Internationalization, Strategic Slack Resources, and Firm Performance: The Case Study of Vietnamese Enterprises

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Abstract: The study attempted to fill a gap in the research on international business by providing fresh evidence of the effect of the degree of internationalization on firm performance and the influence of organizational slack on this relationship. By applying a fixed-effects model to data from 569,767 Vietnamese enterprises from 2007 to 2015, a significant W-shaped linkage between internationalization and firm performance was revealed. Importantly, the results also emphasized the importance of three types of slack in the first stage of the internationalization process: absorbed slack human resources, other absorbed slack resources, and unabsorbed slack resources.

Keywords: performance; internationalization; organizational slack

JEL Classification: F12; F14; F21; F23

1. Introduction

As internationalization in recent decades has expanded the size of the market and enabled small firms to do business on a global scale, the expansion of the presence of enterprises in the international market is no longer a strange phenomenon (Ciravegna et al. 2014). Although larger firm size and reputation are often benchmarks and advantages for acceptance in the global market, smaller firms with excellent products and services have proved their dynamic strengths in assessing and meeting the demands of customers abroad, which include activeness, flexibility and network accumulation (Dasí et al. 2015; Ciravegna et al. 2014). As a result, there is great interest in whether foreign expansion is beneficial for enterprises, given their different sizes and capabilities, and numerous studies have sought to assess the relationship between foreign expansion and firm performance as well as its influencing factors in order to optimize this relationship (Cho and Lee 2018; Dasí et al. 2015; Glaum and Oesterle 2007; Pangarkar 2008; Zhang et al. 2018; Zhou 2018; Delios and Beamish 1999). However, despite recognizing the costs and benefits associated with the increasing degree of internationalization, these studies have raised more questions than answers due to the inconclusive findings and ongoing debates (Glaum and Oesterle 2007).

Once the cost of internationalization outweighs its benefits, the global expansion will negatively impact on performance, whereas positive effects occur when the benefits of internationalization dominate its cost (Denis et al. 2002; Kim and Mathur 2008). The dominance of costs or benefits depends strongly on a firm’s capabilities, characteristics, strategies, and national context (Cho and Lee 2018; Lin et al. 2011; Zhou 2018). Prior studies have viewed internationalization favorably due to the fact of its positive linear effect on performance, which is attributed to greater market access, competitive
advantage and financial success (Chen and Hsu 2010; Pangarkar 2008). However, others have found a
negative linear relationship, suggesting threats of global expansion to firm performance due to the
presence of foreignness liabilities such as fierce competition, high transaction costs, market volatility,
and cultural diversity (Zhou 2017; Zhang et al. 2018).

New research on this issue acknowledging internationalization as a multi-stage process has also
found a curvilinear relationship between internationalization and firm performance (Bobillo et al. 2010;
Empirical results have suggested that this curvilinear relationship is moderated by firm characteristics
and behaviors, leading to an S-shaped relationship in the three-stage theory of Contractor et al. (2003) and
the empirical results of others (Bobillo et al. 2010; Cho and Lee 2018; Lin et al. 2011; Riahi-Belkaoui 1998;
Ruigrok et al. 2007), a U-shaped relationship (Assaf et al. 2012; Capar and Kotabe 2003; Chen and Tan
2012), an inverted U-shaped relationship (Chiao et al. 2006), or a W-shaped relationship for small firms
(Zhou 2018). Further complicating the issue, some studies have attempted to distinguish different
modes of internationalization according to product diversification strategy, including single-item
export versus multi-item export. The results indicate that the single-item strategy generates more
benefits for internationalizing firms in terms of performance enhancement and technology absorption
(Agyei-Boapeah 2018; Sharma 2017).

Moreover, the relevant theoretical and empirical literature has recognized the importance of
organizational slack as a strategic resource to relieve uncertainties and sustain firm performance in
Depending on the discretion and flexibility level, slack resources can be classified as high-discretion slack
and low-discretion slack (Lin et al. 2011). Zhang et al. (2018) recently explored the moderating effects
of three types of slack on the relationship between internationalization and performance: absorbed
slack human resources (AHRs), other kinds of absorbed slack resources (OARs), and unabsorbed slack
resources (USRs). While AHRs represent inimitable slack based on human capital accumulation, OARs
reflect the surplus in business operations and are oriented toward extremely selective uses. By contrast,
due to the fact of its high discretion, USRs are more likely to be used as buffers in implementing
international ventures.

Compared to the rich literature on international economics focused on the internationalization
performance of MNCs from advanced economies like Taiwan, Japan, and Europe, there is less evidence
for the going-global performance of enterprises from emerging countries. The past three decades
have witnessed rapid growth and remarkable transformation in emerging economies (EEs), and EE
enterprises have benefited tremendously from global trade integration and economic convergence.
One of these emerging markets is Vietnam, a developing country that has experienced recent success
in trade and economic growth. The dynamic internationalization process of domestic enterprises
has been a significant contributor to these successes. Due to the globalization efforts and incentive
policies during the past two decades, the total export of manufactured goods has grown at an average
of 10 percent per year, stimulating the development of internationalized firms and contributing to
80 percent of Vietnam’s GDP in 2017 (Eckardt et al. 2018).

In contrast to the regression of globalization occurring in some countries in the Pacific and East
Asia region, Vietnam has witnessed a renaissance in manufacturing and processing industries toward
international expansion. A number of critical factors are responsible for this positive outcome. Among
the most important of these factors is Vietnam’s open trade policy, which has supported the process
of internationalization of local enterprises. Vietnam, along with Singapore, holds the top position
in East Asia for participating in bilateral and multilateral free trade agreements (FTAs) with the
United States, Japan, Korea, and the European Union and is also a member of ASEAN and WTO. In
early 2018, Vietnam and 11 other countries joined the Comprehensive and Progressive Agreement
for Trans-Pacific Partnership (CPTPP). The above trade agreements are committed to drastically
reducing tariffs, implementing domestic reforms, and opening up the economy to foreign investment
(Eckardt et al. 2018).
In addition, Vietnam has taken advantage of its population structure through effective investments in human resources. Furthermore, to facilitate international integration, Vietnam has relentlessly invested in improving competitiveness and creating a favorable business environment for both domestic and foreign firms by lowering corporate income taxes, resulting in higher rankings in the World Economic Forum’s Competitiveness Index and the World Bank’s Favorable Business Environment. Vietnam has also invested in infrastructure, especially in transport, logistics, and electricity, to meet rising business demands. Last but not least, the emergence of the digital era has enabled smaller firms in Vietnam to go global by using digital networking channels and more innovative approaches (Coviello et al. 2017). However, Vietnam’s commercial competitiveness, in terms of time-consuming costs, procedural fees and transaction costs for import-export activities, lags behind other countries in the region, particularly the major ASEAN countries (including Singapore, Malaysia, Thailand, and the Philippines). Despite the significant achievements of local internationalized enterprises nurtured in this emerging market, the manufacturing and processing industry in Vietnam is still relatively small and is mainly driven by foreign direct investment (FDI), which accounts for nearly 90 percent of exports. The higher level of internationalization and increasing foreign inflows in Vietnam have challenged the survival and affected the internationalization performance of local enterprises in different ways (Lin 2014).

While a rich body of previous empirical studies has focused on the internationalization performance of multinational enterprises (MNEs) from developed economies, there is a shortage of academic studies on mature and newly internationalized enterprises from EEs (Buckley et al. 2017). The rapid growth of MNEs and newly internationalized firms in EEs has challenged arguments that successful internationalization requires a well-established institutional framework, firm or country-specific resources and favorable market conditions (Buckley et al. 2017). It has been claimed that EE enterprises can overcome their deficiencies and perform more effectively in global expansion by exploiting their non-traditional capabilities, such as superior networking, resource recombination, linkages, and leverage (Contractor et al. 2007; Cuervo-Cazurra et al. 2018; Buckley et al. 2017). However, there is a lack of evidence on the role of firm behavior, specifically, how EE enterprises allocate and use their strategic organizational resources to pursue internationalization despite many uncertainties and deficiencies (Buckley et al. 2017). Furthermore, direct empirical evidence supporting the explanation of the relationship between organizational slack and firm performance is not available for EEs. To address these research gaps and contribute to the literature on international integration, this study aims to answer two research questions. First, we investigated whether there is a curvilinear (specifically a W-shaped) global expansion–performance relationship for Vietnamese enterprises. Second, we filled a gap in the literature on behavioral economics by exploring the impact of different types of organizational slack on internationalization performance. We found that the three types of slack recently delineated by Zhang et al. (2018), i.e., AHRs, OARs, and USRs, can capture human capital accumulation and the discretion level; in addition, we identified which type of slack was critical for international integration in Vietnam in each of the different stages of internationalization. The findings from this paper can be applied to Vietnam’s neighboring EEs in East Asia and the Pacific region, including Thailand, Malaysia, Philippines, Myanmar, Cambodia, and Laos. The government and top management of MNEs and newly internationalized firms in these regions can use these findings to develop appropriate policies and implement effective strategies to sustain internationalization performance at the firm level.

2. Literature Review

2.1. Degree of Internationalization and Firm Performance

2.1.1. Degree of Internationalization

Although global expansion is recognized as a favorable means of overcoming imperfect home institutional factors, market, and firm or country deficiencies, it is a gradual, long-term process that accompanies a firm’s accumulation of knowledge, experience, transformation of organizational structure,
and networking over time (Hutzschenreuter and Matt 2017; Buckley et al. 2017; Cuervo-Cazurra et al. 2018). In the Uppsala model, these movements require a switch in a firm’s commitment modes (Johanson and Vahlne 2009). However, success stories of born-global companies exhibiting a phase-skipping process abound. To further explain the situation, Håkanson and Kappen (2017) synthesized and compared the three main rooted theories of the process of internationalization based on behavioral economics, as summarized below: the main focus of the study, the Uppsala model described by (Johanson and Vahlne 1977) and revised in (Johanson and Vahlne 2009); the born-global model of (Madsen and Servais 1997); and a new formulation and introduction of the Casino model by (Håkanson and Kappen 2017).

In their formulation of the Uppsala model, Johanson and Vahlne (1977) focus on interpreting firms’ increasing resource commitments as a result of higher experience and knowledge acquisition over incremental phases of internationalization expansion. In this model, international expansion is considered as an evolutionary process that is accumulative in nature; in this process, experiential learning and knowledge gain enable decision-makers to recognize opportunities, perceive potential risks, and calculate expansion costs to move forward (Vahlne and Johanson 2017; Santangelo and Meyer 2017). Interestingly, the wait-and-see strategy is a common practice of firms using the Uppsala model, as a commitment by these firms is strongly restrained by risks (Clarke and Liesch 2017). The framework of the Uppsala model includes change variables and state variables. With respect to change variables, commitment in term of resource allocation decisions always represents a tradeoff between the benefits and costs of internationalization under conditions of uncertainty and partial ignorance, and the commitment can be subsequently altered or adapted (Johanson and Vahlne 1977). Hence, this is considered an important source of another change variable—knowledge development in terms of learning, capacity, and trust-building.

State variables are classified into capability variables and commitment/performance variables, which have a cause–effect relationship with change variables. Operational capabilities are associated with privileged access to raw materials, capital, technology, governance systems, etc., to deal with the liability of foreignness. Dynamic capabilities, on the other hand, are inimitable, often accumulated through the learning process, and reveal the ability of the firm to combine its strengths and competencies to successfully respond to the rapidly changing environment. Finally, commitment variables comprise resource distribution decisions, and performance variables refer to the outcomes that are determined by knowledge development and internal/external capabilities (Santangelo and Meyer 2017; Vahlne and Johanson 2017).

The born-global model, by contrast, emphasizes the spirit of entrepreneurship in risk-taking ventures that seek to take advantage of international niche markets. In this case, pioneering companies aim to go global without a stable foundation based on domestic revenue. The born-global model is quite different from the Uppsala model, which is highly sensitive to uncertainties and pursues a gradually incremental process of internationalization (Håkanson and Kappen 2017). In the modern world, the born-global model appears to be supported by the wide range of internet-based innovative operational approaches and digital tools that can eliminate traditional weaknesses and internationalization costs and open new horizons for newly internationalized firms in global markets (Coviello et al. 2017). In this way, despite lacking a step-by-step approach and cautious practices, born-global companies can take advantage of their means-oriented flexibilities in implementing their internationalization strategy and capturing market opportunities (Chetty and Holm 2000).

The Casino model can be considered as a convergence of the Uppsala and born-global models, as it explains the internationalization process by synthesizing a special pattern based on certain characteristics of these two models (Håkanson and Kappen 2017). Although the Casino model is similar to the Uppsala model in terms of the initial development of a strong domestic base, this model’s international expansion strategy is not restricted to market uncertainties and knowledge gaps. In this model, once the initial investments are made, the marginal cost of internationalization, for example, the marginal cost to establish a new subsidiary, diminishes over time. Similar to born-global enterprises, firms implementing the Casino model are very purposive and proactive in seeking existing
opportunities. However, as in the Uppsala model, they prefer feasible market opportunities rather than uncertain ventures.

It is worth noting that a higher level of internationalization usually requires an incremental process from exports to the establishment of subsidiaries and coordination units abroad for production, marketing, and distribution and from neighboring markets to more distant markets (Johanson and Vahlne 1977, 2009; Vahlne and Johanson 2017). More importantly, improvements in resource commitment and knowledge development over time not only provide firms with a strong base for shifting to later phases of the internationalization process but also influence internationalization performance. Therefore, the Uppsala model seems to be a good fit for the main focus of the present study, which aims to explore firm-level internationalization performance across different incremental phases and investigate whether firms’ behavior in terms of slack resource allocation impacts the global expansion process.

2.1.2. The Relationship between Internationalization Degree and Firm Performance

Beginning with McDougall (1989), the literature on international entrepreneurship initially focused on new ventures undertaken rapidly and proactively by multinational companies. Recent studies of international entrepreneurship have expanded to include firms’ cross-border operations independent of their age and size (Zahra 2005; Jones et al. 2011; Schwens et al. 2018). In general, entrepreneurial internationalization is a business strategy by which companies seek an appropriate level of involvement in global integration to be successful (Lu and Beamish 2001; Schwens et al. 2018). Consistent with the trend in the field, this paper focuses on firms’ degree of internationalization in terms of foreign sales.

Whereas early studies proposed a positive linkage between firms’ internationalization and performance, later analyses have taken into account the benefits and costs of a globalization strategy (Autio et al. 2000; Marano et al. 2016). The latter view is particularly pertinent to international expansion due to the fact of its proactive, innovative, and risky nature (McDougall and Oviatt 2000). Thus, although international market entry enables firms to seek opportunities for growth and value creation, firms also face risk and failure in implementing such an entry, leading to both negative outcomes and a non-linear internationalization–performance relationship. In particular, the greater global expansion will generate additional negative impacts. High global integration may increase coordination and governance costs related to managing internationalization operations, enhance management’s information processing needs, and challenge the allocation of management resources.

Two main theoretical streams have emerged to propose and describe the benefits of internationalization: theories of foreign direct investment (FDI) and theories of multinational firms. According to FDI theories, firms invest in foreign countries because of economic drivers such as low production costs, market expansion, financial markets, and incentive policies from host countries (Ruigrok and Wagner 2003). While researchers in industrial organization and international business usually concentrate on economies of scale and scope (Buckley and Casson 1976), scholars in financial economics emphasize portfolio diversification and its impact on firms’ risk–return performance (Gaur and Delios 2015; Bausch and Pils 2009; Wiersema and Bowen 2008). In general, the international business field has yielded consensus in terms of the benefits of internationalization (Contractor et al. 2007). However, an essential question remains to be clearly answered: “What is the optimum degree of internationalization?”

In addition to its benefits, previous studies have stressed the costs of internationalization. Entry costs and risks in international business are mainly related to differences in language and cultural background among employees, implementing new marketing and promotion programs, seeking reliable foreign distributors or suppliers, and international compliance, among other concerns.

As doing international business generates benefits as well as costs, it is worth noting that the linkage between internationalization and performance relies on the distribution of benefits and costs in the internationalization process. As a result, a non-linear internationalization–performance relationship is likely to be the most reasonable. Previous studies have demonstrated a complex curvilinear relationship
between the degree of internationalization (DOI) and performance. The DOI reflects a firm’s exports to other countries (Hitt et al. 1997; Velez-Calle et al. 2018). Many previous studies have investigated the internationalization–performance relationship, with mixed empirical results: positive linear (Delios and Beamish 1999); negative linear (Denis et al. 2002; Kim and Mathur 2008); no significant linkage (Majocchi and Zucchella 2003); inverted U-shaped (Elango 2006); U-shaped (Chen and Tan 2012); inverted S-shaped (Cho and Lee 2018); S-shaped (Ruigrok et al. 2007); and U-shaped in large firms and W-shaped in small firms (Zhou 2018). Table 1 summarizes the commonly reported relationships.

Table 1. Empirical studies on the internationalization–performance link.

<table>
<thead>
<tr>
<th>Author (Year)</th>
<th>Measurement of DOI</th>
<th>Empirical Results</th>
</tr>
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<tbody>
<tr>
<td>Majocchi and Zucchella (2003)</td>
<td>Ratio of exports to total sales—Italian SMEs</td>
<td>No significant impact on ROA</td>
</tr>
<tr>
<td>Ruigrok et al. (2007)</td>
<td>Foreign sales to total sales—Swiss multinational companies</td>
<td>S-shape was shifted to the right. The higher the DOI, the lower the performance</td>
</tr>
<tr>
<td>Chen and Tan (2012)</td>
<td>Percentage of total sales from foreign sales</td>
<td>Weakly negative U-shaped link between Asian sales and firm performance</td>
</tr>
<tr>
<td></td>
<td>Percentage of total sales from within Asia excluding China</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Percentage of total sales from the Greater China region—Chinese firms</td>
<td>Weak effect</td>
</tr>
<tr>
<td>Cho and Lee (2018)</td>
<td>Foreign sales to total sales—SMEs in Korea</td>
<td>Inverted S-shaped link between DOI and firm performance (supporting the three-stage international theory)</td>
</tr>
<tr>
<td>Velez-Calle et al. (2018)</td>
<td>Foreign sales to total sales (internationalization depth)</td>
<td>U-shaped link</td>
</tr>
<tr>
<td></td>
<td>Geographic zone index (international breadth)—firms in Latin America</td>
<td>Inverted U-shaped link</td>
</tr>
<tr>
<td>Zhou (2018)</td>
<td>The ratio of the number of overseas subsidiaries to the number of total subsidiaries—manufacturing firms in China</td>
<td>W-shaped in small firms and U-shaped in large firms</td>
</tr>
<tr>
<td>Cuervo-Cazurra et al. (2018)</td>
<td>Dummy variable that equals 1 if the firm has international operations—Argentina, Brazil, Chile, and Peru</td>
<td>The internationalization–performance linkage varied depending on the characteristics of the home and host countries</td>
</tr>
</tbody>
</table>

Notes: DOI: Degree of internationalization; ROA: Return on assets.

Given the number of empirical studies on the subject and the variety of outcomes, researchers have recently attempted to reconcile the theoretical arguments by suggesting that a U-shaped, inverted U-shaped, S-shaped or inverted S-shaped curve (a horizontal three-stage) may best represent the relationship between international expansion and corporate performance (see Table 1). However, researchers have not explained the reason that many enterprises, i.e., so-called “born-global” firms, devote all of their resources to achieving high global integration and why firms with greater global expansion have better performance. In particular, few studies in this field have explored emerging markets like Vietnam. Therefore, based on the evidence, we considered a fundamental W-shaped internationalization–performance link and investigated how enterprises’ product diversification affects the global integration decision and the internationalization–performance link in the manufacturing industry of Vietnam. Moreover, this study attempted to determine the
theoretical mechanism underlying the curvilinear relationship in Vietnam, which differs from those in other developed countries.

2.1.3. Four Stages of the Internationalization Process

From an evolutionary perspective, such as that adopted in the Uppsala model, early international developers often start with a low-commitment mode and are restrained to uncertainties and knowledge ignorance (Johanson and Vahlne 1977). In this adverse condition, they attempt to develop their knowledge and experiential learning to better perceive risks and recognize opportunities. This learning process incurs a cost burden, and an analysis of relevant studies illustrates that at the initial stage of foreign entry, firms seeking market expansion often experience upfront costs such as setting costs, administrative costs, and transaction costs (Hutzschenreuter and Matt 2017). The learning theory of Johanson and Vahlne (1977) considers internationalization an incremental process in which firms enhance organizational learning and improve knowledge as they enter foreign markets. Therefore, in the early stage of foreign market entry, firms are willing to pay high costs to obtain new market knowledge and adapt to foreign cultures, industry dynamics, and business environments (Johanson and Vahlne 2009; Zhou 2018). Although internationalization may generate a new income inflow, these benefits are not sufficient to offset the initial costs. In this early stage, firms do not yet benefit from economies of scale, as both the scope and scale of global operations are still small and inefficient (Santangelo and Meyer 2017). The first phase of the internationalization process is the most uncertain and challenging step and initially incurs a huge cost burden without any predictable outcome. However, this phase paves the way for later phases. Because internationalized firms are more exposed to risks and, thus, have a high probability of a loss or poor performance in the early period of foreign entry, we proposed that DOI was negatively associated with firm performance in the first stage of foreign entry.

In the second stage, firms allocating resources to increase DOI can gain economic benefits in diverse ways: accumulating and transforming innovative and useful knowledge, which can enable firms to improve capabilities and performance (Lu and Beamish 2001); obtaining competitive advantages throughout catch-up opportunities in global markets (McDougall and Oviatt 1996); and gaining benefits from economies of scale that are sufficient to compensate for the incremental costs of further foreign expansion. Upon further implementation of global expansion, firms increase market share throughout different foreign markets (Pangarkar 2008). In addition, with an increasing number of representatives in different countries, firms have the ability to reduce country risks derived from deviations in foreign, fiscal, and monetary policies. Moreover, in this second stage, going-global enterprises can exploit markets and seek resources in a more optimal way using a wide range of strategies and advantages, such as price discrimination, arbitrage, access to low-cost inputs or even exercising global market power (Rugman 2016; Contractor et al. 2007). Therefore, we expected that the relationship between DOI and firm performance was positive in the second stage.

In the third stage, as firms continue to implement global entry, DOI increases with the expanding number of overseas subsidiaries. Conflicts of interest among these subsidiaries may occur and lead to unattainable goals of the parent company. As a result, the subsidiaries could become competitors instead of collaborators (Porter 1976). Under this scenario, firms have to overcome considerable challenges in multinational organizational management. In addition, the diversity of culture among employees across countries may become an obstacle for cooperation and coordination toward common objectives (Contractor et al. 2003). When firms are in the third phase of the internationalization process, they face greater exposure to risks due to the large resource commitment and operations beyond an optimum number of nations with increasing governance costs (Vahlne and Johanson 2017). In this way, unexpected market variations or underperformance may accidentally defeat firms as they go beyond the optimal threshold. Therefore, firm performance may decrease in the third stage.

As an expansion of the three-stage theory outlined above, Zhou (2018) described the fourth stage. This fourth stage is consistent with findings by Contractor et al. (2003) that multinational firms will attempt to reform organizational operations to improve their performance. Previous studies have
shown that if multinational firms successfully build up an international network, they can gain benefits from “arbitrage and leverage opportunities” in various markets via this network. Moreover, with investments in new technologies and innovative solutions, firms can enhance effective communication between employees of various cultural and knowledge backgrounds (Kogut 1989; Wernerfelt 1984; Hitt et al. 1997; Zhou 2018). Firms can organize short course training or seminars to promote their organizational culture and core values. The greater the internationalization, the more alternatives that are available to firms when responding to external environmental uncertainty (Trigeorgis and Reuer 2017). Moreover, at the fourth stage, highly internationalized firms have greater access to global resources, human competencies, and opportunities to practice various effective strategies using their global coverage and power (Trigeorgis and Reuer 2017). Hence, internationalization performance was expected to increase again in stage 4.

Thus, based on the above arguments, we propose that the link between DOI and performance is W-shaped:

**Hypothesis 1.** The link between DOI and performance is non-linear (W-shaped): DOI is negatively associated with firm performance in the first stage; has a positive effect on performance in the second stage; is negatively associated with performance in the third stage; and positively impacts performance in the fourth stage.

### 2.2. Organizational Slack and Internationalization Performance

Bourgeois and Singh (1983) propose that organizational slack is “composed of three interrelated but conceptually distinct dimensions: available, recoverable, and potential slack.” The first includes resources that have not been incorporated into the technical design of the organization; the second comprises resources that “have already been absorbed into the system design as excess costs, but may be recovered during adverse time”; and the last involves “the capacity of the organization to generate extra resources from the environment, as by raising additional debt or equity capital.” In particular, Nohria and Gulati (1997) define organizational slack as the “pool of resources in an organization that is in excess of the minimum necessary to produce a given level of organizational output.” In addition, Singh (1986) separates slack into absorbed slack and unabsorbed slack. The first refers to excess costs in organizations, whereas the second encompasses excess, uncommitted liquid resources. Lee and Wu (2016) propose that absorbed slack “can be defined as slack committed to human resource, overhead expenses, the company’s reputation, and other administrative costs. Unabsorbed slack can be defined as excess, uncommitted liquid assets, showing a firm’s ability to meet current obligations with available resources.” Therefore, recoverable slack was considered absorbed slack, and available slack was considered unabsorbed slack.

Previous studies have explored bundles of slack resources and illustrated their influence on firm outcomes. For instance, Mellahi and Wilkinson (2010) examined the effect of slack level on innovation output and found that downsizing of slack was temporally associated with innovation output. In an investigation of financial slack and research and development (R&D) investments, Kim et al. (2008) demonstrated that financial slack had an inverted U-shaped linkage with R&D investments. Other studies concentrated on examining the relationship between organizational slack and outcomes such as firm performance, R&D investments, innovation outcomes, firm growth, and corporate entrepreneurship (Bradley et al. 2011; George 2005; Tan and Peng 2003; Lee and Wu 2016).

Among recent empirical evidence on the extent to which bundles of financial and human resource slack contribute to firm performance and survival, Paeleman and Vanacker (2015) illustrated that neither parallel resource abundance (having slack in financial and human resources) nor parallel resource constraints (lacking slack in financial and human resources) are optimal for firm performance and survival. By contrast, Wiersma (2017) showed that slack leads to greater benefits, as the organization achieves many profitable investment opportunities. Their findings show that the total impact of available slack is positively associated with organizational performance, whereas the association of recoverable slack with performance is negative.
From the perspective of firm behavior, the allocation of slack resources is among the strategic decisions that can determine a firm’s readiness to relieve internal and external challenges and provide possibilities for starting internationalization ventures (Lin and Liu 2012; Tan and Peng 2003; Bourgeois 1981). In this way, slack resources can be understood as a firm’s tangible and intangible assets that are primarily used for contingency purposes (Bourgeois 1981). The availability of organizational slack also reflects firms’ strategic decisions and resource commitment level for internationalization activities (Johanson and Vahlne 1977; Lin 2014). Understanding the moderating effect of organizational slack on the internationalization–firm performance relationship is very important because slack plays a key role in buffering internationalization ventures and promoting efficient strategies to deal with uncertainties and foreign liability (Zhang et al. 2018).

Depending on the specific characteristics and discretion level of the slack, Lin et al. (2011) divided organizational slack into two main types: high-discretion slack and low-discretion slack. By contrast, Zhang et al. (2018) estimated three important kinds of slack: AHR, OAR, and USR. While OAR and USR reflect financial slack in terms of flexibility and discretion level for use, AHR captures a firm’s inimitable assets in terms of human capital accumulation and expertise. Therefore, this study takes into account the impact of these three types of slack on the internationalization–performance relationship for Vietnamese enterprises.

2.2.1. The Moderating Effect of Absorbed Slack Human Resources (AHRs)

As mentioned above, AHR (measured by the ratio of the number of employees to total sales) is considered a critical resource for implementing an internationalization plan. Absorbed slack human resources can be defined as a firm’s long-term intangible assets established through accumulated human capital and expertise that are very difficult to imitate, such as sophisticated solutions, complete processes, experiences, disciplines, and professionals (Zhang et al. 2018; Dutta et al. 2016). For firms, learning, experience, and improvement require a long period. In addition, AHRs are extremely important for newly internationalized firms in the first stage of joining the global market, as this stage requires accumulated international experience and in-depth knowledge to overcome the challenges of foreign liability and cultural diversity (Lin and Liu 2012). Hence, AHRs are expected to enhance a firm’s internationalization performance in the early stages.

However, the importance of AHRs may gradually fade away in later stages due to the increasing cost burden associated with the retention of highly qualified experts. The skills and knowledge of these experts are highly attached to specific tasks instead of multi-task diversification (Zhang et al. 2018). Therefore, as firms reach higher degrees of the internationalization process, AHRs may no longer be an advantage. However, the overall effect of AHRs on international performance at each stage is difficult to predict. From the theoretical aspects discussed above, we obtained the second hypothesis.

Hypothesis 2. Absorbed slack human resources (AHRs) positively moderate the internationalization–performance relationship of Vietnamese enterprises.

2.2.2. The Moderating Effect of Other Kinds of Absorbed Slack Resources (OARs)

The second type of slack, OARs, originate from the financial surplus from business operations (measured by the difference between working capital and the salary budget divided by total sales) and are allocated for very selective contingency use, particularly for relieving internal pressures (Daniel et al. 2004; Bourgeois 1981). This kind of slack is characterized by a low discretion level for use. Moreover, OARs in term of excess financial cashflow may be challenged by economic downturns, inefficient investments, or long payback periods during the firm’s operation time. More importantly, internationalization requires firms to start new ventures under uncertain and unpredictable conditions, but OARs are oriented toward facilitating firm operations and absorbing shock (Zhang et al. 2018). Despite its disadvantages, OARs are a vital resource that enable firms to stabilize firm performance and eliminate shocks to sustain firm development. In this way, OARs are a key resource for opening
new horizons for launching internationalization and maintaining firm performance when going global. Thus, we obtained the third hypothesis:

**Hypothesis 3.** Other kinds of absorbed slack resources (OARs) positively moderate the internationalization–performance relationship of Vietnamese enterprises.

2.2.3. The Moderating Effect of Unabsorbed Slack Resources (USRs)

Among the three types of slack, unabsorbed slack resources (USRs) appears to be the most uncommitted flexible type of additional resource in favor of implementing innovation and internationalization strategies (Nohria and Gulati 1996). The USRs are estimated by the ratio of current assets to current liabilities. While OARs are used to smooth daily operations by buffering internal pressures, USRs can enable firms to launch new ambitious goals, such as investing in new opportunities and diversifying products and markets (Lin 2014; Zhang et al. 2018). Because enterprises are often characterized by limited budgets and low access to abundant resources, the allocation of a firm’s strategic organizational resources to USR has a very high opportunity cost and requires the right investment in truly feasible projects (Dutta et al. 2016). It is important to note that managers in enterprises are under extremely high pressure to ensure efficient portfolio and capital use, especially when implementing complex long-term strategies like international integration. Nevertheless, a higher level of USRs undeniably contribute to activating and facilitating the global expansion process. Thus, we obtained the fourth hypothesis:

**Hypothesis 4.** Unabsorbed slack resources (USRs) positively moderate the internationalization–performance relationship of Vietnamese enterprises.

3. Methodology

3.1. Data Sample

This study used data on all Vietnamese enterprises drawn from the General Statistics Office of Vietnam (GSO) database, which consists of annual reports of all enterprises operating in Vietnam, from 2007 to 2015. During the study period, GSO compiled 2,850,883 records belonging to approximately 900,000 operating firms listed by firm IDs. After filtering out samples not following basic Vietnamese standards, such as those with negative assets or a negative number of employees, we constrained for a suitable range according to the entire variable list to eliminate outliers. Finally, the data used for analysis contained a total of 1,732,265 samples of 569,767 Vietnamese firms, which accounted for 61% of the initial population. According to Vietnamese law, small enterprises have a total labor force under 100 and total assets under 20 billion VND (equivalent to 741 million EUR) or a total labor force under 50 and total assets under 50 billion VND (equivalent to 1852 million EUR). This kind of enterprise accounts for 91.51% of the sample. Similarly, medium enterprises have a total labor force under 200 and total assets under 100 billion VND (equivalent to 3704 million EUR) or a total labor force under 100 and total revenue under 300 billion for trading and service industries. Medium enterprises account for 8.49% of the sample.

3.2. Measurement

3.2.1. Firm Performance

Firm performance can be estimated based on accounting indexes or justification of managers. As a proxy for firm performance, this study used return on assets (ROA), which has been popularly used in many previous studies (Daniel et al. 2004; Zhang et al. 2018), in addition, to return on sales (ROS) or return on equity (ROE). Because of the characteristics of Vietnamese enterprises, which include limited
financial management and a lack of financial capabilities, we strongly suggest using ROA to avoid the unobservable bias of ROE.

3.2.2. Internationalization

There are many ways to estimate firm DOI. The DOI can be calculated based on a firm’s operations overseas, including its operation time in years, a number of overseas subsidiaries, or amount of outward FDI (Lu and Beamish 2004; Zhang et al. 2018). However, for Vietnamese enterprises, this measurement is not appropriate, as most Vietnamese enterprises do not operate abroad. Therefore, we estimated the DOI of enterprises by the ratio of total foreign sales to total revenue (Zhao and Ma 2016; Korsakiene and Tvaronavičienė 2012; Dutta et al. 2016).

3.2.3. Organizational Slack

Previous studies of the relationship between internationalization and firm performance have suggested an important role for organizational slack (Tan 2003; Lin and Liu 2012; Lin 2014; Zhang et al. 2018; Daniel et al. 2004; Bourgeois 1981; Dutta et al. 2016). Following Zhang et al. (2018), AHRs are measured as the ratio of the number of workers to total sales, USRs as the ratio of current assets to current liabilities, and OARs as the difference between working capital and total labor cost divided by total sales.

3.2.4. Control Variables

This study had four control variables: product diversification (PDIVER), experience in business (AGE), firm size (FIRM_SIZE), and technology gap (TECH_GAP). Bowen and Wiersema (2009); Chang and Wang (2007); Kumar et al. (2012), and Tallman and Li (1996) have described the impact of product diversification strategies on firm performance. Following Santarelli and Tran (2016), we estimate PDIVER by entropy. The AGE was represented by firm operating years, and FIRM_SIZE was measured by the natural logarithm of firm revenue. TECH_GAP was estimated by the gap between the firm average wage and the average wage of the industry. In addition, two dummy variables, YEAR and INDUSTRY, were introduced to prevent unobservable bias of the research model.

3.3. The Model

A research model was designed to investigate the relationship between internationalization and firm performance and the impact of the three types of organizational slack on this relationship. The main research model is as follows:

\[
\text{ROA}_{it} = \beta_0 + \beta_1 DOI_{it} + \beta_2 DOI_{it}^2 + \beta_3 DOI_{it}^3 + \beta_4 DOI_{it}^4 + \beta_5 AHR_{it} + \beta_6 OAR_{it} + \beta_7 USR_{it} + \beta_8 PDIVER_{it} + \beta_9 FIRM\_SIZE_{it} + \beta_{10} AGE_{it} + \beta_{11} TECH\_GAP_{it} + \mu_i + \xi_{it}
\]

The model in this study was estimated by a fixed-effects-based regression following the results of a Hausman test (Hausman 1978) indicating that a fixed-effects regression was more appropriate than a random-effects regression for our dataset. The next step in the analysis procedure was to check for collinearity among the independent variables. As shown in Table 2, the correlations between independent variables were relatively low; all were less than 0.3 (Neter et al. 1990), indicating low bias and high reliability. The variance inflation factor (VIF) test was also used to test for collinearity in the research model. The mean VIF was 1.17, and the highest VIF was 1.67, which indicates that multicollinearity was not a problem in our model.
Table 2. Descriptive statistics and variable correlations.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>ROA</th>
<th>DOI</th>
<th>AHR</th>
<th>OAR</th>
<th>USR</th>
<th>PDIVER</th>
<th>FIRM_SIZE</th>
<th>AGE</th>
<th>TECH_GAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>-0.003</td>
<td>0.178</td>
<td>1</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOI</td>
<td>0.001</td>
<td>0.013</td>
<td>0</td>
<td>1</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AHRs</td>
<td>0.007</td>
<td>0.024</td>
<td>-0.0026*</td>
<td>0.0008</td>
<td>1</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OARs</td>
<td>-0.762</td>
<td>0.717</td>
<td>0.0001</td>
<td>-0.0002</td>
<td>-0.0102*</td>
<td>1</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USRs</td>
<td>0.023</td>
<td>0.910</td>
<td>-0.0001</td>
<td>0.0002</td>
<td>0.0193*</td>
<td>0.0243*</td>
<td>1</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PDIVER</td>
<td>0.031</td>
<td>0.154</td>
<td>0.0092*</td>
<td>0.0107*</td>
<td>-0.0071*</td>
<td>0.0007</td>
<td>-0.0004</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIRM_SIZE</td>
<td>8.305</td>
<td>1.822</td>
<td>0.0362*</td>
<td>0.0368*</td>
<td>-0.1290*</td>
<td>0.0117*</td>
<td>-0.0076*</td>
<td>0.1452*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGE</td>
<td>3.974</td>
<td>4.248</td>
<td>0.0402*</td>
<td>0.0262*</td>
<td>-0.0145*</td>
<td>-0.0008</td>
<td>-0.001</td>
<td>0.1173*</td>
<td>0.2387*</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>TECH_GAP</td>
<td>-0.032</td>
<td>0.274</td>
<td>0.0118*</td>
<td>0.0146*</td>
<td>-0.0096*</td>
<td>-0.0018*</td>
<td>-0.0001</td>
<td>0.0150*</td>
<td>0.1294*</td>
<td>0.0153*</td>
<td>1</td>
</tr>
</tbody>
</table>

Notes: ROA: Return on assets. DOI: Degree of internationalization. AHR: Absorbed slack human resources. OAR: Other kinds of absorbed slack resources. USR: Unabsorbed slack resources. PDIVER: Product diversification. FIRM_SIZE: Firm size. AGE: Firm operating years. TECH_GAP: the gap between the firm average wage and the average wage of the industry. * p-value < 0.05.
4. Results and Discussion

To estimate the impact of DOI on firm performance, a fixed-effects-based regression model and random-effects model were first considered due to the fact of their popularity and appropriateness for panel data. The results of the Hausman test ($p = 0.000$) recommended the use of a fixed-effects model for our large unbalanced 2007–2015 panel data. However, according to two studies (Bell et al. 2018; Bell and Jones 2015), the Hausman test is not always optimal for determining the preferred model. An alternative approach to check the appropriateness of a fixed-effect versus random-effect model is provided by Mundlak (1978) work. The comparative advantage of the Mundlak approach to the Hausman test is that the former can be applied to scenarios with the heteroskedastic error or intragroup correlation. According to the Mundlak approach, a panel-level average of time-varying proxies is calculated and checked to determine whether the panel-level means are jointly equal to zero in the random-effects estimator with other covariates in the model. In the present study, the results of the Mundlak approach rejected the hypothesis that the coefficients of our model were jointly equal to 0, which implies that a correlation between the time-invariant unobservable bias and regressors exists and that the fixed-effect model would be more appropriate. The coefficients of Fixed Effect Model (FEM) and Random Effect Model (REM) that were used to conduct the Hausman test and Mundlak approach are illustrated in Appendix A. We also conducted firm clustering to reduce heteroskedasticity and autocorrection bias in the model. On the right-hand side of the equation, other important explanatory variables, such as organizational slack, product diversification, firm size, firm age, and technology gap, are comprehensively reviewed and added to avoid missing-variable status and enhance the possibility of explaining unobserved variants. Organizational slack is also used as a moderator to explore how this critical variable moderates the relationship between DOI and firm performance. The problems of heteroskedasticity and autocorrelation are eliminated by using industry/year clusters and dummies for ownership identities. Because the VIF was 1.17 (less than 10), there was no concern of multicollinearity in our estimation.

As the $R^2$ value of the quartic estimation was highest among the linear, quadratic, cubic, and quartic models, we report the quartic estimation of the DOI–performance relationship. First, as shown in Table 3, the coefficient of DOI was significantly negative ($\beta = -0.226$, $p < 0.01$). In other words, internationalization triggers a negative impact on firm performance in the first stage. On the contrary, the quadratic term of DOI shows the opposite trend in the second stage, with a significantly positive influence on firm performance ($\beta = 1.526$, $p < 0.01$). Interestingly, the magnitude of this upturn is quite strong and outweighs the initial loss. Next, the cubic coefficient of DOI indicated a significantly negative effect on firm performance in the third stage ($\beta = -2.836$, $p < 0.01$). The magnitude of the negative downturn in the third stage was quite large compared to the benefits in stage 2. Then, at the final stage, the quartic term of DOI indicated a significantly positive relationship between internationalization and performance ($\beta = 1.558$, $p < 0.01$), as the curve shifts up strongly again after the decline in the third stage. Therefore, the empirical evidence indicated a W-shaped curvilinear relationship between internationalization and firm performance across the four different stages, supporting the first hypothesis.

This result is consistent with that of Zhou (2018), who also found a W-shaped DOI–performance relationship for small Chinese firms from 2001 to 2014. Most studies measuring the curvilinear impact of DOI on performance have discovered an S-shaped relationship (Bobillo et al., 2010; Cho and Lee 2018; Lin et al. 2011) or U-shaped relationship (Assaf et al. 2012; Capar and Kotabe 2003; Chen and Tan 2012), and the present study is among the very few providing strong evidence that performance shifts toward a W-shaped trend under the presence of DOI. While the theory of Contractor et al. (2003) rejects the argument that “the more international integration, the more benefits”, this study once again challenges the three-stage theory of Contractor et al. (2003) by supporting the fourth stage of internationalization. In this way, internationalization can start with an initial loss due to the presence of foreign liability before moving to the second prosperous stage with accumulated experiences and offset benefits. Moreover, internationalization does not end at the third stage, where performance
continues to diminish with higher levels of internationalization, but recovers again and truly thrives in the fourth stage as a result of increasing maturity of international integration, which brings enormous improvements such as advanced technology upgrades, innovative solutions, effective networking, and within-organization communication (Hitt et al. 1997; Zhou 2018).

Table 3. The relationship between DOI and firm performance.

<table>
<thead>
<tr>
<th>Fixed-Effects Model</th>
<th>ROA (Firm Performance)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent Variable</td>
<td></td>
</tr>
<tr>
<td>DOI (Degree of internationalization)</td>
<td>−0.226 *** (0.073)</td>
</tr>
<tr>
<td>DOI²</td>
<td>1.526 *** (0.445)</td>
</tr>
<tr>
<td>DOI³</td>
<td>−2.836 *** (0.828)</td>
</tr>
<tr>
<td>DOI⁴</td>
<td>1.558 *** (0.466)</td>
</tr>
<tr>
<td>AHRs (absorbed slack human resources)</td>
<td>0.001 *** (0.000)</td>
</tr>
<tr>
<td>OARs (other kinds of absorbed slack resources)</td>
<td>−0.000 (0.000)</td>
</tr>
<tr>
<td>USRs (unabsorbed slack resources)</td>
<td>0.000 * (0.000)</td>
</tr>
<tr>
<td>PDIVER (product diversification)</td>
<td>−0.003 *** (0.001)</td>
</tr>
<tr>
<td>FIRM_SIZE (firm size)</td>
<td>0.004 *** (0.000)</td>
</tr>
<tr>
<td>AGE (firm age)</td>
<td>0.003 *** (0.000)</td>
</tr>
<tr>
<td>TECH_GAP (technology gap)</td>
<td>0.007 *** (0.001)</td>
</tr>
<tr>
<td>OWNERSHIP dummies Industry dummies Year dummies _cons</td>
<td>Yes Yes Yes −0.038 *** (0.004)</td>
</tr>
<tr>
<td>N</td>
<td>1,732,265</td>
</tr>
<tr>
<td>R-square</td>
<td>0.004</td>
</tr>
</tbody>
</table>

Standard errors in parentheses: * p < 0.10, *** p < 0.01.

Table 3 also shows that AHRs positively affect firm performance (β = 0.001, p < 0.01), while OARs had no influence on performance (β = −0.000, p > 0.1). The significantly positive relationship between USR and firm performance was quite weak, with a very small coefficient (β = 0.000, p < 0.1). From the perspective of firm behavior, on the one hand, high availability of slack resources may enable a firm to start its new ventures abroad and to tackle the uncertainties associated with a higher level of internationalization (Lin and Liu 2012; Lin et al. 2011). The AHRs are a critical determinant of the stimulation of firm performance and growth, as it reflects an inimitable resource via human capital accumulation (Tan and Peng 2003; Dutta et al. 2016). On the other hand, abundant slack may be a signal of inefficient capital use, which may trigger a negative impact on firm performance (Zhang et al. 2018). Because slack may originate from different strategic sources, the type of slack and its level of flexibility vary across industries.
In addition, product diversification had a significantly negative impact on firm performance ($\beta = -0.003, \rho < 0.01$). This finding indicates that the single-item strategy is a wiser choice for enterprises. By specializing in the best thing that it can produce, supply or serve, a firm can reach a higher position in its learning curve, generate more innovations, and achieve higher productivity and performance targets (Sharma 2017). In addition, scholars consider international diversification an essential strategic tool for firms entering global markets. Agyei-Boapeah (2017) proposes that product-diversified firms may retain greater performance since they confront lower cash flow volatility. However, they can also experience poor performance if they have to deal with agency costs (Agyei-Boapeah 2018). Interestingly, the newly added variable of technology gap has a significantly positive coefficient, which may reflect the far lower technological level of Vietnamese enterprises compared with foreign firms in developed countries. Therefore, global integration may generate greater motivation and opportunities for Vietnamese enterprises to absorb knowledge spillovers and strengthen their production systems (Goh 2005).

The relationships between firm performance and other control variables representing firm characteristics, such as firm size ($\beta = 0.003, \rho < 0.01$) and firm age ($\beta = 0.007, \rho < 0.01$), are also significantly positive. Firm size was identified as a strong moderator of the DOI–performance relationship by Zhou (2018). Undoubtedly, firm size functions as a control variable in the present study, but it is closely linked to a firm’s internal capabilities. Thus, the larger the firm, the greater its capabilities to deal with uncertainties and launch successful international campaigns. Firm age, on the other hand, can reflect the international experiences of the firm. Firms with rich international experiences are undeniably more likely to succeed in the global market (Hsu et al. 2013).

Figure 1 illustrates the W-shaped relationship between DOI and Vietnamese enterprises’ performance from 2007 to 2015. Based on the figure and the estimation of extreme values, the first stage of the internationalization process is completed as the DOI of Vietnamese enterprises reaches approximately 9.9 percent. The second stage occurs between DOI of 9.9 percent and 44 percent. The third stage extends from DOI of 44 percent to 82.47 percent. The fourth stage occurs when DOI exceeds 82.47 percent. Firm performance is highest when the DOI of Vietnamese enterprises reaches approximately 44 percent. By contrast, firm performance is lowest when the DOI of Vietnamese enterprises reaches approximately 82.47 percent.

![Figure 1](image-url)

**Figure 1.** The relationship between the degree of internationalization and Vietnamese firms’ performance from 2007 to 2015 (Notes: ROAhat is estimated according to the coefficients of regression results).

Table 4 presents the results for the potential moderating effects of the three types of organizational slack on the relationship between DOI and the performance of Vietnamese enterprises. Based on the observed W-shaped relationship between internationalization and firm performance, we estimated...
three thresholds of DOI in the population. We then separately analyzed the moderating effects of the organizational slack in each stage. First, the coefficients for the interaction term DOIxAHR are significantly positive for the first stage (β = 46.057, p < 0.1) and the second stage (β = 173.585, p < 0.05). Thus, a higher level of AHRs in the first two stages of the internationalization process will enhance the internationalization–performance relationship of Vietnamese enterprises. The large magnitudes of these terms imply a very strong moderating effect of AHRs. However, as the DOI reaches a higher percentage in the later stages, the results indicated that there was no influence of AHRs on the internationalization–performance relationship (stage 3: β = −0.047, p > 0.1; stage 4: β = −0.043, p > 0.1). This new empirical evidence is consistent with the results of Zhang et al. (2018), who found an inverted U-shaped moderating effect of AHRs. In summary, the second hypothesis is supported only in the first and second stages and not in the two later stages.

Table 4. The moderating effects of AHRs, OARs, and USRs across the four stages of internationalization.

<table>
<thead>
<tr>
<th></th>
<th>(Stage 1)</th>
<th>(Stage 2)</th>
<th>(Stage 3)</th>
<th>(Stage 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ROA</td>
<td>ROA</td>
<td>ROA</td>
<td>ROA</td>
</tr>
<tr>
<td>DOI (degree of internationalization)</td>
<td>−0.227 *** (0.072)</td>
<td>−0.174 (0.136)</td>
<td>−0.095 *** (0.023)</td>
<td>−0.060 *** (0.021)</td>
</tr>
<tr>
<td>AHRs (absorbed slack human resources)</td>
<td>0.001 *** (0.000)</td>
<td>−63.653 ** (28.076)</td>
<td>0.070 (0.109)</td>
<td>0.042 (0.565)</td>
</tr>
<tr>
<td>OARs (other kinds of absorbed slack resources)</td>
<td>−0.000 (0.000)</td>
<td>−0.017 (0.016)</td>
<td>0.000 (0.000)</td>
<td>−0.000 (0.000)</td>
</tr>
<tr>
<td>USRs (unabsorbed slack resources)</td>
<td>0.000 * (0.000)</td>
<td>8.480 * (4.678)</td>
<td>−0.807 ** (0.344)</td>
<td>0.029 (0.088)</td>
</tr>
<tr>
<td>PDIVER (product diversification)</td>
<td>−0.003 *** (0.001)</td>
<td>−0.027 (0.050)</td>
<td>−0.019 (0.037)</td>
<td>0.745 (0.942)</td>
</tr>
<tr>
<td>DOIxAHR</td>
<td>46.057 * (26.030)</td>
<td>173.585 ** (75.865)</td>
<td>−0.047 (0.176)</td>
<td>−0.043 (0.575)</td>
</tr>
<tr>
<td>DOIxOAR</td>
<td>0.022 *** (0.008)</td>
<td>0.063 (0.054)</td>
<td>−0.000 (0.000)</td>
<td>0.000 (0.000)</td>
</tr>
<tr>
<td>DOIxUSR</td>
<td>13.621 *** (3.885)</td>
<td>−23.096 (18.781)</td>
<td>1.443 *** (0.555)</td>
<td>−0.029 (0.089)</td>
</tr>
<tr>
<td>FIRM_SIZE</td>
<td>0.004 *** (0.000)</td>
<td>−0.031 (0.030)</td>
<td>0.003 (0.003)</td>
<td>0.012 * (0.006)</td>
</tr>
<tr>
<td>AGE</td>
<td>0.003 *** (0.000)</td>
<td>0.009 (0.008)</td>
<td>0.001 * (0.001)</td>
<td>0.004 *** (0.001)</td>
</tr>
<tr>
<td>TECH_GAP</td>
<td>0.007 *** (0.001)</td>
<td>0.112 ** (0.054)</td>
<td>0.006 (0.025)</td>
<td>−0.040 (0.050)</td>
</tr>
<tr>
<td>_cons</td>
<td>−0.052 *** (0.001)</td>
<td>0.209 (0.294)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>1,563,517</td>
<td>119,574</td>
<td>35,639</td>
<td>13,535</td>
</tr>
<tr>
<td>R²</td>
<td>0.031</td>
<td>0.147</td>
<td>0.071</td>
<td>0.146</td>
</tr>
</tbody>
</table>

Standard errors in parentheses. * p < 0.10, ** p < 0.05, *** p < 0.01.

The early stages of the internationalization process are strongly supported by the presence of AHRs, which consists of accumulated human capital, expertise, international experiences, and innovative solutions (Dutta et al. 2016). In this way, the availability of AHRs represent an inimitable key for unlocking the door to global markets, which requires in-depth knowledge and experiences to deal with uncertainties and complexities (Zhang et al. 2018). However, in the later stages of internationalization, retaining highly qualified labor and experts represents an unexpected cost...
burden for enterprises, as these individuals tend to specialize in specific tasks and have difficulty in meeting new job requirements. This may partly explain why there is no influence of AHR on the internationalization–performance relationship.

Second, the interaction term DOIxOAR is only significantly positive in the first stage ($\beta = 0.022, \rho < 0.01$). This result indicated that there were no moderating effects of OARs on the internationalization–performance relationship beyond the first stage (stage 2: $\beta = 0.063, \rho > 0.1$; stage 3: $\beta = 0.000, \rho > 0.1$; stage 4: $\beta = 0.000, \rho > 0.1$). Because OARs are oriented for very selective use with a low discretion level, it is often used to relieve internal pressures and smooth firm operation rather than investing in new opportunities (Daniel et al. 2004; Bourgeois 1981). However, a firm should always have stable performance and a growth rate approaching sustainable development before pursuing an internationalization strategy. This makes OARs vital for going global, especially for the first stage of an internationalization launch. Thus, the third hypothesis is only supported in the first stage of the internationalization process.

Third, among the three types of slack, USRs are considered the key resource to help enterprises break limits and pursue ambitious targets, including an internationalization strategy. The results show that the coefficient of the interaction term DOIxUSR was significantly positive in the first ($\beta = 13.621, \rho < 0.01$) and third stages ($\beta = 1.443, \rho < 0.01$). In other words, USRs positively moderate the internationalization–performance relationship in the first and third stages of global expansion. By contrast, USRs did not affect the influence of internationalization on performance in the second ($\beta = −23.096, \rho > 0.1$) and fourth stages ($\beta = −0.029, \rho > 0.1$). Because USRs are characterized by their readiness and easy redistribution, it can facilitate the full exploitation of the expansion opportunities of internationalization regardless of geographical location and industry (Zhang et al. 2018; Nohria and Gulati 1996). Notably, firm performance decreases in stage 1 and stage 3 of the internationalization process due to the presence of foreign liability in stage 1 and under-controlled diversity in stage 3 (Contractor et al. 2003). As a result, USRs are more effective as a moderator in these stages to help the firm overcome international challenges.

4.1. Contributions

First, the findings contribute strong evidence for a W-shaped internationalization–performance linkage across the four different stages of internationalization. Specifically, Vietnamese enterprises’ performance initially decreased in the first stage as a result of early barriers arising from foreign liability, followed by an increase in the second stage due to the higher market size and economies of scale. Next, firms again experienced a downward trend as DOI goes beyond the optimum threshold and triggers the negative impacts of loose governance control. However, instead of ending with this diminishing outcome at the third stage, the firm once again recovers and truly thrives in the fourth stage, when it successfully attains maturity in the learning curve. All three types of slack had positive influences on the relationship between internationalization and performance at the early stages of the internationalization process, especially at stage 1.

Interestingly, USRs, which are considered the most available slack in terms of discretion and readiness for implementing internationalization strategies, positively moderated the effect of internationalization on performance in stages 1 and 3. These stages appeared to be the most difficult stages faced by newly internationalizing firms. Moreover, the lower product diversification of Vietnamese enterprises was beneficial, as product diversification negatively affected firm performance. In addition, other explanatory variables related to firm characteristics, such as firm size, labor size, age, and technology gap, were significant determinants of enhanced firm performance.

The empirical results have practical contributions from a managerial perspective. First, a long-term action plan is very important in implementing internationalization strategies because firms face many uncertainties and complexities during this process. Reaching a higher level of internationalization forces firms to make strategic decisions on resource allocation that can determine their survival. Therefore, until their growth stabilizes, firms must be calm and avoid aggressive global expansion and
successfully nurture their internal capabilities. Second, as slack resources are extremely important in the initial stage of launching international integration, firms must allocate each type of slack efficiently and promptly to take advantage of internationalization without harming their daily business operations.

4.2. Limitations and Further Study

This paper has several limitations that may also provide scope for future studies. Because the enterprise dataset does include unlisted firms, the measurements of some interesting variables or multi-dimensional indicators of DOI may not fully capture the internationalization level of Vietnamese enterprises. Future studies employing smaller groups of listed enterprises with adequate data may provide new evidence. In addition, the measurement of AHRs of enterprises and their interaction term with DOI are presented in very small values. Consequently, the insignificant effects of these proxies are considerable limitations in this paper. Therefore, future studies should find appropriate measurements to overcome these limitations.

Moreover, intangible assets play a crucial role in many businesses, and the effect of human slack resources should be considered in this context. Thus, future research can investigate the interaction effect of human slack resources and R&D investment on firm performance.

5. Conclusions

This study attempted to fill a gap in the research on the international business of enterprises by investigating whether the relationship between internationalization and enterprise performance exhibits a W-shaped trend using unbalanced panel data of 569,767 Vietnamese enterprises from 2007 to 2015 (surveyed by GSO). While the implementation of international strategies requires a certain level of slack resources, enterprises are often characterized by limited resources. Thus, three types of organizational slack, i.e., AHRs, OARs, and USRs, and their interaction terms with DOI were added to an econometric model as moderators to examine whether each kind of slack and its inherent characteristics influence the internationalization–performance relationship. In addition, independent variables such as product diversification, firm size, firm age, product diversification, and technology gap were added to the right-hand side of the equation as important predictors of firm performance. If this paper could have one message, it would be to have entry strategies based on different types of local resources (Meyer et al. 2009). The higher the level of internationalization, the better the firms can make strategic decisions on resource allocation that can determine their survival. Since slack resources are so essential in the initial stage of global integration, the firms must allocate each type of slack efficiently and promptly to take internationalization business opportunities. This further illustrates that the importance of the global competitiveness has partly been established by internationalization strategies, which stimulates the economic growth and reduce poverty so important to nations (Tomizawa et al. 2019).

Author Contributions: P.V.N. developed the research topic and design, provided the literature review, and revised and corrected the final revision. H.T.N.H. wrote the methodology, conducted data analysis, and wrote discussions. H.D.X.T. was in charge of the programming code to filter the data, provided some explanations and wrote conclusions and limitations. K.T.T. wrote the introduction and provided some ideas to respond to the reviewers’ comments.

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Conflicts of Interest: The authors declare no conflict of interest.
## Appendix A

### Table A1. The coefficients of Fixed Effect Model (FEM) and Random Effect Model (REM).

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<th>Hausman</th>
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<tr>
<td>DOI</td>
<td>−0.003</td>
<td>−0.002</td>
<td>−0.002</td>
</tr>
<tr>
<td></td>
<td>(0.010)</td>
<td>(0.009)</td>
<td>(0.006)</td>
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<tr>
<td>AHRs</td>
<td>0.001 ***</td>
<td>0.001 ***</td>
<td>0.001 ***</td>
</tr>
<tr>
<td></td>
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<td>(0.000)</td>
<td>(0.000)</td>
</tr>
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<td>−0.000</td>
<td>−0.000</td>
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<tr>
<td></td>
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<td>(0.000)</td>
<td>(0.000)</td>
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<td>0.000</td>
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<tr>
<td></td>
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<td>(0.000)</td>
<td>(0.000)</td>
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<td>−0.002</td>
<td>−0.002 **</td>
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<td>0.004 ***</td>
<td>0.004 ***</td>
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<td>(0.000)</td>
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<tr>
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<td>0.003 ***</td>
<td>0.003 ***</td>
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<tr>
<td></td>
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<td>0.006 ***</td>
<td>0.006 ***</td>
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<td></td>
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<td>−0.075 ***</td>
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<td>(0.021)</td>
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<td>−0.001 ***</td>
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<td>0.007 ***</td>
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<td>−0.003 ***</td>
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<td>(0.000)</td>
<td>(0.000)</td>
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<td>−0.002 ***</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
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<td>−0.004 ***</td>
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<td>(0.001)</td>
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Notes: vce: variance-covariance matrix of the estimators. *** p < 0.01.
Table A2. Hausman test.

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<tr>
<th></th>
<th>est7</th>
<th>(b)</th>
<th>est6</th>
<th>(b-B)</th>
<th>sqrt(diag(V_b-V_B))</th>
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\[ \text{Chi}^2 = 180.36, \ p\text{-value} = 0.000. \]

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