

INNOVATION VERSUS ACQUISITION: PANEL EVIDENCE ON THE MARKET VALUE OF INTANGIBLE CAPITAL IN EUROPE

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Abstract

This study examines the influence of intangible investments on firm valuation in terms of the comparative influence of internally generated research and development and externally purchased intangible fixed assets. Using panel data for 247 listed European firms over the span of a decade, this paper uses fixed effects and Generalized Method of Moments estimators to adjust for unobserved heterogeneity and endogeneity problems. The findings reveal a strong and stable positive and statistically significant association between research and development intensity and Tobin's Q, stressing the focus of the market on endogenously driven innovation as the strongest driver of firm value. In comparison, the effect of acquired intangibles is less strong and statistically less intense, revealing that capital markets focus more on endogenous innovation efforts than on intangible acquisition. Results of the study contribute to the literature on intangible capital by offering empirical findings on the impact of investment styles on firm value, with significant implications for policy making, innovation management, and corporate finance.

Keywords: R&D expenditure; intangible fixed assets; market capitalisation; European publicly-traded companies; firm valuation

1. INTRODUCTION

In the knowledge economy of the present times, intangible assets (IA) have become the drivers of corporate value, competitiveness, and sustainable growth.

The conventional accounting systems, which have focused on tangible assets, have failed to catch the strategic value of intangible assets like research and development (R&D) initiatives, intellectual property, brands, and human capital. With the global economy

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accelerating towards digitalisation and innovation, companies are becoming more aware that their most prized assets are no longer tangible or financial assets, but in knowledge-based competencies and potential for innovation.

In this context, the upper management of firms has significant strategic dilemmas concerning the most suitable distribution of financial and managerial resources. Of special concern is whether intangible capital must be built internally through research and development activities or acquired externally by buying intangible fixed assets (IFA), including patents, licenses, trademarks, or client databases. Although R&D spending is widely accepted as a source of technological innovation, differentiation, and lasting long-term competitive advantage, it is also fraught with high risk, delayed financial payoff, and frequently ambiguous outcomes. On the other hand, acquisition programs can give firms instant access to established market footholds, technology, and intellectual properties, but typically demand high financial outlay and enormous integration hurdles.

This decision-making is especially relevant for publicly traded companies under severe shareholder pressure and capital market expectations. The financial markets' perception of a company's intangible capital increasingly impacts share price volatility and company valuation. However, measurement and valuation of intangible investments are confronted with methodological and practical limitations. The accounting procedures prescribed in international reporting standards (e.g., IAS 38) fail to reflect the market identification of intangible assets as value-contributing, resulting in a sustained disparity between market capitalisation and financial reports.

Furthermore, existing studies have been inconclusive about whether firm value is enhanced through internal innovation development through research and development or the acquisition of intangible assets.

Closing this research gap, the present research conducts a comprehensive empirical analysis of 247 listed European companies across different industries from 2010–2019. The paper employs sophisticated econometric techniques, such as the Generalized Method of Moments (GMM) and fixed effects panel regression, to formally test the relation between two main indicators of intangible investment—R&D intensity and intangible fixed assets—and the market value of companies, proxied by Tobin's Q. The results of this empirical investigation seek to reveal the degree to which capital markets compensate companies for their innovation efforts conducted in-house compared to acquisition-based strategies.

By offering empirical evidence to the existing literature on financial market measurement of intangibles, this study has important theoretical and managerial implications. The results are especially useful for corporate finance practitioners, policymakers, and investors interested in understanding the impact of intangible investments on firm performance in the European environment. Our research contributes to the academic discussion on intangibles through offering comparative findings spanning two different types of strategic investment, thus filling a literature gap on the impact of intangibles on firm valuation and competitive dynamics in modern capital markets.

2. LITERATURE REVIEW

The growing occurrence of intangible assets (IA) and intellectual capital (IC) in firm valuation and productivity warrants additional comprehensive empirical investigations into their influences on strategic decision-making processes. The European Central Bank (2018) and IFRS (2022) characterise IA as identifiable non-monetary assets without physical substance, whereas scholars consider them as assets with future benefits that do not have material forms (Lev & Gu, 2016; Edvinsson & Malone, 1997).

Intellectual capital (IC) literature, particularly after the 1990s, has progressed through various conceptual phases, from understanding the definition of IC to using ecosystem frameworks to facilitate effective IC management (Guthrie et al., 2012; Garanina et al., 2021). IC has human, structural, and relational capital, constituting a pivotal knowledge source, innovation, and competitive edge within today's knowledge-based economy (Giraldo et al., 2022). Organisations that utilise these elements successfully are more likely to increase efficiency, promote innovation, and gain long-term success in the market.

That heightened visibility of intangible assets (IA) is reflected in the rising proportion of their contribution to overall market valuations. Initial research had shown that IA represented 85% of firms listed on the S&P 500 index of 2015 (Elsten & Hill, 2017).

Later analyses indicate that this only intensified after the worldwide COVID-19 pandemic, which focused on digitalisation and knowledge-based business models (Hazan et al., 2024). European market examinations (Dancaková, 2022) have also

supported similar trends, where the Value Added Intellectual Coefficient (VAIC) approach identified that structural capital effectiveness and the integration of structural and capital employed resources positively influence firm performance in industries. However, controversies remain surrounding recognising, recording, and valuing intangible assets (IA) per current international accounting standards. Chalmers et al. (2012) and Garanina et al. (2021) cite the large extent of uncertainty within the IFRS framework, leading to substantial differences between companies' recorded and market valuations. Additionally, authors as Lev & Gu (2016) also note some variations in geographic terminology: whereas "intangibles" prevail in academic and professional jargon in North America, "intellectual capital" is employed in Europe, Australia, and Asia (Lev & Gu 2016). This terminology difference also indicates variations in valuation methodologies and strategic management practices in various regions.

Various approaches have been utilised to quantify the impact of IA and IC on firm performance. As exemplified by Tobin's Q (Eckstein, 2004), conventional methods emphasise market-based assessments of firm value. Integrative frameworks such as VAIC (Pulic, 2000) and the enhanced Modified VAIC (Xu & Li, 2022) offer a multidimensional perspective of value creation by analysing human capital efficiency, structural capital efficiency, relational capital, and innovation capital. Most recently, Wudhikarn (2021) presented hybrid models incorporating qualitative and quantitative approaches to increase the accuracy of IC valuation.

Empirical evidence on the association between intellectual capital (IC) and

organisational performance continues to demonstrate inconsistency. Some studies have found a strong positive relationship between human capital and financial performance (Chen et al., 2005; Kamath, 2008; Ting & Lean, 2009). Others have suggested context-dependent findings or weak correlations, which are often founded on industry, regulatory contexts, or methodological choice (Chu et al., 2006; Maditinos et al., 2011). Such inconsistencies have instigated a growing focus on bibliometric studies and meta-studies.

Faraji et al. (2022) and Xu and Li (2022) have traced the conceptual development and future directions in IC studies, echoing the influence of international viewpoints and research networks on the ongoing discussion.

In particular, R&D as an intangible investment type financed internally has performed an increasingly key strategic role. Previous research consistently demonstrates a strong and significant relationship between R&D intensity and market value (Chang & Hsieh, 2011; Chen et al., 2019; Dženopoljac et al., 2016). Nevertheless, converting research and development output into tangible financial outcomes is frequently subject to delays, uncertainties, and challenges in properly reflecting in conventional financial reporting systems. And also the lack of balance in measurement represents an enormous challenge for researchers and practitioners. However, creating ongoing demands for improved empirical investigation of the relative effectiveness of internal versus external intangible investment strategies. This research answers the above-addressed need by offering fresh empirical insights regarding the differing effects of research and development expenditures and

intangible fixed assets on companies' market value in the European setting. Drawing from an examination of 247 listed European companies spanning ten years (2010–2019), the present study contributes to the knowledge of how capital markets recognise and reward various types of intangible investment and addresses a significant gap in the literature relating to the valuation of intangibles in modern capital markets.

3. DATA AND METHODOLOGY

The primary aim of the present research is to investigate empirically the effect that two significant categories of intangible investment, i.e., expenditure on research and development (R&D) and on intangible fixed assets (IFA), have on the market value of firms. In order to investigate this strategic trade-off, the research uses a sample of 247 European listed firms from various industries. The research span is from 2010 to 2019, which provides sufficient consideration of the long-term effects of investments across various economic cycles. In supporting the estimation of value relevance in addition to helping mitigate possible endogeneity, the study uses sophisticated econometric methods for panel data, such as fixed effects regression and Generalized Method of Moments (GMM). All of the statistical computations are accomplished utilizing the R programming environment, more specifically the *plm* package for linear modeling in panel data settings.

3.1. Data

In the analytical part of this work, we work with secondary data obtained from the

financial information database Orbis Europe from Bureau van Dijk (now part of Moody's). When defining the input characteristics of the data set in the database, small, medium and large European enterprises operating in various sectors were selected, for which we focused on the availability of information on investments in intangible assets in the form of reported R&D expenditures in the period from 2010 to 2019. In order to ensure the largest possible number of enterprises with available data of the required quality, the data loaded from the Orbis Europe database were sorted in descending order by the value of R&D expenditures and subsequently extracted. The data set originally contained 4687 European enterprises for which information on the amount of R&D expenditures was available for the monitored ten-year period. The original geographical representation of individual enterprises consisted of 18 countries: Austria, Germany, France, Finland, Belgium, Denmark, Sweden, Switzerland, United Kingdom, Netherlands, Italy, Portugal, Liechtenstein, Luxembourg, Lithuania, Ireland, Estonia and Norway. The final data set, from which all observations with missing data were removed, consists of 247 enterprises, which were arranged in a long balanced panel with a total number of observations of 2470. While the initial scope was broad, the final sample is ultimately comprised of large firms from Germany, France, and Switzerland, as these were the only nations where companies provided the strictly required ten-year continuous reporting of R&D expenditures. Furthermore, the sample is restricted to large companies because the dependent variable, Tobin's Q, requires a market-based assessment of firm value; such data is typically only available for large enterprises

publicly traded on capital markets. The data in the resulting set constitute 5.33% of the original data and are strongly represented mainly by enterprises from Germany and France. The adjusted sample represents 16.66% of the original geographical structure of the data. This significant reduction in geographical breadth is a direct consequence of the rigorous data-cleansing process necessary to build a balanced panel for GMM estimation. The representation of the data by these countries may be partly due to the fact that France and Germany have long been among the leaders among global investors in R&D and their companies appear at the top of the rankings of leading international companies with the largest number of registered patents and trademarks (Daiko et al., 2017).

Investments in research and development (R&D) and intangible fixed assets (IFA) are increasingly recognised as key drivers of firm value in the knowledge-based economy. These expenditures are expected to enhance innovation, competitive advantage, and long-term profitability, etc. That can be reflected in the firm's market valuation, particularly through Tobin's Q. Based on this rationale, the following hypotheses are proposed:

- H_a: There is a positive and statistically significant relationship between research and development (R&D) expenditures and the market value of publicly traded companies, as measured by Tobin's Q.

- H_b: There is a positive and statistically significant relationship between intangible fixed assets (IFA) and the market value of publicly traded companies, as measured by Tobin's Q.

To test the hypotheses and analyze the relationship between R&D and IFA to the market-based performance represented by

Tobin's Q the following formula is used:

$$TQ_{i,t} = \alpha + \beta_1 R\&D_{i,t} + \beta_2 IFA_{i,t} + \beta_3 TFA_{i,t} + \beta_4 CL_{i,t} + \beta_5 CoE_{i,t} + \beta_6 ROA_{i,t} + \beta_7 SA_{i,t} + \beta_8 T_{i,t} + \varepsilon_{i,t} \quad (1)$$

3.2. Variables

In order to study the link between intangible investment and market valuation, the present study uses a panel of financial and operating variables frequently utilized in the analysis of firm-level panel data. The main dependent variable under consideration is Tobin's Q (TQ), which is a widely used metric for the market value of a firm and is computed by dividing the market value of a firm by the replacement cost of its assets. This variable needs no standardization.

The two independent variables of focus are Intangible Fixed Assets (IFA) and Research and Development spending (R&D). Both have been normalized by Total Assets (TA) to control for company size and to have a comparable basis for companies across industries. This transformation yields R&D intensity and the relative value of intangible fixed assets, respectively.

Additional control variables are included to prevent omitted variable bias and to

delineate the effects of R&D and IFA on Tobin's Q. They include:

- Total Fixed Assets (TFA) deflated by Total Assets (TA), representing capital intensity;
- Current Liabilities (CL) / TA, showing short-term financial obligations and liquidity;
- Cost of Employees (CoE) divided by Number of Employees (NoE), a proxy to human capital intensity as a measure of average cost of an employee;
- Return on Assets (ROA) is the proportion of net income to total assets, with the outcome standardized by dividing by 100 to express it as a proportion;
- Sales to Assets (SA) multiplied by TA, which indicates asset turnover and operating efficiency;
- Taxation (T) is expressed as a proportion of the Earnings Before Interest and Taxes (EBIT), serving as an approximation of the effective tax rate.

All the financial figures are proportionally adjusted based on the size of the company by the process of standardization, thereby decreasing heteroscedasticity and making coefficients more interpretable.

Table 1 below presents the descriptive statistics of all the variables used. The

Table 1. Summary statistics of all the variables included in the regression analysis

Variable	N	Mean	Standard Deviation	Min	Max
Dependent variables					
TQ	2470	0.801	0.992	0.024	21.84
Explanatory variables					
R&D	2470	0.017	0.038	0	0.422
IFA	2470	0.22	0.17	0	0.826
Control variables					
TFA	2470	0.183	0.172	0.0001	0.943
CL	2470	0.523	0.201	0.033	0.988
CoE	2470	106.204	1290.125	0.081	38902
ROA	2470	0.034	0.069	-0.863	0.415
SA	2470	0.945	0.532	0.001	4.629
T	2470	0.283	3.002	-33.409	121.329

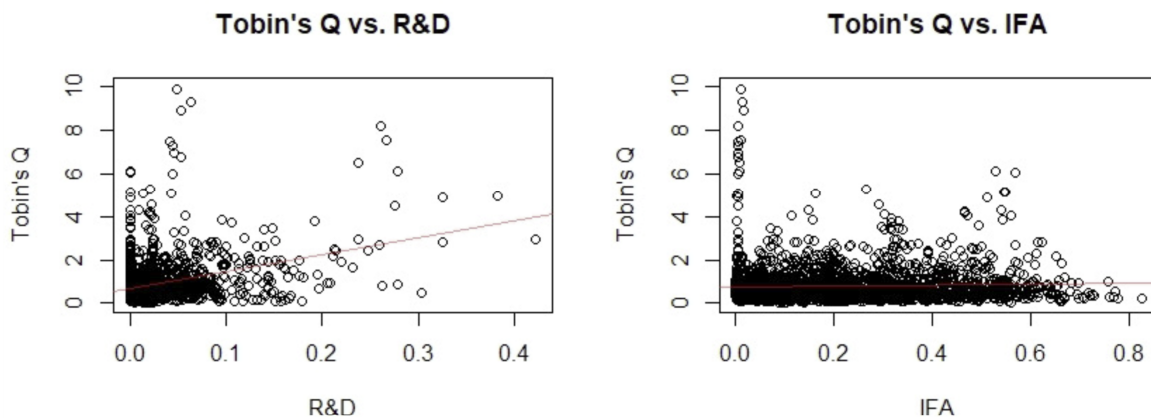
sample consists of 2,470 firm-year observations. The mean Tobin's Q is 0.801, and its standard deviation is 0.992, reflecting a moderate level of variability in market valuation between firms. R&D intensity has a mean of 0.017, and intangible fixed assets represent approximately 22% of total assets on average. Of note, the statistics reflect high variability, especially for spending on employees and taxation, highlighting the requirement for stringent econometric approaches in the empirical analysis.

3.3. Models

A multiple regression analysis was executed in the statistical software R (primarily with the plm package) to investigate the relationship between a company's market performance and R&D or IFA. The multiple regression design aimed to find the best-fitting model to explain the behavior of dependent variables in response to changes in the independent variable based on the observed data. A Pooled Ordinary Least Squares or pooled OLS (POLS) model was used as a base model. In addition, panel

regression in the form of a fixed or random effect panel was conducted as well as provided in the following text.

Before applying the POLS model, five assumptions regarding the model's specification should be tested to ensure the coefficient estimates are unbiased. Firstly, the linearity of the coefficients and error terms of the regression were tested. For this, a Ramsey Reset test was conducted with the null hypothesis claiming that there is no omitted nonlinearity. This hypothesis was rejected, as the resulting p-value was smaller than 0.0000, which implied that the model was indeed suffering from some omitted variables or misspecification. However, scatter plot diagrams of R&D and IFA against the total Tobin's Q indicated a clearly positive linear relationship in the case of the research and development (R&D) to the market value and ambiguous one in the case of the intangible fixed assets (IFA), for more details see Figure 1.



Source: own elaboration

Figure 1. Scatterplot of Tobin's Q versus R&D (left) and IFA (right)

4. RESULTS AND DISCUSSION

To assess the relevance of intangible investment strategies' value, the present study estimated four panel data models: Pooled Ordinary Least Squares (POLS), Fixed Effects (FE), Random Effects (RE), and the Generalised Method of Moments (GMM). Of these, the GMM estimator is preferred as it can deal with potential endogeneity and unobserved heterogeneity, which are of specific concern in firm-level studies concerning investment decisions and market valuation.

The GMM estimates (Table 2) reveal a statistically significant and positive strong association between R&D intensity and Tobin's Q (Estimate = 7.351, $p < 0.001$). That

is consistent with Hypothesis a (Ha), suggesting that capital markets value internal innovation activities positively. The coefficient size implies that even a marginal increase in the R&D expenditures (relative to total assets) can result in substantially improved firm market valuation. That echoes past empirical findings, including Chen et al. (2005) and Chang & Hsieh (2011), and emphasises the essential role of sustained investment in innovation capabilities. These findings underscore the critical importance of endogenous factors, as R&D represents a firm's unique, non-imitable knowledge base that drives technical sovereignty.

The IFA coefficient is positive but only marginally significant at the 10% level (Estimate = 0.785, $p = 0.073$), partially

Table 2. Panel regressions with TQ (note: ***, **, and * denote a significance level of 1, 5, and 10 percent, respectively).

Dependent variable: Tobin's Q (TQ)				
	(1) POLS	(2) FE	(3) RE	(4) GMM
R&D	7.3511 ***	1.8755 ***	3.3661 ***	7.3511 ***
	-0.4734	-0.5899	-0.5438	-1.8857
IFA	0.7847 ***	-0.7939 ***	-0.2191	0.7847 *
	-0.1625	-0.2905	-0.2411	-0.438
TFA	0.2935 *	-0.5379 *	-0.2686	0.2935
	-0.1619	-0.3238	-0.2545	-0.1928
CA	0.8471 ***	0.6850 **	0.7503 ***	0.8471 ***
	-0.1575	-0.2661	-0.2245	-0.3249
CoE	-0.000013	0.0000002	-0.000001	-0.000013 ***
	-0.000014	-0.0000099	-0.0000099	-0.0000037
ROA	5.0283 ***	1.3039 ***	1.8218 ***	5.0283 ***
	-0.2571	-0.2224	-0.2173	-1.5827
SA	-0.1933 ***	0.0154	-0.0987 *	-0.1933 **
	-0.0388	-0.073	-0.059	-0.0958
T	-0.0008	-0.0014	-0.0017	-0.0008
	-0.0059	-0.0037	-0.0038	-0.0018
Constant	0.0194		0.4807 **	0.0194
	-0.1285		-0.1953	-0.1853
N Observations	2470	2470	2470	2470
Effects		firm	firm	
R² / Adj. R²	0.227 / 0.225	0.046 / -0.064	0.057 / 0.054	-

supporting Hypothesis b (Hb). This finding indicates that although externally acquired intangible assets can contribute to market value, their impact is weaker than internally developed research and development activities. Its comparative lack of effect may reflect market scepticism regarding integration success or uncertainty in valuing acquired intangibles. Also, the probability that IFA includes legacy assets unrelated to modern competitive advantage may undermine its explanatory power. However, acquisition strategies involving IFA cannot be completely excluded from a balanced business model. This is necessitated by the inherent "market swallow" risk: the danger that by the time an entrepreneur or firm develops an internal R&D model to maturity, they may be overtaken by faster-moving competitors. Acquisitions, therefore, serve as a vital temporal tool, providing "instant access" to established market footholds and intellectual properties that bypass the lengthy time-to-market barriers of internal R&D.

Among the control variables, several variables are significantly correlated with Tobin's Q. Current Assets (CA) positively and significantly ($p < 0.01$) affect it, which may reflect that liquidity and operational flexibility are viewed positively by investors. Return on Assets (ROA) is highly significant ($p < 0.01$), which further supports the hypothesis that underlying profitability is still a primary driver of corporate value. The Cost of Employees (Coe) carries a negative and significant coefficient, suggesting that in the short term, higher average employee costs can drain firm valuation if not immediately matched by productivity gains. However, as noted by Edvinsson and Malone (1997), human capital represents the 'hidden brainpower' of a firm and is the primary creator of intellectual capital. Therefore, this

negative coefficient likely reflects a 'valuation lag.' While employee expenditures are recorded as an immediate accounting expense that may temporarily depress Tobin's Q, these same employees are the essential agents behind the R&D activities that this study identifies as the strongest driver of firm value. In this light, human resource employment is not merely a productivity factor but the foundational source of the endogenously driven innovation that capital markets reward over the long term. Conversely, Sales to Assets (SA) has a negative coefficient ($p < 0.05$), which may point to diminishing returns on revenue generation per asset base, possibly due to scale inefficiencies or industry-specific factors. The taxation variable (T) is statistically insignificant across all models.

On the contrary, the Fixed Effects model also detects the positive and statistically significant impact of R&D ($p < 0.01$). At the same time, IFA has a negative and significant outcome ($p < 0.01$), indicating that unobserved firm-specific heterogeneity can mask the positive contributions of acquired intangible assets. The Random Effects model detects a high contribution of R&D; however, it detects a non-significant outcome for IFA, thereby supporting the uncertain nature of the contribution of acquired intangible resources from external sources.

Overall, the results strongly validate the value-enhancing effect of R&D investment across all specifications, whereas that of IFA is model-sensitive. The GMM estimates, most believable given the model's treatment of potential endogeneity, support the argument that capital markets reward companies engaging in internal innovation activities in a systematic manner. The results have strategic implications for corporate

managers making resource allocation choices between R&D and acquisition-based intangible investment. The observed market skepticism toward IFA in our models likely reflects the integration hurdles and strategic fit risks rather than a dismissal of the acquisition's strategic necessity for speed.

Organisations striving to enhance their market valuation should foster innovation capabilities developed internally, underpinned by effective research and development strategies. Concurrently, they must systematically assess the incorporation and relevance of externally sourced intangible assets to guarantee coherence with their long-term value creation goals.

5. CONCLUSION

The present research aims to analyse the strategic consequences associated with intangible investments, i.e., spending in research and development (R&D) and intangible fixed assets (IFA), against the market value of publicly traded European firms. Using a balanced panel of 247 companies over ten years (2010–2019) and employing sophisticated econometric methods such as the Generalised Method of Moments (GMM), this research provides detailed information on how various types of intangible capital affect firm value.

The empirical findings overwhelmingly corroborate the hypothesis that R&D intensity has a significant and positive association with Tobin's Q, supporting the argument that internally generated innovation is a main driver of market value. Firms that spend more on R&D are generally more valued by investors, implying that capital markets reward persistent innovation capability and knowledge creation over the

long term.

By comparison, the effect of intangible fixed assets does not appear as consistent. Whereas GMM estimates yield a modestly positive and borderline significant impact, fixed effects estimation detects an adverse effect. Such divergent findings imply that the market value effect of purchased intangibles depends on situational factors such as integration success, type of assets, or strategic fit with core operations.

The study also confirms the relevance of profitability and liquidity, captured by return on assets and current assets, respectively, as complementarities that drive market valuation. Conversely, high employee spending and sales inefficiencies are likely to depress firm value if not matched by offsetting performance gains. While this study identifies a negative and significant coefficient for the average cost of employees, we acknowledge that human resources management represents a complex strategic pillar. Future research should investigate the threshold at which human resource expenditures transition from a value-draining expense to a value-generating investment in intellectual capital. Specifically, longitudinal studies could examine how firms navigate the "crisis-retention" paradox—balancing the immediate financial burden of high employee costs during economic downturns against the long-term necessity of retaining highly trained workers to preserve the firm's innovative quality and structural capital. Distinguishing between administrative labor costs and strategic investments in specialized human capital would provide a more granular understanding of how HRM influences market valuation.

In conclusion, the evidence underscores that strategic decision-making should favour

investment in R&D over acquiring intangible assets per se if the objective is to enhance firm market value. The findings contribute to the overall discussion on intangible capital by accentuating the heterogenised effect of internally developed versus acquired intangible assets. From the managerial point of view, findings indicate that stimulating innovation by sustaining research and development activities is a more sustainable and certain route to achieving market recognition and generating long-term value.

Further research can continue exploring sector-level dynamics or analysing interactions among physical and intangible investments in firm valuation, particularly in knowledge content-intensive industries.

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ИНОВАЦИЈЕ НАСПРАМ АКВИЗИЦИЈЕ: ПАНЕЛ-ДОКАЗИ О ТРЖИШНОЈ ВРЕДНОСТИ НЕМАТЕРИЈАЛНОГ КАПИТАЛА У ЕВРОПИ

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Извод

Ова студија испитује утицај нематеријалних инвестиција на вредновање предузећа, с посебним освртом на компаративни значај интерно генерисаних улагања у истраживање и развој и екстерно стечених нематеријалних сталних средстава. Користећи панел-податке за 247 листираних европских компанија у временском периоду од десет година, рад примењује моделе са фиксним ефектима и метод генерализованих момената ради корекције за неуочену хетерогеност и проблеме ендегености. Добијени резултати указују на снажну, стабилну, позитивну и статистички значајну повезаност између интензитета улагања у истраживање и развој и Тобиновог Q коефицијента, наглашавајући да тржиште препознаје ендегено генерисане иновације као кључни покретач вредности предузећа. Насупрот томе, ефекат стечених нематеријалних средстава је слабији и статистички мање изражен, што указује на то да тржишта капитала придају већи значај интерним иновационим активностима него аквизицији нематеријалних ресурса. Резултати истраживања доприносе литератури о нематеријалном капиталу пружајући емпиријске увиде у утицај различитих инвестиционих приступа на вредност предузећа, уз значајне импликације за креирање јавних политика, управљање иновацијама и корпоративне финансије.

Кључне речи: издвајања за истраживање и развој, нематеријална стална средства, тржишна капитализација, европске јавно листиране компаније, вредновање предузећа

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