

Internationalisation and Performance: An Analysis of the Direction of Causality in Portuguese Firms

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Abstract

Given the growing number of studies on the unidirectional relationship between internationalisation (I) and performance (P), as well as performance (P) and internationalisation (I), it becomes relevant to explore the possibility of a simultaneous (bidirectional) relationship between these two concepts. Thus, this study aims to analyse the direction of causality in the relationship between firms' internationalisation and performance, using the research model known as the cross-lagged panel model (CLPM). A quantitative methodology was adopted, based on secondary data obtained from the Iberian Balance Analysis Systems (SABI) on 1338 Portuguese international firms. The empirical evidence obtained in this study contributes to the literature by demonstrating a bidirectional I-P relationship characterised by incremental and time-lagged effects.

Keywords: Internationalisation; Performance; Direction of causality; Cross-lagged panel model.

Introduction

The growing interest among some authors in understanding the relationship between internationalisation (I) and performance (P) has led to numerous studies adopting a unilateral approach, seeking to examine the impact of international expansion on firm profitability (e.g., Fu, 2024; Mao, 2025; Miller et al., 2016; Pangarkar, 2008; Xiong et al., 2024; Zhou, 2018). In the same vein, other authors have tested the reverse effect, aiming to determine whether performance feedback drives internationalisation (e.g., Bai et al., 2025; Jung & Bansal, 2009; Roh et al., 2025). However, based on this understanding, there remains the possibility that internationalisation and performance are mutually dependent (Grant et al., 1988; Hong Luan et al., 2013; Schmuck et al., 2022; Winoto et al. 2024).

Although the literature acknowledges the potential existence of a bidirectional relationship between these two variables, as supported by the authors, it is evident that this approach remains underexplored. In this context, this study aims to analyse the direction of causality in the relationship between internationalisation and performance, using the innovative research model known as the cross-lagged panel model (CLPM). This methodological framework provides a disruptive contribution to the study, as it enables a dynamic temporal analysis and allows for the identification of the direction of causality between the variables over time. Accordingly, this study is guided by the following research questions: *Are firms more internationalised because they are more profitable, or are they more profitable because they are more internationalised? Could this be a simultaneous and bidirectional process?*

Literature Review

Internationalisation and Firm Performance

The relationship between internationalisation (I) and firm performance (P) is complex. The extant literature explains that the positive impact of internationalisation on performance can be owned to different mechanisms. First, internationalisation allows to transfer and exploit firm-specific advantages (FSAs) (Dunning, 1980) and internalize market imperfections (Buckley & Casson, 1976). Second, internationalisation provides flexibility allowing the firm to maintain stable performance growth by changing production to favourable environments when uncertainty increases in a specific country (Kim et al., 1993). Third, existing studies have been arguing that internationalisation increases firm's performance by providing economies of scale, that allows the firm to standardize products, streamline production, and coordinate R&D activities (Hitt et al., 1997). Fourth, internationalisation allows the firm to increase its knowledge resources, which constitute a key competitive advantage (Xiong et al., 2024).

However, despite internationalisation does accrue benefits, empirical evidence has suggested that performance decreases as the degree of internationalisation increases. First, the transaction cost theory postulates that high levels of internationalisation increase the governance costs (Williamson, 1985) and international investments represent non-recoverable costs (O'Brien & Folta, 2009). Second, internationally diversified firms have to deal with a wide range of institutional and cultural challenges, such as divergent governance policies, climates of instability and exchange rate risks, which make it difficult to adapt to the external environment and reduce profit margins (Mao, 2025). Third, the combination of business diversification and internationalisation significantly increases organisational complexity (Mao, 2025).

Firm Performance and Internationalisation

Empirical research has mainly focused on the underlying assumption that internationalisation has an impact on firm performance. However, results greatly vary, so it is time to question the view that performance is a result of internationalisation.

The positive impact of performance on internationalisation relates with behavioural arguments. These arguments are linked to the resource-based view theory (RBV) and to the Uppsala model. The RBV states that firms performing well are better prepared for internationalisation and the higher the performance, the more resources available to internationalise (Barney, 2001). On the other hand, the Uppsala model highlights that knowledge and experiential learning are crucial for international expansion (Johanson & Vahlne, 1977). This premise, therefore, implies that for be successful in internationalisation a firm needs to perform well in one market before extending into a new one, since the acquisition of knowledge and experiential learning is a gradual and incremental process.

Conversely, the negative effect of performance on internationalisation is grounded in arguments linked to the prospect theory (Kahneman & Tversky, 1979), which considers that managers decisions arise from the potential value of losses and gains rather than the outcomes. Consequently, underperforming firms attempt to improve their position by adopting new strategies, whilst the most profitable firms are less likely to engage in risky activities (Ketchen & Palmer, 1999). Other authors also refer to the behavioural theory of the firm (BTOF), which explains the decision-making process in the face of strategic challenges by integrating ideas from psychology and behavioural economics. When companies receive negative feedback

regarding their performance in the domestic market, they tend to initiate the process of internationalisation to solve this problem (Bai et al., 2025; Xiao & Yu, 2024).

Two-way causality between internationalisation and firm performance

Previous research on the relationship between internationalisation and performance has mainly focused on a unidirectional approach, whether studying internationalisation's effect on performance or the reverse relationship. Based on this understanding, some scholars acknowledged the possibility of internationalisation and performance are mutually dependent trying to specify and estimate simultaneous equation models to test the strength of this relationship.

Extant research identifies a two-way relationship between internationalisation and performance (Grant et al., 1988; Hong Luan et al., 2013; Schmuck et al., 2022; Winoto et al. 2024). Despite these studies relied on two equation models including both dimensions (internationalisation and performance), they do not correct for the potential endogeneity of these. Only the study developed by Hong Luan et al. (2013) addressed the endogeneity bias arising from the simultaneous or reverse causality between internationalisation and performance.

The findings of reverse causality potentially support the proposition that more profitable firms display distinct competitive advantages. If a substantial number of firms that would benefit from internationalisation fail to do so because of insufficient incentives or motivations to expand overseas, then competitors face difficulties in trying to imitate their actions. Processes that are difficult to imitate create long-term competitive advantages for profitable firms. For this reason, we aim to test the direction of causality between internationalisation and performance. To understand this relationship, it is necessary to consider the feedback loop from performance to internationalisation as well as the impact of internationalisation as an input affecting performance outcomes.

Therefore, based on the evidence outlined above, the following hypotheses were formulated:

Hypothesis 1: The degree of internationalisation in a specific period is positively associated with subsequent performance.

Hypothesis 2: The level of performance in a specific period is positively associated with the subsequent degree of internationalisation.

Methodology

This study adopts a quantitative approach, as its objective was to identify Portuguese firms operating in international markets through the Iberian Balance Analysis Systems (SABI). The final sample comprises 1338 Portuguese firms whose Foreign Sales to Total Sales (FSTS) ratio over the last three years (2022–2024) is equal to or greater than 25%, and which have a registered email contact in the SABI database.

Based on the literature, the main variables underpinning this study are internationalisation and performance, both of which were treated as dependent and independent variables to analyse the direction of causality. Regarding the internationalisation variable, it was measured using the FSTS ratio, in line with previous studies (e.g., Miller et al., 2016; Mao, 2025; Schmuck et al., 2022). On the other hand, the performance variable was measured using the Return on Sales

(ROS) ratio, supported by prior research (e.g., Almodóvar & Rugman, 2014; Winoto et al., 2024).

Regarding the method of analysis, more traditional regression models have been widely used to explore relationships between variables. However, they present limitations when the objective is to understand temporal dynamics and potential reciprocal relationships over time. Therefore, the direction of causality in the relationship between internationalisation and performance was tested using the model proposed by Orth et al. (2021), namely the cross-lagged panel model (CLPM). This model allows for the simultaneous incorporation of autoregressive and cross-lagged effects, providing a more appropriate representation of dynamic processes. Accordingly, three distinct time points were considered (T1 – 2022, T2 – 2023, and T3 – 2024), enabling a longitudinal approach that allows for the analysis of directional relationships between the two variables.

Results

The findings show that FSTS does not generate immediate performance (ROS) effects, as estimated paths from T1 FSTS to T2 ROS are not statistically significant ($\beta = 0,031$; $p = 0,102$) (Table 1). However, there is a significant and positive effect from T2 FSTS to T3 ROS ($\beta = 0,049$; $p < 0,05$), allowing to conclude that successful internationalisation leads to improved performance at a later stage. This pattern is theoretically consistent with incremental internationalisation arguments (e.g., experiential learning and gradual commitment) (e.g., Johanson & Vahlne, 1977), where performance benefits emerge only after firms accumulate foreign market knowledge and adapt their operations. Therefore, Hypothesis 1 is supported, as current FSTS positively affects subsequent ROS, although this effect materializes only with a time lag, highlighting the delayed nature of internationalisation payoffs.

On the other hand, the estimated paths from T1 ROS to T2 FSTS are positive and statistically significant ($\beta = 0,035$; $p < 0,05$), although statistically insignificant from T2 ROS to T3 FSTS ($\beta = 0,021$; $p = 0,085$) (Table 1). This confirms that firms use internally generated profits to sustain and finance international growth, consistent with both resource-based and Uppsala-based arguments. It is worthwhile noting that, the magnitude of the effect is relatively small (0.035), which suggests that while performance facilitates internationalisation, firms expand abroad cautiously rather than aggressively, even when performing well. Hypothesis 2 is thus supported, as higher performance increases the likelihood of subsequent successful internationalisation, although the magnitude of this effect indicates a cautious and incremental expansion pattern.

Table 1: SEM regression estimates

	β	SE	p-value
<i>Autoregressive effects</i>			
<u>FSTS</u>			
$AR_{x_{T1}} \rightarrow x_{T2}$	0,891***	0,008	0,000
$AR_{x_{T2}} \rightarrow x_{T3}$	0,915***	0,006	0,000
<u>ROS</u>			
$AR_{y_{T1}} \rightarrow x_{T2}$	0,103***	0,024	0,000
$AR_{y_{T2}} \rightarrow x_{T3}$	0,164***	0,024	0,000
<i>Crossed-lagged effects</i>			
<u>H1: FSTS $\rightarrow$ ROS</u>			
$CL_{x_{T1}} \rightarrow y_{T2}$	0,031	0,012	0,102
$CL_{x_{T2}} \rightarrow y_{T3}$	0,049*	0,024	0,010
<u>H2: ROS $\rightarrow$ FSTS</u>			
$CL_{y_{T1}} \rightarrow x_{T2}$	0,035*	0,014	0,047

	β	SE	p-value
$CL_{Y_{T2}} \rightarrow X_{T3}$	0,021	0,013	0,085
<i>Fit indices:</i>			
χ^2 (p-value)		12,46(0.000)	
CFI/GFI/TLI		0.91/0.91/0.89	
RMSEA/ SRMR		0.063/0.075	

X, FSTS; Y, ROS; *** $p < 0.001$; * $p < 0.05$. AR, autoregressive effects; CL, cross-lagged effects; CFI, comparative fit index; GFI, goodness-of-fit index; TLI, Tucker-Lewis's index; RMSEA, root mean square error of approximation; SRMR, standardized root mean square residual.

The findings therefore highlight that the I-P nexus is sequential, lagged, and self-reinforcing only within specific temporal windows, rather, than being immediate or permanently virtuous. This temporal perspective helps reconcile mixed empirical evidence in the literature and emphasizes the importance of modelling dynamic causality and persistence effects when analysing I-P relationships.

Conclusion and Implications

This study confirms the existence of a bidirectional relationship between internationalisation and performance. However, it is important to highlight some specific nuances inherent to this relationship. Entering international markets involves initial costs, and it is a gradual process whose returns only become visible in the long term, once the firm has consolidated its position. In turn, current performance in the domestic market facilitates internationalisation; however, this is a process that progresses cautiously and prudently, rather than rapidly.

In terms of theoretical implications, the study reinforces traditional models, such as the Uppsala model, by demonstrating that internationalisation is generally a gradual and incremental process. It also identifies an inverted U-shaped relationship between investment and performance. Regarding practical implications, strategic decisions should consider the continuous relationship between internationalisation and performance, aiming for an expansion process that informs future decisions. It is suggested that internationalisation should occur gradually over the medium to long term, beginning with culturally proximate markets and using lower-commitment entry modes to reduce risk. Furthermore, it is important for managers to develop effective strategies before entering foreign markets, particularly if domestic market performance is weak. Finally, policy implications are presented, advocating for the strengthening of export incentives and suggesting that governments should facilitate business expansion and reduce trade barriers.

Regarding the study's limitations, it is acknowledged that the sample is somewhat restricted, as it only includes Portuguese firms. In addition, the use of a single database (SABI) may limit the study due to the absence of information considered essential for the analysis. In terms of future research, it is proposed to conduct a survey of managers from the firms in the sample to collect information not available in the database. It is also suggested that future research incorporate dynamic capabilities to better understand their influence on the relationship between internationalisation and performance. In particular, it could examine whether firms with higher capabilities internationalise to enhance performance, while those with lower capabilities may need to improve performance before expanding abroad.

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