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Empowering small and medium enterprises to foster balanced development in ASEAN: Insights and implications for Vietnam

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Abstract: In the diverse and dynamic ASEAN landscape, this paper explores how small and medium enterprises (SMEs) internationalization can foster balanced regional development, focusing particularly on Vietnam. Employing a comprehensive approach, it investigates key enablers of SME international trade—namely, integration into Global Value Chains (GVCs), the implications of non-tariff barriers, and the transformative influence of e-commerce solutions. The findings underscore that while SMEs hold significant potential for stimulating economic diversification and equitable growth, they face intricate challenges ranging from regulatory complexity to constrained digital infrastructure. To address these hurdles, the research proposes targeted trade-based policies at both regional and national levels, aiming to unlock SMEs' full internationalization potential. By doing so, it seeks to contribute substantially to a more equitable and sustainable development path, where ASEAN as a whole—and Vietnam as a compelling case study—demonstrate how strategic policy interventions and technological advancements can catalyze SME-led growth. Ultimately, these insights highlight the critical importance of SME internationalization in shaping ASEAN's future economic landscape.

Keywords: ASEAN, SMEs, Internationalization, Regionally balanced development.

1. Introduction

Balanced development spans various dimensions, both at the national and regional levels. On a national scale, it encompasses achieving equilibrium among economic sectors [1-3]. Addressing regional disparities [4-7]. And harmonizing diverse developmental priorities, including economic, environmental, and social objectives [4-6]. In the context of developing nations, the pursuit of balanced development encounters inherent challenges, requiring these countries to strike a delicate balance between fostering equilibrium among economic sectors and prioritizing specific sectors for rapid economic growth within resource constraints [2, 3].

Of paramount importance in this pursuit of equilibrium is the role played by SMEs, which represent the backbone of businesses, constituting approximately 90% of all enterprises globally and employing over 50% of the workforce [8]. They are pivotal to accommodating the expanding global labor force World Bank [9] and play a crucial role in poverty alleviation [10]. However, the continued innovation and productivity growth seen in firms in high-productivity countries, facilitated by agglomeration effects, have exacerbated income disparities between nations. This phenomenon has posed persistent challenges to balanced development at the national and regional levels. Therefore, facilitating SME internationalization, especially among SMEs in industrialized countries, becomes a compelling strategy Baldwin [11] given that trade involvement [12, 13]. And engagement in Global Value Chains (GVCs) Grossman and Rossi-Hansberg [14] can act as competitive pressures to incentivize firms to enhance productivity over time.

The Association of Southeast Asian Nations (ASEAN) was established in 1967 and has made significant strides in economic integration, culminating in forming the ASEAN Economic Community

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(AEC) in 2015. However, economic disparities persist in this diverse regional landscape at national and regional levels. In addressing this economic development gap among its member states (AMS), ASEAN formulated Pillar III of the AEC Blueprint, focusing on Equitable Economic Development emphasizing the pivotal role of internationalizing SMEs. Notably, SMEs comprised an average of 97.2% of total enterprises and employed 69.4% of the workforce in the ASEAN region between 2010 and 2020. The highest growth rates of SMEs during this period were observed in Vietnam, Malaysia, and Myanmar, at 140%, 85%, and 91%, respectively. Both the ASEAN Strategic Action Plan (ASAP) 2015–2020 and ASAP 2020–2025 underscored the aspiration for ASEAN SMEs to seamlessly integrate with the AEC, thereby enabling them to actively participate in regional value chains actively, enhancing their global competitiveness, innovativeness, inclusivity, and resilience over the following five years.

The international engagement of SMEs has contributed significantly to achieving balanced development in ASEAN. SME internationalization promotes multi-sector development within individual countries, bridging the development gap between rural and urban areas and among various economic sectors. Moreover, it has bolstered overall economic growth in AMS, reducing the development divide between countries throughout the region. In a region characterized by highly diverse levels of development, realizing balanced development entails implementing a comprehensive range of policies that support economic progress. It is essential to clarify that balanced development in ASEAN does not imply uniform growth across sectors or geographical regions within a single country or parallel development across countries in a region. Instead, it focuses on establishing an enabling environment that optimizes the effective utilization of available resources across different sectors and regions, fostering sustainable and inclusive development at national and regional levels.

Despite the growing importance of SME internationalization in achieving balanced development in ASEAN, there remains a notable research gap. To date, there has been a lack of specific investigation into the significance of SME internationalization in realizing balanced development within the ASEAN context. Additionally, effective strategies to enhance the practical involvement of ASEAN SMEs in international trade have remained largely unexplored. This paper addresses this research void by offering a comprehensive analysis of how SME internationalization can significantly contribute to balanced development within ASEAN and provides specific implications for Vietnam.

The structure of this paper is organized into six sections. In the subsequent section following this introduction, we present a research background, shedding light on the pivotal role of internationalized SMEs in rectifying the multi-tiered imbalanced development within ASEAN, alongside a proposed research framework. The third section delves into the obstacles obstructing the effective international trade engagement of ASEAN's SMEs. Subsequently, the fourth section focuses on trade-based policies that potentially eliminate these barriers. Finally, the paper concludes by presenting its findings and implications for Vietnam in the last section, thus offering a holistic view of the significance of SME internationalization in fostering balanced development within ASEAN.

2. Roles of SME Internationalization in Enhancing Balance Development of ASEAN

ASEAN is a region characterized by significant diversity, encompassing varying levels of economic development, population sizes, and urbanization rates. According to the World Bank, this diversity is reflected in the income classifications of AMSs. Brunei and Singapore are classified as high-income countries, while Malaysia and Thailand fall under the upper-middle-income category. In contrast, Vietnam, the Philippines, Indonesia, Laos, Cambodia, and Myanmar are categorized as lower-middle-income nations. Additionally, half of the ASEAN member states maintain predominantly rural economies, with rural populations ranging from 52% to 75% of the total population. This diversity underscores the multifaceted nature of the ASEAN region.

Country	Total population as of July 1 (Thousands)	Urban population (% of the total population)	Labor Force calendar year (Thousands)	GDP (Millions)	GDP per capita (Thousands)
Brunei	430	78.6	234	13,215.7	29.7
Cambodia	16,600	24.7	7,981	23,721.3	1.4
Indonesia	272,700	57.3	140,153	1,065,595	3.9
Lao	7,100	36.9	1,940	19,054.8	2.6
Malaysia	3,266	77.3	15,797	355,073	10.65
Myanmar	55,300	31.4	23.6	70,876	1.3
Philippines	110,200	47.7	47,701	378,957.4	3.3
Singapore	5500	100.0	3,608	360,897.3	66.2
Thailand	69,700	56.0	38,700	438,481.3	6.1
Vietnam	98,5000	37.1	50.5	332,270.9	3.4

Table 1.Development indicators of AMSs in 2021.

Source: Authors' compilation from ADB [15] and World bank [16].

AMSs exhibit heterogeneous economic structures with sector-specific priorities. Each AMS has distinct economic characteristics and sectoral focuses that shape its economic landscape. Brunei's economy relies heavily on natural resources, including mining, quarrying, and oil and gas exports. This dependence makes the economy susceptible to fluctuations in energy prices, leading to volatility. Cambodia has prioritized the development of a low-value-added textile and garments industry, which has become a cornerstone of its economy. Indonesia benefits from abundant natural resources and a large consumer market. These factors have driven its economic growth and development. Lao PDR has cultivated a dual-sector economy, with agriculture and tourism industries playing significant roles. Malaysia's economy has been driven by manufacturing, service sectors, and commodities since the 1970s, contributing to its economic growth. Myanmar's economic growth primarily stems from a predominantly rural economy, and businesses focused on natural resources. The Philippines emphasizes sectors such as business process outsourcing and tourism, which are vital contributors to its economy. Singapore's economic development is centered around financial and insurance services, oil trading, pricing, shipping, and biotechnology. Thailand's economic growth is supported by critical sectors, including agriculture, manufacturing (especially vehicles and vehicle parts), and tourism. Vietnam follows a market-oriented socialist economy model, where agriculture and manufacturing sectors dominate its economic landscape. While these critical sectors generate jobs, revenue, and export earnings for AMSs, they may also lead to income disparities between prioritized and non-prioritized sectors.

Additionally, there is often an imbalance in labor shares within the total labor force and GDP contributions among sectors in these AMSs. For instance, in some countries like Brunei, Myanmar, Malaysia, Singapore, and Thailand, key sectors contribute a more significant percentage of GDP than their share in the total labor force. Conversely, countries like Cambodia, Indonesia, Laos, the Philippines, and Vietnam exhibit a labor bias, where key sectors' labor share outstrips their share in GDP. This variation highlights the diversity of economic structures and priorities within the ASEAN region.



Figure 1.

Composition of the labor force and GDP by economic sectors of AMSs in 2022 (%).

SMEs accounted for an average of 97.2% of total ASEAN's enterprises and 69.4% of its workforce in 2010 – 2020. SMEs comprised 99% of total enterprises in most AMS except for Brunei, Malaysia, Myanmar, and Vietnam in 2019. From 2010-2020, the fastest growth rate in SMEs was witnessed in Vietnam, Malaysia, and Myanmar, 140%, 85%, and 91%, respectively. Breaking down by sectors, the region's SMEs who operate in the service sector share the dominant part, from 61.3% to 89.2% by

country, primarily wholesale, retail trade, and other services such as accommodation and food services. The proportion of SMEs engaged in manufacturing industries (including food processing) accounts for only 5% to 17% by country. Notably, with most low-tech firms operating in the domestic market, an insignificant number of firms are working in the area related to global-oriented, young entrepreneurs, startups, and technology-based companies [9].

SMEs' participation in international trade stimulates domestic production, creates additional jobs, and enhances innovation, consequently leading to the development of AMSs' sectors in which they are involved. Their international trade activities comprise exporting and importing goods and services or participating in GVCs. The latter tasks can be done by directly trading cross-border immediate goods and services or linking activities through a value-creation process [17]. Firms participating in GVCs can import for production Baldwin and Lopez-Gonzalez [18] for the domestic market or export orientation or consequent stage of GVCs [17]. Besides, direct or indirect international trade within a GVC can benefit SMEs with positive spillover effects from foreign investment or locally established multinational companies [19]. Imported inputs help ASEAN countries increase export competitiveness and domestic value when participating in exports Lopez-Gonzalez [20] increase productivity, increase diversity, and reduce concentration dependent on exports, creating a premise for economic growth and development [17]. Labor in the production of intermediate goods traded in the value chain grew 3.5 times faster than the growth rate of the total labor force, implying that the participation of firms in general and SMEs creates essential opportunities for economic development. SMEs and enterprises of different sizes benefit from exporting Wagner [21] and participating in international trade through export, import, or both will bring higher wages and create more jobs [22].



Figure 2. SMEs in AMSs in 2010 – 2018.

SME development is a pivotal driver of economic growth and development in AMSs. The contribution of SMEs to the GDP varies across these countries, with significant figures in some key AMSs. In 2018, Indonesia witnessed SMEs contributing a substantial 61.1% to its total GDP, while Brunei accounted for 35.5%, Malaysia 38.3%, Thailand 44.7%, and Singapore 43% in 2018 and 2019, respectively. Notably, SMEs in the service sector played a prominent role in most AMSs, contributing

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significantly to the GDP, such as 68.4% in Indonesia, 62.4% in Malaysia, 60.4% in the Philippines, and 70.5% in Thailand. Across AMSs, SMEs' collective contribution to the GDP ranges from approximately 19% to 27%, showcasing their crucial role in driving economic prosperity. In the agricultural sector, SMEs notably accounted for 10% of Malaysia's GDP in 2018, emphasizing their diverse impact across sectors within AMSs.

70 60 50 40 30 20 10 0 Brunei Indonesia Malaysia Singapore Thailand

a. SMEs' contribution as a percentage of GDP in b. SMEs' contribution as a percentage of GDP in AMSs by sector (%)



Figure 3.

AMSs (%)

SMEs' contribution as a percentage of GDP in AMSs in 2021. Source: ASEAN Secretariat [23].

In general, ASEAN SMEs' engagement in international trade has actively supported the balanced development of ASEAN by (i) enhancing multi-sector development within a country and narrowing the development gap between rural and urban areas and (ii) promoting the overall economic growth of AMS, reducing the development gap between countries in a region as a whole.

3. The participation of ASEAN's SMEs in International Trade: The State of Play

The export share of SMEs in the total export value of some AMS was relatively stable but modest during the period 2010-2018

Despite the domination in the number of companies and the proportion of employees, SMEs contributed an average of 41.1% of an ASEAN member state's gross domestic product (GDP) in 2010 -2020 [24]. Regarding international trade activities in 2010 - 2018, SMEs modestly made up an average of 20.4% of the export value of an ASEAN member state (AMS) [9]. The composition of SMEs and their contribution to the GDP by sector provides valuable insights into the broader context of SMEs' participation in international trade within ASEAN. SMEs predominantly operate within the domestic market, particularly in service sectors such as wholesale and retail trade, accommodation, and restaurants. Consequently, the proportion of firms directly engaged in international trade or exposed to the global market remains relatively modest. In 2018, SMEs in Thailand accounted for 28.7% of the country's total export value, followed by Malaysia at 17.3% and Indonesia at 14.4%. Fortunately, the

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share of SMEs in these countries' total export value remained relatively stable from 2010 to 2018. By the end of this period, the growth rates compared to the beginning of the period were 12.4% for Indonesia, 9.7% for Malaysia, and 29.4% for Thailand.

Figure 4. Contribution to exports of Indonesia, Malaysia, and Thailand in 2021 (%).

3.1. Indirect Trade is Dominant among SMEs' Participation in International Trade

Participation in international trade among ASEAN's SMEs is moderately active in purchasing and selling activities, as reported by González [25]. According to the latest World Bank enterprise survey, SMEs in ASEAN member states tend to engage in direct exports less frequently than larger companies. Among the eight ASEAN member states, Cambodia has the highest percentage of SMEs involved in direct exports, at 27%, followed by Malaysia at 23.5%, Laos at 17.9%, and Vietnam at 15.5%. Notably, the percentage of SMEs directly involved in exports is surprisingly low in Thailand, with only 2.2% for small enterprises and 3.4% for medium-sized enterprises.

Table 2.

Percentage of enterprises participating in exporting by size in some ASEAN member countries (%).

Countries	Percentage of enterprises exporting directly or indirectly (at least 10% of turnover)				ige of busine rectly (at lea sales)		Share of revenue is directly exported		
	S	М	L	S	M	L	S	М	L
Cambodia	10,7	19,6	59,6	6,9	19,1	26,9	6,8	16,7	26,3
Indonesia	8,9	10,7	32,7	5,3	7,9	25,2	2,9	5	11,7
Laos	14,1	6,8	17,4	12,9	5	9	7,1	2,7	4,6
Malaysia	11,2	33,8	74,8	4,3	19,2	69	2,2	7,6	30,3
Myanmar	1,3	10,7	42,6	1,2	10,7	39,6	1,2	5,3	38,2
Philippines	5,4	9,9	26,4	3,9	9	23,6	1,8	6,1	16,6
Thailand	2,2	4,5	29,5	2,2	3,4	28,1	0,8	2	18,9
Vietnam	6,4	15,4	42	4	11,5	36,1	2,2	6,6	21,6

Note: S, M, and L stand for small business, medium enterprise, and large enterprise, respectively. **Source:** Latest data from the Enterprise Surveys, available at <u>http://www.enterprisesurveys.org.</u>

Indirect export, which involves the sale of domestic intermediate goods to other firms that subsequently export them, serves as another vital avenue for SMEs to participate in international trade.

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For instance, around 12% of SMEs in Vietnam are engaged in direct exports. However, when considering indirect exports through the supply of inputs to more prominent exporters, the proportion of SMEs involved in exports increases to 27%. Notably, in industries heavily reliant on value chains, such as computers, electrical equipment, or automobiles, the number of SMEs engaged in direct exports is considerably lower than those participating in indirect exports. For instance, in the electrical and optical equipment industry, the number of Thai SMEs involved in indirect exports is twice that of SMEs engaged in direct exports. On the import side, SMEs tend to use fewer imported inputs and have lower production volumes than larger firms, indicating their reduced reliance on imported inputs to enhance competitiveness.

Table 3.

Countries		enterprises using and foreign suppl		Percentage of imported inputs			
	S	М	L	S	М	L	
Cambodia	39	43,4	94,5	25,7	29,5	90,9	
Indonesia	1,6	10,7	42,3	0,9	4,6	16,4	
Laos	26,3	41,3	94,1	16,7	31,8	93	
Malaysia	45,8	46,7	44	17,9	12,6	13,8	
Myanmar	15,5	26,2	74,3	12,4	18,3	53,8	
Philippines	23,8	53,9	77,4	15	31,6	48,6	
Thailand	4,2	3,6	7,7	1,8	1	2,7	
Vietnam	24,5	50,9	65,8	13,9	31,9	37,2	

Percentage of enter	prises by size us	sing importe	ed inputs in som	ne ASEAN member	countries (%).
r er een age er en ee	pribeb by bille a	mg mpor e	a mpate m son	не повли пенное	000000000000000000000000000000000000000

Note: S, M, and L stand for small, medium enterprise, and extensive enterprise, respectively **Source:** Latest data from the Enterprise Surveysy, available at http://www.enterprisesurveys.org.

3.2. Participating in GVCs is the Key Channel of SMEs' Internationalization

AMSs such as Malaysia, Thailand, the Philippines, and Vietnam have primarily integrated into GVCs through backward participation. This means these countries specialize in GVCs by serving as buyers of intermediate goods and then exporting the final finished products. Conversely, other AMSs, like Indonesia and Brunei Darussalam, which possess abundant and high-quality raw materials, have actively engaged in GVCs by supplying these materials to Transnational Corporations (TNCs) to produce exports. However, recent findings indicate that the foreign value-added shares of ASEAN countries have decreased, suggesting that regional production is becoming more localized due to open regional integration and development [26]. According to OECD [19] over 60% of intermediate inputs are domestically sourced in Thailand, Lao PDR, Indonesia, Malaysia, and the Philippines, which is a significant proportion. In contrast, Vietnam lags with an average percentage of 45%, while Myanmar and Cambodia have only around 10% of domestic inputs. Singapore is another country that has developed competitive local SMEs capable of manufacturing parts and providing services to MNCs.

Local firms in ASEAN countries play a significant role in GVCs, particularly in industries with robust domestic capabilities [19]. For example, the food and garments sectors stand out in Lao PDR. In the Philippines, MNEs appear to expand their use of local inputs from low-tech and high-tech industries, such as machinery, although the percentage remains relatively low. In Vietnam, inputs for the metals and electronics sectors are sourced domestically to the extent of 50%. Additionally, where Vietnam demonstrates its strength in raw materials and labor, apparel, and textiles play a crucial role. Thailand and Malaysia are notable for their advanced ability to engage in extensive local sourcing, especially in motor vehicles, equipment, and machinery. It's important to note that the involvement of ASEAN's SMEs in GVCs is predominantly concentrated in manufacturing industries, with limited analysis in the services sector.

4. Trade-Based Obstacles to SME Internalization in ASEAN

SMEs face several significant limitations in participating in international markets since they are suffering high fixed costs for exports [27, 28]. The lack of financial access, management skills, key technologies and innovation, high-quality human resources, and networks [29-31]. Non-tariff measures (NTMs) (Ramon and Epictetus, 2016), the lack of nationwide geographical presence and an inability to extend their services 24 h a day and seven days a week [32]. In the case of ASEAN, SMEs seem to be experiencing three obstacles: ineligibility to participate in GVCs, NTMs, and underperforming e-commerce.

4.1. Numerous ASEAN SMEs fail to Reach Requirements for Engaging in TNC-led GVCs

One of the primary reasons TNCs tend to rely heavily on foreign-produced inputs is the challenge of finding competent and competitive local suppliers that can meet the stringent standards required for participation in GVCs [33, 34]. These standards encompass various aspects, including quality, costeffectiveness, reliability, and more. For instance, SMEs seeking to engage in agricultural GVCs often encounter difficulties due to technological limitations and financial resources needed to obtain essential inputs like seeds, fertilizers, and agricultural machinery (World Bank, 2021). In addition, issues such as poor farm management skills, limited production output, inadequate quality control, and concerns regarding food safety further hinder SMEs from becoming preferred suppliers for TNCs [33, 34]. SMEs also lack channels to connect with potential buyers, obtain vital information about product specifications and quality requirements, and access training opportunities in advanced production techniques [31, 34]. Furthermore, the absence of collaborative networks to share experiences and learn from best practices compounds the challenges [35]. Another critical obstacle SMEs face is their limited access to credit for upgrading equipment and infrastructure, essential for improving inputs or meeting quality assurance standards [9].

Quality assurance is a fundamental requirement for SMEs looking to expand their presence in the export market. Compliance with internationally recognized standards, such as those established by the International Organization for Standardization (ISO), is a way for SMEs to demonstrate that their products and services meet established quality benchmarks [9, 36]. However, several factors impede SMEs in their quest to obtain quality certification. These include a lack of information about specific standards, difficulties in accessing technical training to meet these standards, deficiencies in business skills, insufficient economies of scale to reduce costs, limited access to effective information channels related to different standards, and challenges in meeting the requirements for third-party certification [31, 36-38]. For instance, surveys conducted among SMEs in Thailand reveal that barriers related to health, safety, and technical standards in foreign markets, such as SPS requirements, represent the most significant impediments to trade [39]. Consequently, SMEs in ASEAN member states face substantial obstacles in obtaining internationally recognized quality certifications, setting them at a disadvantage compared to larger enterprises [9, 36].

4.2. Non-Tariff Measures Remain Unaddressed Barriers for Smes' Exposure to International Trade

NTMs represent a formidable barrier that impedes the participation of SMEs in international trade [40]. The prevalence of NTMs has been on a rapid rise, and despite efforts towards tariff reduction, their impact on trade within the ASEAN region is substantial [41]. In 2015, AMSs implemented 8,237 NTMs, which surged by 15% in 2018, reaching 9,502 measures. These NTMs significantly impacted approximately 70% of the trade value within AMSs [42]. The trend continues to escalate, with data from the NTMs database of TRAINS UNCTAD revealing a further increase to 13,804 measures by December 2022, representing a staggering 45% rise compared to 2018. Among these measures, the majority are SPS and TBT, accounting for 63.6%. Thailand has the highest number of NTMs with 5,390 measures, followed by Vietnam with 2,339. Indonesia, the Philippines, and Malaysia report 1,372, 1,262, and 1,055 measures, respectively [43].

NTMs, particularly non-tariff barriers, significantly affect the competitiveness of SMEs by driving up production costs due to the need for compliance with technical standards and ongoing adjustments. In AMSs, NTMs, especially SPS and TBT measures, restrain the export capabilities of SMEs to other ASEAN markets. The coverage ratio and frequency index for NTMs in agri-food products are particularly striking, ranging from 90% to 100%. This implies that up to 90% to 100% of the value of imported goods or product lines are impacted by at least one NTM. Given that agri-food products constitute a core area for SMEs in AMSs, NTMs pose a substantial challenge. Finding solutions to meet NTM regulations, especially technical standards and quality requirements, without inflating product costs and compromising competitiveness for SMEs is a formidable dilemma. The impact of SPS measures on agri-food commodities' prices is evident, with increases reaching 116.4% in Vietnam, 94.5% in Brunei, and ranging from 49% to 60% in Myanmar, the Philippines, and Thailand [44].

In light of the legitimate intentions behind most NTMs in ASEAN, these non-tariff barriers nonetheless pose a significant challenge for SMEs regarding market access and compliance complexity [40]. As a result, NTBs have contributed to the sluggish growth of intra-ASEAN trade in recent years. Notably, these barriers are not limited to ASEAN; they also affect SMEs' access to markets outside the region. Major export partners of AMSs, including the United States, European Union, China, Japan, and Korea, maintain strict requirements regarding technical and quality standards [41].

Table 4.

NTM Туре	NTM Description	EU	US	Japan	Korea, Republic of	China
А	Sanitary and phytosanitary measures	112	2219	173	348	704
В	Technical barriers to trade	305	2703	639	688	4698
С	Pre-shipment inspection and other formalities	27	67	30	24	25
D	Contingent trade-protective measures	234	518	29	67	-
E	Non-automatic import licensing, quotas, prohibitions, quantity-control measures and other restrictions not including SPS or TBT	39	146	65	94	112
F	Price-control measures, including additional taxes and charges	-	38	45	71	19
G	Finance measures	1	1	1	1	3
Н	Measures affecting competition	2	-	3	-	9
Ι	Trade-related investment measures	-	-	-	-	3
Ν	Intellectual property	-	-	-	-	11
Р	Export-related measures	3	228	129	216	179
Total	-	723	5920	1114	1509	5763

NTMs affecting ASEAN SMEs' exports by selected trading partners in 2022

Source: Authors' compilation from TRAINS - UNCTAD NTMs database.

The United States and China have implemented a substantial number of NTMs within ASEAN, with 5,920 and 5,763 measures, respectively, making them the top countries in terms of NTMs. Followed closely are Korea, Japan, and the European Union (EU) (Table 3). While the EU imposes a comparatively smaller number of NTMs on ASEAN, it is noteworthy that the EU's regulations are widely regarded as the most stringent and complex for SMEs to comply with in meeting the EU's rigorous standards and technical requirements [45].

Additionally, data from the TRAINS – UNCTAD NTMs database reveals that ASEAN remains one of the regions subjected to a significant number of NTMs by its trading partners. For example, the EU has imposed NTMs in varying numbers across different world regions. However, ASEAN ranks as the second-highest region impacted by EU NTMs, with 723 NTMs, trailing only behind East Asia with 927



NTMs (Figure 2). Consequently, SMEs in the AMSs bear a more substantial burden compared to other regions when attempting to access the EU market.

Figure 5.

EU's NTMs affect some Regions in the world in 2022.

Source: Authors' compilation from TRAINS - UNCTAD NTMs database.

4.3. SME's ASEAN in E-Commerce: High Potentials but Significant Challenges to Go Ahead

SME participation in electronic commerce (e-commerce) has played a pivotal role in fostering the exchange of goods and services among ASEAN member nations while enhancing accessibility to the global marketplace [46]. The growth of the e-commerce sector in the ASEAN region has been remarkable, buoyed by the presence and contributions of unicorn companies such as Shopee, Tokopedia, and Lazada [32, 47]. Between 2015 and 2017, the ASEAN e-commerce market surged from USD 5.5 billion to USD 10.9 billion, demonstrating a robust compound annual growth rate of 41%. This impressive trajectory is poised to persist, with projections indicating that the gross merchandise value of e-commerce will skyrocket to USD 88 billion by 2025, surpassing several other industries in terms of economic value, including ride-hailing, online media, and online travel [48].

However, it's essential to recognize that the e-commerce landscape within ASEAN is multifaceted and exhibits regional variations. As the most significant and fastest-growing market, Indonesia commanded approximately 45% of ASEAN's e-commerce revenue in 2018. With its market expanding at an astonishing rate of over 30% annually, Indonesia's contribution is anticipated to soar beyond 60% in the coming years [48]. Simultaneously, countries like Singapore, Thailand, and Malaysia, while sharing in the e-commerce boom, are also poised for rapid growth [49]. These developments are fueled by factors such as the adoption of e-payment systems, advancements in logistics and transportation, levels of ICT (Information and Communication Technology) usage, the development of ICT infrastructure, and the regulatory environment—all of which collectively create an enabling environment for the thriving e-commerce sector in the region [49]. Moreover, as ASEAN acknowledges the significance of expanding internet access, challenges related to network coverage and electricity access, particularly in rural areas, remain pertinent and necessitate proactive efforts to ensure broader internet access and participation in the e-commerce landscape [48].

5. Enhancing SMEs' Participation in International Trade for Balanced Development in ASEAN

To address obstacles hindering ASEAN SME internationalization, AMS governments need to promote linkages between SMEs and TNCs, reduce NTMs, and leverage e-commerce platforms.



Figure 6.

An analytical framework for targeted policies in enhancing SME internalization towards the balanced development of ASEAN.

Promoting linkages between SMEs and leading companies, including TNCs or FDI firms, often requires government intervention. Government policies can play a crucial role in attracting and incentivizing these larger companies to choose SMEs as their suppliers. Additionally, efforts to eliminate barriers related to export regulations, non-tariff imports, and quotas can significantly reduce trade costs and enhance the country's prospects for participating in international trade. Simultaneously, leveraging e-commerce platforms can effectively address the challenge of SMEs' limited presence in the global market.

5.1. Strengthening TNC and FDI – SME Linkages

The policies aimed at strengthening the linkage between TNC, FDI and SMEs within ASEAN can be broadly categorized into three key groups:

Policies aiming to enhance local SME improvement. These policies are designed to enhance the capabilities and competitiveness of local SMEs. They focus on improving SMEs' productivity, absorptive capacity, and overall competitiveness. The goal is to enable local SMEs to effectively engage with FDI companies, particularly within Global Value Chains (GVCs). These policies are essential for

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creating a conducive environment for SMEs to participate in international trade and collaborate with FDI firms. ASEAN member countries have implemented various investment promotion and attraction policies at both the regional and national levels. These policies aim to attract foreign direct investment into the region. Agreements and initiatives, such as the ASEAN Declaration on Industrial Transformation to Industry 4.0 and the ASEAN Digital Integration Framework, demonstrate the region's commitment to promoting investment opportunities and increasing transparency in regional integration. The signing of the Regional Comprehensive Economic Partnership (RCEP) Agreement further underscores the region's focus on promoting trade and investment.

Policies must encourage collaboration and partnerships to foster stronger linkages between FDI companies and local SMEs. These policies facilitate knowledge transfer, technology sharing, and supply chain integration between FDI firms and local SMEs. They often involve initiatives to connect SMEs with FDI networks and create collaboration and business development platforms.

The ASEAN Strategic Plan for SME Development 2016-2025 outlines five central objectives: enhancing SME productivity, increasing access to finance, improving market access and internationalization, enhancing the policy and regulatory environment, and promoting entrepreneurship and human capital development. These objectives reflect ASEAN's multifaceted approach to SME development, addressing economic efficiency, social well-being, and sustainability.

Additionally, signing agreements and organizing summits and meetings further demonstrate ASEAN's commitment to regional integration and promoting trade and investment. These initiatives help create a more favorable environment for FDI and SMEs to collaborate, ultimately contributing to economic growth and development in the region.

At a national level, some national laws and acts can be listed below.

Country	Instrument or law	Date
Brunei Darussalam	Companies Act Order and Companies (Striking Off) Rules	Amendment
		September 13, 2018
	Insolvency Rules 2018	New law
		September 19, 2018
Indonesia	Omnibus Law	New law
		November 2020
Lao People's Democratic	Article 12 of the 2016 Law on Investment Promotion, No.	Amendment
Republic	14/Na	December 2019
-	Law on Land No. 70/ Na	Amendment August 2020
Myanmar	Tourism Law	New law
·		September 17, 2018
	Trademark Law	New law
		January 30, 2019
	Industrial Design Law	New law
		January 30, 2019
	Patent Law	New law
		March 11, 2019
	Copyright Law	New law
		May 24, 2019
	Insolvency Law	New law
		February 14, 2020
	Industrial Zone Law	New law
		May 26, 2020
Philippines	Innovative Startup Act	New law
·		April 26, 2019
	An investment circular	New circular
		October 30, 2020
Singapore	Companies Act	Amendment
Singapore		August 31, 2018
	Variable Capital Companies Act 2018	New law
	, anaste capital companies free 2010	January 14, 2020
Thailand	Electronic Transactions Act	New law
		April 14, 2019
	Personal Data Protection Act	New law
		May 27, 2019
	Cyber Security Act	New law
		May 27, 2019
Vietnam	Law on Investment 2019	Amendment
		June 17, 2020
	Y THE STATE	Amendment
	Law on Enferprises 2019	
	Law on Enterprises 2019	
		June 17, 2020
	Law on Enterprises 2019 Law on Public-Private Partnership (PPP) Investment	

 Table 5.

 National laws and actions with implications for FDI (Selected cases).

Source: ASEAN Secretariat (2021).

AMSs employ a variety of policies to attract FDI, encompassing investment facilitation and promotion measures, tax incentives, and restriction measures, among others. These policies extend beyond economic considerations and incorporate socio-environmental aspects. Improvement of Business Environment: Some ASEAN countries, such as Vietnam and the Philippines, have implemented initiatives to enhance their business environments. For instance, Vietnam issued Resolution No. 02/NQ-CP on January 1, 2020, aimed at improving the country's business environment and national competitiveness, including efforts in e-government. The Philippines enacted the Ease of Doing Business and Efficient Government Services Law in 2018 to streamline business processes and improve efficiency.

ASEAN members actively promote developing special economic zones (SEZs) to attract investment. Vietnam and Cambodia have notably implemented numerous SEZs or economic corridors. These zones offer attractive incentives and infrastructure to attract foreign investments and promote economic growth.

Governments in ASEAN are keen on attracting investment in infrastructure development, including the construction of transportation networks, ports, and other critical infrastructure elements. These investments facilitate trade and contribute to economic development and competitiveness.

In addition, ASEAN nations are working to accelerate technological development and entrepreneurship, particularly in digitalization and the Fourth Industrial Revolution (Industry 4.0). Governments encourage innovation, research, and development and adopt advanced technologies to enhance competitiveness and appeal to tech-driven industries.

5.2. Collectively Addressing NTM Challenges

Since 1977, the issue of Non-Tariff Measures (NTMs) has been consistently addressed in the agendas set by ASEAN leaders [50]. These mentions have been evident in various key agreements and initiatives, underscoring ASEAN's commitment to dealing with NTMs: (i) Preferential Trade Agreement (1977); (ii) Memorandum of Understanding on the Standstill and Rollback on Non-Tariff Barriers (NTBs) among ASEAN - EU Business Council [51]; (iii) Establishment of ASEAN Secretariat [52]; (iv) High-Level Task Force on ASEAN - EU Business Council [51] (v) AFTA Roadmap Wattanapruttipaisan [53] (vi) ASEAN Economic Community (AEC) 2015 Bernard, et al. [28] (vii) ASEAN ASEAN Secretariat [52] (viii) AEC 2025 Bernard, et al. [28]. To effectively address NTMs, ASEAN has established specialized bodies responsible for monitoring and working on the identification and assessment of NTMs. These bodies include the Coordinating Committee of ATIGA (CCA), the ASEAN Consultative Committee on Standards and Quality (ACCSQ), and the Working Group on Sanitary and Phytosanitary (SPS) Measures [51]. The inclusion of NTM issues in the ATIGA framework is further emphasized in the ASEAN Economic Community's Strategic Action Plan on Trade Facilitation 2025 [52].

ASEAN has launched several initiatives to enhance intra-ASEAN and external trading regions while facilitating trade for enterprises, particularly SMEs:

(i) Development of ASEAN's NTM database: ASEAN member states (AMS) have collaborated on building and updating the ASEAN NTM database to ensure transparency. Each AMS is required to maintain its own database of NTMs and notify any revisions or new regulations. Establishing this database is an integral part of the broader ASEAN Trade Repository (ATR) initiative, aiming to make NTMs more transparent and predictable, ultimately reducing company costs [43]. The Economic Research Institute for ASEAN and East Asia (ERIA) and UNCTAD have supported ASEAN in developing an extensive NTM database shared with AMS to populate their national commercial repositories.

(ii) Guidelines for implementing ASEAN commitments on NTMs: In 2018, ASEAN implemented guidelines to establish a unified framework for enhancing transparency and effectively managing NTMs across the region. These guidelines cover key NTM regulations in ATIGA, including notification procedures, NTM disclosure and management, NTM implementation, and elimination of NTMs. The main objective is to enhance transparency and effective management and minimize the trade-distorting effects of NTMs within ASEAN.

(iii) ASEAN Economic Community 2025 Strategic action plan on trade facilitation: This plan includes goals for addressing the trade-distorting effects of trade while reducing the cost and time of ASEAN trade. It encompasses various instruments to achieve transparency and access to NTM information, support NTM streamlining, enhance institutional capacity, and promote private sector participation. Non-Tariff Measures Cost-Effectiveness Toolkit: In September 2021, ASEAN Economic Ministers adopted the "Non-Tariff Measures Cost-Effectiveness Toolkit." This toolkit provides stakeholders access to information on current NTMs and NTB-related aspects. It encourages suitable governance validation parameters to simplify import requirements and procedures, ultimately boosting regional exports (ASEAN Secretariat, 2021).

(iv) ASEAN Solutions for Investment, Services, and Trade (ASSiST): An online voluntary mechanism established to enable SMEs to raise complaints regarding operational challenges encountered by ASEAN-based entities and businesses when implementing trade agreements in ASEAN. There is also a proposal to create a mechanism for AMS to provide feedback on new proposals or regulation amendments. Additionally, AMSs are strengthening their national trade facilitation coordination committees to oversee regulations and examine NTMs more thoroughly.

These initiatives collectively reflect ASEAN's commitment to addressing NTMs, promoting transparency, reducing trade costs, and facilitating trade for all, focusing on enhancing SME participation in the region's economic activities.

5.3. Lowering Barriers for Enterprises or Consumers to Participate in the E-Commerce Marketplace

To reduce barriers for enterprises looking to engage in the e-commerce marketplace, ASEAN achieved a significant milestone in November 2018 by signing its first regional e-commerce agreement. This agreement marked an important step forward for the region's e-commerce sector, emphasizing adopting paperless trading practices and promoting digital signatures and other electronic methods for services. Furthermore, it sought to enhance the security of personal information online and foster transparent awareness of consumer protection measures [54].

The agreement also encompassed commitments to collaborate on various aspects, including trade facilitation, ICT infrastructure, competition policy, cybersecurity, electronic payments and settlement, legal and regulatory frameworks, and intellectual property rights in the digital age. Governments must ensure fairness and transparency to encourage SMEs' participation in e-commerce, creating a trusted and predictable business environment.

In the realm of cross-border commerce, the Electronic World Trade Platform (eWTP) stands out as an innovative multi-stakeholder initiative designed to enhance the accessibility of online trading, particularly for SMEs. The eWTP serves as a public-private dialogue to establish an efficient and effective policy environment for e-commerce [55]. Consequently, this platform strives to share best practices, facilitate the development of robust e-commerce infrastructures, and pilot digital trade zones to address enduring challenges SMEs face in developing nations.

This regional commitment to e-commerce and initiatives like eWTP illustrate ASEAN's dedication to fostering an environment that promotes SMEs' active participation in the digital economy.

6. Implications for Vietnam

Vietnam's experience in addressing challenges and opportunities related to SME internationalization offers valuable lessons for the region. Vietnam has made significant strides in improving its business environment, including digitizing tax procedures, streamlining business processes, and reducing business time and costs. However, challenges, such as bureaucratic procedures, infrastructure deficits, and regulatory imperfections, hinder SMEs from fully participating in international trade.

To enhance the internationalization of Vietnamese SMEs, several critical implications can be drawn:

(i) Vietnam should develop specific programs and initiatives to support SMEs in various industries engaging in international trade and value chains. Capacity-building initiatives should focus on trade facilitation, helping SMEs maximize commercial databases and available trade information. Special support mechanisms should be designed for SMEs that qualify for Authorized Economic Operator (AEO) status to ensure they fully benefit from Vietnam's trade facilitation measures.

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(ii) Vietnam should tailor programs to SMEs, particularly in areas related to e-commerce and quality standards. Current measures promoting e-commerce and quality standards should consider SMEs' resource and knowledge constraints. Targeted measures can significantly boost overall e-commerce adoption and enhance the competitiveness of Vietnamese products.

(iii) Vietnam should continue investing in developing a strategic national program to increase SME participation in GVCs. This program should complement existing SME-GVC initiatives with donor support, establishing a network of domestic SMEs in GVCs to enhance their positions in the production network.

(iv) Governments should facilitate easy entry into the e-commerce marketplace, ensuring low barriers for enterprises and consumers to participate efficiently. Lowering barriers will promote competition and a wide range of options for businesses, including SMEs, helping them effectively engage in markets and expanding consumers' choices.

(v) Vietnam should focus on developing emerging technologies, especially in the smartphone economy and fintech, to enhance domestic and international connectivity. Mobile commerce (m-commerce) offers a practical platform for SMEs to integrate into their operations, given the widespread use of smartphones in Southeast Asia. Collaborative efforts among ASEAN members can create a favorable environment supporting regional e-commerce and preventing trade protectionism.

7. Conclusions

In conclusion, ASEAN grapples with enduring imbalances in regional and national development, spanning a spectrum of factors, from economic development and demographics to urbanization and sectoral structures. Amid this complexity, internationalized SMEs emerge as crucial drivers of economic dynamism, invigorating domestic production and job creation, thereby strengthening the socio-economic landscape of member states. However, a notable incongruity prevails: the preponderance of SMEs in terms of quantity and employment sharply contrasts with their relatively modest contributions to the GDP and aggregate export revenues of ASEAN member states.

To navigate the path towards more equitable development, ASEAN and its member nations must make concerted efforts to fortify the connections between SMEs and TNCs, dismantle NTBs that stifle SMEs' international trade engagement, and cultivate an environment conducive to e-commerce development. In the specific case of Vietnam, positioned at a pivotal juncture of opportunity, a resolute focus on trade promotion and facilitation measures becomes imperative. Simultaneously, Vietnam must bolster its national innovation ecosystem, ensuring the seamless alignment of domestic and international standards. Leveraging emerging technologies, particularly in smartphone-based economies and fintech sectors, will propel the country towards a more inclusive and balanced development trajectory. Ultimately, the imperative lies in harnessing the collective potential of SMEs, both regionally and within individual member states, as essential agents of transformation in the pursuit of balanced prosperity across ASEAN.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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