# Interrelation of Internationalization and Firm Financial Performance in the Manufacturing Sector

Josephine Aurelia Winoto, Deddy Marciano(✉), and Liliana Inggrit Wijaya

University of Surabaya, Surabaya, Indonesia
marciano@staff.ubaya.ac.id

**Abstract.** This study examines the interrelation of internationalization and firm performance among manufacturing sectors in Indonesia for the years 2021–2021. This is basic research with a quantitative approach using data panels on E-Views 10. The research used 20 companies that fulfill the terms of the period year, sector and have the component of variables. The results of this study show that internationalization has a significant effect on firm performance (ROA and ROS proxy), firm performance has a significant effect on internationalization (FATA proxy), but firm performance has an insignificant effect on internationalization (FSG proxy).

**Keywords:** Internationalization · Foreign Sales Growth · Firm Performance · Firm Size · Financial Leverage

## 1 Introduction

The rapidly growing trend of globalization is attracting considerable attention to adopt internationalization as a corporate strategy characterized by market expansion, learning synergies, and new business opportunities. The benefits of expanding geo-business coverage are increasingly realized by enterprise managers across world markets with the support of international resource sharing, customer outreach activities, and information transfer [1]. Business entity performance is evaluated using a more comprehensive return and risk from internationalization. In Indonesia, the internationalization strategy is still not widely discussed and used in expanding business abroad. According to Tashman et al. [2], the degree of internationalization has a positive effect on the growth of foreign sales. Therefore, internationalization becomes an appropriate and interesting discussion because it can answer and overcome ambiguity due to a lack of literacy regarding internationalization. Corporate profits through internationalization have driven increased revenues and returns. The internationalization strategy also aims to diversify business entities' revenues to mitigate existing financial risks.

Research conducted by Tashman et al. [2] said that firm-specific assets evolve positively with the degree of internationalization of a business entity and provide a prominent role of resources in internationalization relations and business entity performance. In


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addition, the greater the degree of internationalization of business entities, the higher the asset value and benefits, so the business entities' performance will increase. This research aims to examine the theoretical basis for the direct internationalization-performance relationship of contextual conditions and other processes. The results of this study conclude that internationalization has a significant positive effect on average profit. Other results that have a significant positive effect are firm-specific assets and moderation between internationalization and firm-specific assets.

Huang and Marciano [3] examined the same variables, namely internationalization and the performance of business entities in two countries, namely China and Indonesia. The populations of China and Indonesia are in the first and fourth places in the order of countries with the most populations; this implies that the consumer and labor markets are extensive. As quoted from the 2019 World Investment Report, China and Indonesia are ranked second and nineteenth as countries that have attractiveness for world capital.

Sun et al. [1] used several variables to measure their study on the international business entity. The research conducted was not limited by sector because of inconsistent findings. However, it can also be attributed to the limited focus of several studies on certain industries using samples taken from limited industrial sectors. The variables used were internationalization, ROA, cash flow volatility, firm size, product diversification, environmental dynamism, environmental munificence, competition intensity, and market capability. Research conducted by Yovita and Marciano [4] examined the effect of capital investment on internationalization and the performance of business entities. The variables used were internationalization, foreign sales growth, and business entity performance.

## 2 Research Method

This analysis is used to determine the effect of two or more independent variables on the dependent variable. The independent variables used are internationalization and foreign sales growth. The dependent variable used is the performance of the business entity. Business entity performance is measured by ROA and ROS proxies.

$$ROAi,t = \alpha + \beta 1.\,FATi,t + \beta 2.\,FSGi,t + \beta 3.\,SIZEi,t + \beta 4.\,LEVi,t + \mathrm{e}\ldots \quad (1)$$

$$ROSi,t = \alpha + \beta 1.\,FATi,t + \beta 2.\,FSGi,t + \beta 3.\,SIZEi,t + \beta 4.\,LEVi,t + \mathrm{e}\ldots \quad (2)$$

$$FATAi,t = \alpha + \beta 1.\,ROAi,t + \beta 2.\,ROSi,t + \beta 3.\,SIZEi,t + \beta 4.\,LEVi,t + \mathrm{e}\ldots \quad (3)$$

$$FSGi,t = \alpha + \beta 1.\,ROAi,t + \beta 2.\,ROSi,t + \beta 3.\,SIZEi,t + \beta 4.\,LEVi,t + \mathrm{e}\ldots \quad (4)$$

## 3 Results and Discussion

The research results of Eqs. 1 and 2 indicate a significant positive relationship between internationalization and business entity performance, signifying that the higher the internationalization level, the higher the business entities' performance. Tashman et al. [2]

and de Jong & van Houten [5] admitted that internationalization (both as measured by FATA and FSG) has a significant positive effect on business entity performance because the benefits obtained exceed the costs to be incurred. According to Singla & George [6], there are three main benefits of internationalization activities: (1) geographical income diversification, (2) cheaper factors of production, and (3) being a market leader due to a large market share (in various countries). By obtaining costs from cheaper production factors, business entities can obtain greater revenues and profits than the previous year. However, to achieve these benefits, business entities must carry out and manage internationalization activities properly [7, 8]. According to Singla & George [6], there are benefits from economies of scale for businesses that have a relatively small market share, especially in developing countries. Business entities carry out internationalization to increase the value and benefits of their assets (Table 1).

Foreign asset to total asset (FATA) reflects foreign direct investment (FDI). According to Abhiyoga et al. [9], FDI is a real investment where investors are directly involved in the activities of business entities. Internationalization is a form of outward FDI, which means investment from within to abroad. As the regulatory holder, the government takes an important position in economic activity and has the right to make several policies. If policies or regulations restrict imports, then FDI will undoubtedly bring more benefits than exports. This is because export activities require several costs to be paid by producers or business entities, such as customs, transit, and import duties. Therefore, in Eqs. 1 and 2, FATA is more profitable and can improve the performance of business entities (Table 2).

The Eq. 3 results are consistent with research conducted by Tashman et al. [2] and de Jong & van Houten [5]. The results also indicate a significant negative relationship between business entity performance as measured by ROS and internationalization. That

**Table 1.** Regression Test Results for Eqs. 1 and 2.

| Variables | Eq.#1 ROA | | Eq.#2 ROS | |
|---|---|---|---|---|
| | Hypothesis Sign | Reg. Coef. (t-stat.) | Hypothesis Sign | Reg. Coef. (t-stat.) |
| C | | 0.6221*** (2.7651) | | 0.1958 |
| FATA | Positive | 0.3852*** (4.7386) | Positive | 0.2440*** (2.6370) |
| FSG | Positive | 0.048*** (4.9611) | Positive | 0.0480*** (2.8169) |
| SIZE | Negative | −0.0175*** (−2.2963) | Negative | −0.0016 (−0.3135) |
| Lev | Negative | −0.1804*** (−5.3861) | Negative | −0.2137*** (−8.4687) |
| $R^2$ | 0.32789 | | 0.2658 | |
| Adjusted $R^2$ | 0.3141 | | 0.2508 | |
| Prob. (F-Stat.) | 0.000 | | 0.0000 | |

**Table 2.** Regression Test Results for Eqs. 3 and 4.

| Variables | Eq.#3 FATA | | Eq.#4 FSG | |
|---|---|---|---|---|
| | Hypo. Sign | Reg. Coef. (t-stat.) | Hypo. Sign | Reg. Coef. (t-stat.) |
| C | | 0.2150 (1.4831) | | −0.9818 |
| ROA | Positive | 0.4731*** (9.3363) | Positive | 0.7159 (1.4473) |
| ROS | Positive | −0.2329*** (−4.9296) | Positive | 0.9581 (1.3609) |
| SIZE | Negative | −0.0048 (−1.0333) | Positive | 0.0255 (0.3846) |
| Lev | Negative | −0.0189 (−0.8060) | Positive | 0.4950*** (3.3554) |
| $R^2$ | 0.8778 | | 0.162 | |
| Adjusted $R^2$ | 0.8618 | | 0.0525 | |
| Prob. (F-Stat.) | 0.0000 | | 0.0822 | |

is, if the level of performance of business entities with ROS ratios increases, then the level of internationalization can decrease. This could happen because of the difference in the formula of the independent variable, namely return on sales (ROS) and the dependent variable, namely foreign assets to total assets (FATA), where ROS would be more suitable and give positive results with foreign sales to total sales (FSTS) proxies. As a measure of internationalization.

The Eq. 4 results indicate a significant positive relationship between business entity performance as measured by ROS on internationalization. Good performance of a business entity in the utilization of resources will enable the business entity to carry out internationalization activities [10]. That is, if the performance level of business entities with ROS ratios increases, the level of internationalization will also increase. However, good performance cannot be a guarantee for having a high level of internationalization.

## 4 Conclusion

The Internationalization variable as measured by foreign assets to total assets and foreign sales growth, the business entity performance variable as measured by return on assets and return on sales, and control variables as measured by business entity size and financial leverage, all have a significant influence on the dependent variable.

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