identifying undervalued growth before general equilibrium is reached. Conversely, developed markets demonstrate a more compressed alpha profile, consistent with higher degrees of market maturity. In the Australian industrial sector, a baseline low P/E strategy yielded a return of 11.52% (Kelly et al., 2008), which, while anomalous, is notably lower than yields observed in emerging economies. Comparing this to seminal US-based research (Basu, 1977) reveals an "efficiency gap," highlighting a phenomenon of "anomaly arbitrage": in high-maturity markets, excess returns resulting from fundamental mispricing are rapidly liquidated through capital flows, whereas in less efficient contexts, value-price decoupling persists for longer durations.

The successful operationalization of the GARP strategy requires precise calibration of fundamental variables to mitigate the pervasive risk of "value traps"—securities that appear undervalued but are experiencing structural decline. A critical analysis reveals that simplistic adherence to Lynch's original thresholds is insufficient across complex international market regimes, where the relationship between growth and valuation is often non-linear. A primary point of divergence is the PEG ratio; while Lynch (1989) posited a linear relationship where a PEG below 1.0 signals undervaluation, econometric

evidence from the South Korean KOSPI market identifies a non-linear, U-shaped relationship (Lew, 2016). This indicates that extremely low PEG values often signal distressed firms characterized by high default risk, challenging the assumption that growth-relative-to-valuation is the universally superior predictive metric. Indeed, Lew (2016) identifies the Price-to-Book Ratio (PBR) as a more reliable indicator of future returns in the Korean context. Furthermore, the impact of capitalization is significant; "small-cap bias" can heavily inflate performance, as seen in South African research reporting a 13.7% abnormal return associated with the PEG ratio that is likely entangled with size-effect premiums (I'Ons & Ward, 2012). To address these risks, integrating bankruptcy prediction models is essential. Evidence from Australia demonstrates that applying a consensus of the Altman Z-score and the Castagna and Matolcsy (1981) models effectively filtered insolvent firms, increasing risk-adjusted returns (Kelly et al., 2008). Similarly, the K1-score—a jurisdiction-specific adaptation of the Altman model—serves a critical function in the Korean market for distinguishing deep value from terminal distress (Lew, 2016). Finally, any robust implementation must account for exogenous variables and potential model misspecification. Regulatory interventions, such as those documented in China (2006), can temporarily decouple corporate growth from share price (Ye, 2013), and skeptics must critically consider whether reported alpha represents a true EMH violation or a failure of the Capital Asset Pricing Model (CAPM) to account for distortions caused by thin trading or size effects.

A rigorous assessment of the empirical evidence supporting the GARP strategy reveals significant methodological gaps that may lead to an overestimation of potential alpha. Many studies fail to account for technical biases and lack the econometric rigor required by modern financial research standards. A prominent issue is the inconsistent control for survivorship and look-ahead biases. While foundational studies emphasized the necessity of including delisted and bankrupt firms (Basu, 1977), subsequent reports—particularly those focusing on emerging markets—frequently neglect this requirement, artificially inflating success rates by excluding failed enterprises. Furthermore, look-ahead bias remains prevalent when studies utilize fiscal year-end data not yet publicly available at the time of trade execution. Moreover, the literature frequently ignores the frictional costs associated with portfolio rebalancing; transaction costs and taxes can substantially erode the net alpha of high-turnover strategies, yet they are rarely deducted from reported returns in emerging market analyses (Wirawan & Sumirat, 2021; Ye, 2013). It is worth noting that certain performance metrics reported in the surveyed emerging market literature, such as the Sharpe ratio of 9.75 in Indonesia (Wirawan & Sumirat, 2021), appear exceptionally high from a theoretical standpoint and may reflect methodological variances in return annualization or specific look-ahead sub-periods. There is also a notable deficiency in statistical rigor, with some studies critiqued for observing phenomena without formally testing the monotonic decline of returns (Kelly et al., 2008). To ensure regressor stationarity and avoid spurious correlations, future research must utilize refined econometric measures, including Augmented Dickey-Fuller (ADF), Phillips-Perron (PP), and Kwiatkowski-Phillips-Schmidt-Shin (KPSS) tests. Table 5 outlines these critical methodological limitations. Ultimately, while the empirical evidence for the GARP strategy is compelling, the lack of standardized methodology remains a barrier to scientific validation, necessitating the rigorous application of stationarity tests, transaction cost accounting, and bias elimination in future models.

Table 5: Methodological Limitations in Analyzed Empirical Studies

Limitation Type	Description	Impact on Reported Alpha
Survivorship Bias	Exclusion of companies delisted or bankrupt during the study period.	Significant overestimation of returns due to the exclusion of failed enterprises.
Transaction Costs	Failure to account for brokerage fees, slippage, and taxes during rebalancing.	Reduction of net alpha; may render some contrarian strategies unprofitable.
Look-ahead Bias	Use of fundamental data (e.g., net profit) not yet officially published at the time of trade.	Artificial inflation of predictive power that is impossible in real-time execution.
Statistical Significance	Insufficient use of Student's t-tests or stationarity tests (ADF/KPSS/PP).	Risk that reported results are statistically insignificant or artifacts of stochastic variance.

Source: own study based on (Wirawan & Sumirat, 2021; Ye, 2013; Kelly et al., 2008; I'Ons & Ward, 2012; Sareewiwatthana, 2012; Pettersen, 2011).

6. Conclusions

The Growth At a Reasonable Price (GARP) strategy, defined and popularized by Peter Lynch, presents a rigorous challenge to the semi-strong form of the Efficient Market Hypothesis (EMH). From the perspective of modern capital market theory, Lynch's historical performance—specifically the 29.2% average annual return achieved at the Magellan Fund compared to the S&P 500's 15.8%—cannot be dismissed as a mere statistical anomaly (Lynch, 1989). Rather, it represents the systematic exploitation of market mechanisms described by DeBondt and Thaler's (1985) Overreaction Hypothesis. Within this theoretical framework, the success of Lynch's approach relies on capitalizing on investor psychology; excessive market pessimism leads to undervalued assets characterized by low P/E ratios, creating structural opportunities to generate abnormal returns through mean-reversion processes. Furthermore, contemporary portfolio management requires the synthesis of empirical data across markets of varying maturity. Structural discrepancies in informational efficiency between developed and emerging economies position the GARP strategy as a critical tool, enabling the identification of fundamental value in environments where classical factor models consistently fail.

Empirical verification of Lynch's methodology confirms its robust capacity to generate Jensen's alpha. Research on the Australian market provides strong evidence of the low P/E anomaly; specifically, after excluding companies with negative earnings, portfolios based on low P/E ratios generated a statistically significant, risk-adjusted excess return of 11.52% annually. Furthermore, the PEG ratio serves as a precise growth filter, validating Lynch's assertion that accepting high P/E ratios (such as Walmart's historical

valuations exceeding 20) is rational provided the earnings per share (EPS) growth rate remains proportionally adequate. This demonstrates the superiority of the PEG indicator over a static P/E ratio, as it enables the identification of dynamic enterprises whose elevated valuations are operationally justified. In emerging markets characterized by higher information asymmetry, rigorous fundamental selection—which Lynch characterizes as "doing the homework"—facilitates the systematic outperformance of broad indices. These findings contribute significantly to the theoretical debate between the Fama-French factor model and Daniel and Titman's characteristics model by suggesting that specific firm-level characteristics, such as PEG and P/E ratios, possess superior predictive power relative to general market factors. Consequently, the success of the GARP strategy is not derived from a simplistic algorithm but from the disciplined implementation of fundamental indicators, a process that critically requires calibration to local market conditions.

A critical analysis of international evidence reveals that the orthodox application of Lynch's rules—such as a rigid PEG threshold below 1.0—can lead to suboptimal decision-making due to local market specificities. Consequently, the integration of bankruptcy prediction models is imperative; evidence from the Australian market confirms that strategy efficiency increases from 11.52% to approximately 12.5% annually when such safety filters are applied. Similarly, in South Korean studies, the K1-score—a model developed by Altman (1995) specifically for Korean equities—played a crucial role in eliminating insolvent firms, thereby avoiding "value traps" characterized by low valuation multiples driven by actual bankruptcy risk. Furthermore, analysis of the Korean KOSPI market revealed a non-linear, U-shaped correlation between the PEG ratio and stock returns. This indicates that high returns are generated both by companies with low PEG ratios (classic undervaluation) and those with extremely high PEG values, representing extraordinary growth dynamics priced at a significant premium, which directly challenges the universality of the PEG < 1.0 dogma. Finally, mathematical limitations must be acknowledged: the PEG ratio loses its analytical validity under conditions of negative earnings growth, rendering it effective primarily during phases of market expansion. These observations underscore the necessity for further empirical verification of these relationships across markets with distinct structural characteristics, particularly within Central and Eastern Europe.

Future research concerning the implementation of Lynch’s strategy within specific regional indices, such as the Central European WIG20 and mWIG40, must adhere to the highest standards of academic rigor to preclude statistical and cognitive biases. Specifically, controlling for time-series stationarity via Augmented Dickey-Fuller (ADF) and KPSS tests is a prerequisite to eliminate the risk of spurious correlations that frequently distort financial research. Furthermore, predictive models must strictly account for survivorship bias by incorporating delisted and bankrupt entities, as their exclusion artificially inflates reported alpha. Following Jensen (1968), researchers must also rigorously incorporate transaction costs and taxes, recognizing that a market can only be deemed inefficient if abnormal returns persist net of these practical frictions. Additionally, future investigations must isolate the fundamental low P/E effect from the structural "small firm anomaly" identified by Reinganum (1981) to ensure accurate attribution of returns. Ultimately, Peter Lynch’s investment philosophy—synthesizing fundamental business logic with quantitative discipline—remains a highly relevant

foundation for contemporary asset selection. The synthesis of empirical evidence demonstrates that success within the GARP framework requires treating the methodology as a flexible analytical system rather than a set of invariant dogmas. The long-term value of Lynch's approach lies in the contextual adaptation of valuation metrics (P/E, PEG) to local market regimes and the rigorous management of downside risk through bankruptcy prediction models. When fortified by modern statistical rigor, Lynch's method remains a highly effective analytical tool for systematically exploiting the behavioral inefficiencies of global capital markets.

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