

WFE Research

Global developments in SME markets over the past decade

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Executive Summary

Small and medium enterprises (SMEs) play a vital role in the economy of many countries in the world due to their importance in growth, job creation, innovation, international trade, and balanced regional development. At the same time, they face significant challenges. One of them is access to sustainable and affordable finance, a limitation that can curtail their ability to survive and grow. The consequences of such limitation became evident during the pandemic, when cashflows dried up and many SMEs could not survive without government support. The conditions for SMEs may also worsen as monetary policy tightens and interest rates go up.

In the past decade, the WFE has produced a series of reports studying the factors that drive the evolution of SME markets across the world, the strategies that exchanges have adopted to support them, and the different initiatives that policymakers can adopt to stimulate their growth. In line with this, the purpose of the present study is to update our knowledge of the status of SME markets and to incorporate the new insights arising from the evolution of these markets after the pandemic. The report includes the results of a survey distributed to WFE members that covered quantitative and qualitative aspects of their SME markets.

Key findings

- To facilitate SME funding, 68% (49 out of 72) of stock exchanges among WFE members now offer specialised SME listing platforms or segments, featuring modified listing and regulatory requirements, reduced fees, relaxed profitability prerequisites, and smaller issuances.
- While public equity SME markets in the advanced economies remain the world's largest by market capitalisation (79%), the number of listed companies has made almost no progress in the last decade.
- In contrast, in emerging and developing countries the number of listed companies has nearly doubled from 2012 to 2022. This increase is primarily driven by the developing countries in the East Asia and Pacific region, which accounts for 49% of global SME listings. Conversely, the number of listings in the North America and Latin America and Caribbean regions has been decreasing during the same period.
- In emerging and developing countries, the market capitalisation of SME platforms has increased about thirteen-fold since 2012, reaching roughly USD 2.13 trillion in 2022. Comparing across regions, the East Asia and Pacific region also dominates in terms of market capitalisation, accounting for 90% of the total, surpassing USD 2.41 trillion by the end of 2022.

Survey results:

- Of the different benefits that SME platforms offer to issuers, the most frequent are exemptions of minimum profitability requirement (57%), a less frequent reporting schedule (33%), no minimum free-float requirement (30%), and no historical financial statements requirement (7%).
- Our analysis confirms that SME markets generally exhibit lower liquidity compared to main markets albeit with certain exceptions, making it challenging for SMEs to raise capital and attract investors.
- There's a notable correlation in the return performance between SME markets and main markets, with this trend strengthening in the post-COVID era.
- Volatility in SME markets has increased in the post-COVID period with policies such as stimulus packages amplifying market fluctuations, especially in SME markets dominated by retail investors.

1. Introduction

Small and medium enterprises (SMEs)¹ play a vital role in the economy of many countries due to their importance in growth, job creation, innovation, international trade, and a balanced regional development. They represent about 95% of the businesses worldwide and they account for more than 60% of the jobs. Formal SMEs contribute about 50% of GDP in developed economies and 35% in developing economies, according to the World Trade Organisation.² Despite their critical role in economic development, access to finance remains one of the top obstacles to their ability to survive and grow their business (Alibhai et al. 2017).

Public markets support listed companies at all growth stages. They provide access to a large pool of investors and increase the firm's creditworthiness, transparency, and visibility in the market, as well as augment its ability to raise bank financing under more favourable conditions.

Public markets also play a vital role in supporting companies with high-risk and high-return profiles, such as innovative and rapidly growing SMEs. These markets offer the potential for long-term investment, fostering innovation, value creation, and sustained growth.

In the past decade, the WFE has produced a series of reports studying the factors that are driving the evolution of SME markets across the world. The WFE (2016) report featured a collection of case studies that spotlighted the efforts of WFE member exchanges to facilitate SME access to finance. It underscored the significance of tailored listing requirements, strategies for enhancing secondary market liquidity, and a supportive ecosystem. The WFE (2017a) report, written in collaboration with the Milken Institute, provided an in-depth examination of the role of stock exchanges in facilitating SMEs' access to cost-effective finance, their strategic growth positioning, and the diversification of investor portfolios. It identified crucial factors such as minimising costs and enhancing SMEs' understanding of listing prerequisites. In partnership with the World Bank, the WFE (2018a) study identified commonalities and variations in approaches to SME markets globally. These studies equipped policymakers and market operators with valuable insights into diverse strategies employed in designing effective SME market structures.

The importance of SMEs' access to equity market financing was emphasised in the WFE (2017b) research, which identified persistent barriers and opportunities across diverse jurisdictions. This research showcased that listing decisions extend beyond financial considerations and highlighted the pivotal role of secondary market liquidity in encouraging SMEs' equity market participation.

Focusing on family businesses, the WFE (2018b) study delved into the unique attributes of family firms and their implications for engagement in equity markets. It provided recommendations to enhance the appeal of equity markets for this specific business segment. More recently, WFE published a report

¹ Throughout this report, the term "SME" is used to refer to a range of businesses that includes micro, small, and medium-sized enterprises, as defined by various criteria such as the number of employees, annual turnover, and assets owned. In some regions, this term is synonymous with "MSME" (micro, small, and medium-sized enterprise). It's important to note that the distinction between these terms can vary depending on the region and the specific definitions used by different countries or organisations.

² https://www.wto.org/english/tratop_e/msmesandtra_e/msmesday20_e.htm

on how some of the flexibilities for listed issuers that were introduced to mitigate the impact of the pandemic, could be used to stimulate SME listing in the future (WFE, 2022).

The purpose of this report is to provide an updated picture of the SME global landscape and study the recent developments in the public equity markets for SMEs.

To capture the most recent developments and activities of exchanges in the SME markets across jurisdictions, the WFE conducted a survey among its members between July 2022 and January 2023. A total of 35 responses were collected from exchanges covering markets in both developed and developing countries. The survey consisted of a quantitative part (32 responses) and a qualitative one (29 responses), hence the response rates for different questions vary. The total number of responses for each question is noted throughout.³

In what follows, we start by characterising SMEs and discussing the finance gap. Subsequently, we provide a brief overview of the development of SME markets in the world over the past five years. We then describe the listing environment for SMEs as well as the initiatives that exchanges undertake to support SMEs' access to capital. Finally, we discuss the liquidity and investor types in the SME markets.

2. Characterising SMEs

Definitions of what constitutes an SME vary across countries and regions, reflecting economic, social, and regulatory specificities. The parameters used in the definitions also reflect different policy purposes; for example, definitions based on profitability are useful for taxation purposes while the number of employees is relevant for employment legislation.

The precise definition of SMEs can be crucial, as it often serves as the linchpin for assessing firms' eligibility for targeted support from various stakeholders, including national governments, multilateral development institutions, and non-governmental organisations. It is pivotal in unlocking a wide range of support mechanisms tailored to strengthen and empower SMEs. These include various forms of financial support such as financial aid, access to credit, and loan guarantees. They may also include business advice and training services, support for technology adoption, regulatory simplifications, and specialised government programs designed specifically for SMEs.

SME definitions also play a fundamental role in the systematic collection of statistics. Clear and standardised definitions allow to effectively monitor the health and performance of SMEs over time. This monitoring is not only essential for assessing the impact of support programs but also aids in identifying areas where further assistance or policy adjustments may be required.

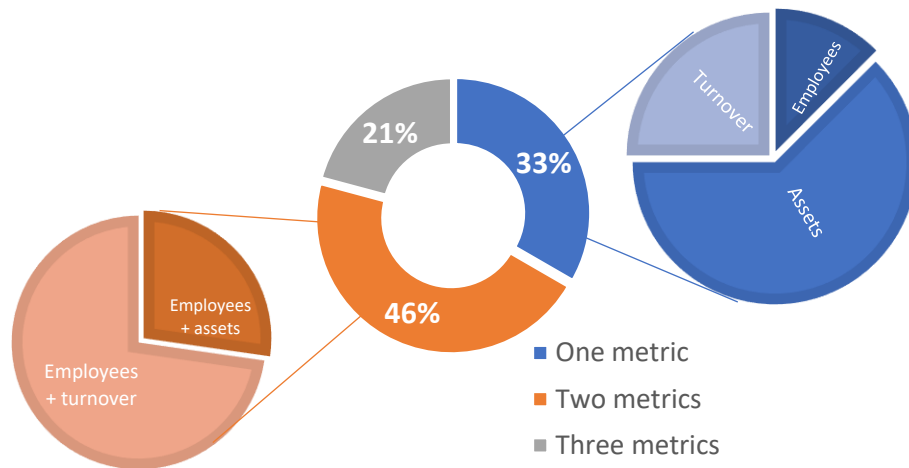
While definitions typically focus on quantitative aspects such as employee count, turnover, or size of assets, there's growing recognition that rigid quantitative criteria might not capture underlying differences adequately. This has led to calls for qualitative dimensions to complement the quantitative definitions (IFC, 2019).⁴

³ The list of participating exchanges can be found in the Annex: WFE Survey.

⁴ The qualitative dimensions of SME definitions encompass aspects such as organisational structure, the owner's influence in principal decision-making, the firm's market position, and economic and legal autonomy. For further details, see Berisha and Pula (2015).

The responses to the survey confirm that the definitions of SMEs differ among regions and countries. Some economies use only a single metric, while others combine several. Despite these distinctions, the most used combination involves assessing employee count and turnover (**Figure 1**). Among the metrics utilized, employee count is consistently prevalent, with turnover and assets playing a slightly lesser role in defining SMEs.⁵

Figure 1. Frequency of metrics used in the SME definition among surveyed exchanges



Source: WFE Survey

Despite the variations in threshold levels for these metrics among countries, there is some level of agreement. For instance, according to the International Finance Corporation (IFC), a member of the World Bank, the global norm for employee count is 250 (IFC, 2019). However, income disparities influence thresholds, particularly in low-income economies. Generally, small enterprises are defined as employing fewer than 50 persons, while micro-enterprises employ fewer than 10 individuals. These values tend to decrease alongside income levels.

The European Union (EU) has provided clearly outlined and standardized definitions of SMEs at a regional level.⁶ In the EU framework, micro-enterprises are defined as enterprises that employ fewer than 10 persons and whose annual turnover or annual balance sheet total does not exceed EUR 2 million. Small enterprises are defined as enterprises that employ fewer than 50 persons and whose annual turnover or annual balance sheet total does not exceed EUR 10 million. Medium-sized enterprises are defined as enterprises that employ fewer than 250 persons and either have an annual

⁵ According to an analysis by the World Bank, the IFC, and the SME Finance Forum, MSME-EI (2019) identifies employee count and turnover as the most common combination for defining SMEs. The second most prevalent approach considers all three metrics. However, it is important to consider potential differences in sample size and covered economies when interpreting any variations between the MSME-EI's report and our survey findings.

⁶ Detailed information can be found in https://single-market-economy.ec.europa.eu/smes/sme-definition_en

turnover that does not exceed EUR 50 million, or an annual balance sheet not exceeding EUR 43 million.

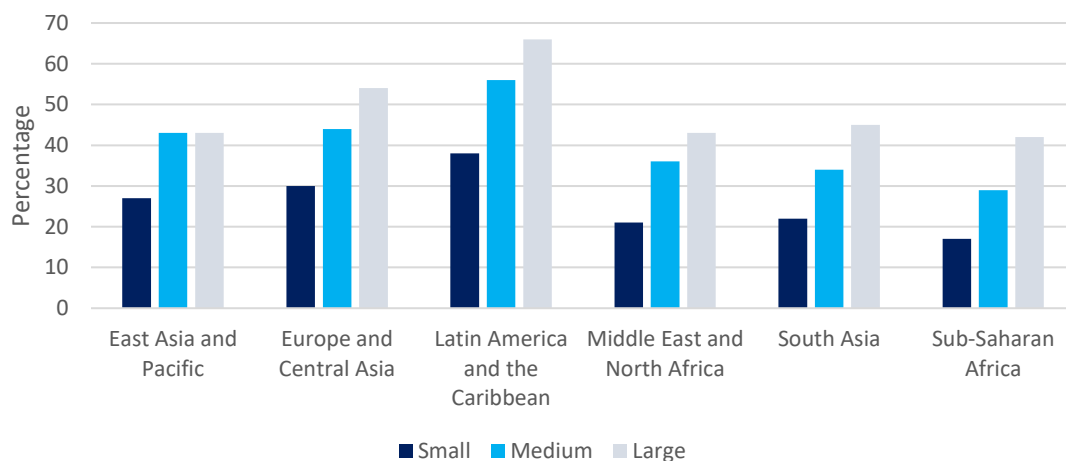
In this report, we refrain from using a uniform definition. Instead, we rely on the SME definition provided by exchanges for their jurisdictions.

3. The finance gap and the SME lifecycle

3.1. Finance gap

As of 2017, the SME financing gap (the difference between the amount of financing needed by SMEs and the amount of credit they are able to obtain from formal financial institutions) was valued at USD 5.2 trillion every year in developing countries, which is equivalent to 1.4 times the level of the global SME lending (IFC, 2017). This, in turn, amounts to 19% of the GDP in developing economies. The East Asia and Pacific region had the largest share (46%) of the total global finance gap, followed by Latin America and the Caribbean (23%) and Europe and Central Asia (15%).

Figure 2. Percentage of firms with a bank loan/line of credit by enterprise size



Source: Enterprise Surveys, (<http://www.enterprisesurveys.org>), The World Bank.

This global financing gap points to the limitations of bank financing as a traditional source of external finance for SMEs needing to raise sustainable and safe funds for their business. This limitation is illustrated further by the consistently lower usage of formal bank/line credits by SMEs worldwide, especially when compared to their larger counterparts, as depicted in Figure 2.

Despite the ease of monetary conditions and high liquidity in the post 2008-9 Global Financial Crisis (GFC) environment, in many economies SMEs are still discouraged from using bank financing because it is often expensive, complicated and demanding. High fees arise from information asymmetries,

credit processes are opaque and cumbersome, and collateral requirements are stringent.⁷ SMEs may not be able to meet requirements for bank loans because they may lack the necessary collateral and servicing the debt can strain their cash flows. Compared to large enterprises, SMEs are more credit-constrained and less likely to obtain bank loans/credits (Beck et al. 2013; Kuntchev et al. 2013; Piabuo et al. 2015). The IFC reports that, as of 2017, half of SMEs still lack access to formal credit, and the gap is even greater when micro and informal enterprises are included (IFC, 2017).

The issue is relatively more acute for SMEs in innovative sectors, those exploring new lines of business, and those with high growth potential, as these firms need larger initial capital and present higher risk. Additionally, the wider population of SMEs remains vulnerable to changes in credit market conditions and shocks. The GFC, for example, had long-lasting effects on SME access to external finance (OECD, 2022). The COVID-19 pandemic disproportionately harmed SMEs, necessitating policy solutions to ensure they continued to receive funding (IFC, 2019). This environment has resulted in an increased interest in alternative finance channels for SMEs, such as equity instruments (public equity, private equity, venture capital, etc.), debt markets (corporate bonds, securitised debt, peer-to-peer lending platforms), asset-based finance (factoring, purchase order finance), or crowdfunding.⁸

Public equity markets are a way to bridge the financing gap for SMEs, especially those at a developed stage of growth.⁹ At the G20 Finance Ministers and Central Bank Governors meeting in 2015, market-based financing was also highlighted and promoted by the European Commission (G20, 2015). Stock exchanges globally have acknowledged the importance of supporting SMEs by creating new SME-specific markets or enhancing existing ones to better meet their needs.

3.2. The SMEs lifecycle and the choice of finance

Various factors explain why SMEs choose different types of financing. The "life cycle" paradigm for SMEs suggests that different stages of an enterprise's growth require different types of financing to support the business (Figure 3). Typically, the journey begins with the inception and start-up phases, during which funding primarily stems from founders' capital and support from family and friends. During the early stages of a business, the primary focus is on establishing the company and determining its market viability. Firms may have difficulty securing loans from financial institutions during this period due to reliance on intangible assets, a lack of financial and credit history, and limited information transparency.

As the company moves into more advanced stages, additional sources of finance come into play such as bank loans, lines of credit, seed or venture capital investments, or factoring services. These financial instruments enable the company to secure the necessary funds to fuel its growth and expansion, support working capital needs, and develop its products or services further.

In the growth phase, a company is typically profitable, having already established its presence in the market. At this point, it seeks funding to expand into new markets or products, often undergoing

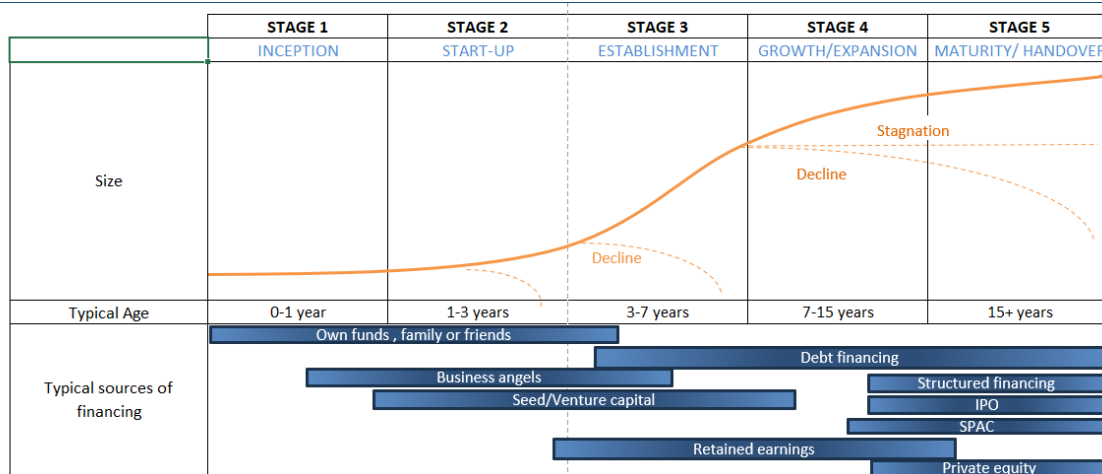
⁷ For a comprehensive examination of the factors that lead businesses to avoid bank financing, consult the following studies: Berger and Udell (2006), Harwood and Konidaris (2015), and Nassr and Wehinger (2016).

⁸ See OECD (2015) for a wide range of financing instruments with the challenges and potential risks associated with expanding financing options for MSMEs.

⁹ Financing spectrum refers to the range or continuum of financing options available to SMEs, from traditional bank loans to equity financing. See Section 2.2 for further details.

significant transformations and encountering substantial capital requirements. Firms with a proven track record of success often turn to equity financing and asset-based funding to secure the substantial, long-term capital needed for transformative endeavours.¹⁰ For instance, Rajan & Zingales (2002) demonstrated that equity financing is particularly advantageous for technology-intensive industries that require forward-looking research and development investments. This approach enables companies to issue shares or seek investments from external sources. On the other hand, asset-based financing involves leveraging existing assets as collateral to access funds.

Figure 3. The SME growth stages and typical source of financing needs



Source: Reproduced from SIX (2020)

In a comprehensive global study of 70,000 firms, Chavis, Klapper, and Love (2010) found that younger firms tend to rely less on bank financing and show a greater preference for informal financing methods. Additionally, in countries with stronger rule of law and better credit information, these younger firms lean more towards bank financing and their reliance on informal financing diminishes as the availability of credit information improves.

4. Overview of public SME markets in the world

Raising equity capital is crucial for enterprises, enabling them to expand and boost their growth potential. Typically, an enterprise can tap into this capital either by launching an initial public offering (IPO), where it is first introduced to the public and listed on the stock exchange or via a secondary public offering.¹¹ While these methods are prevalent among larger corporations, smaller businesses

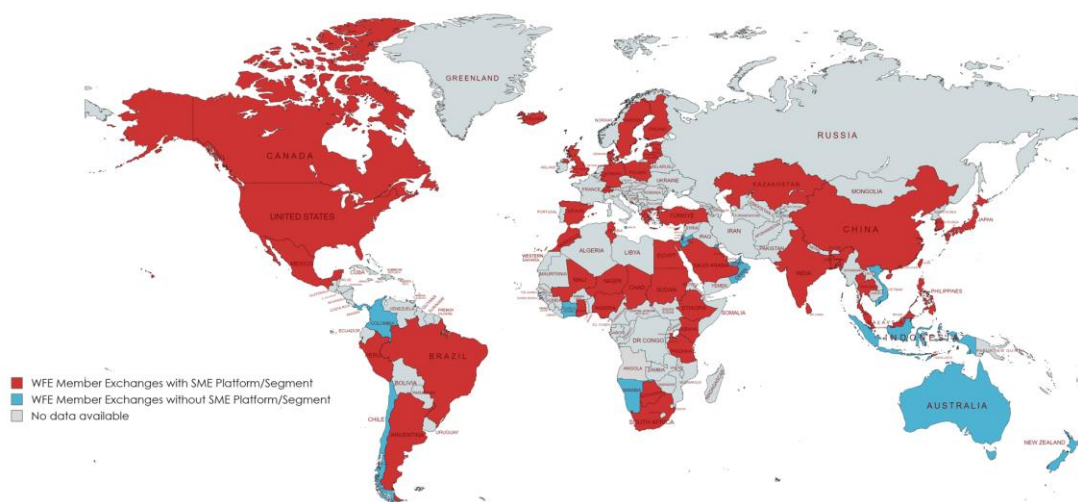
¹⁰ Depending on the sector, this funding life cycle may differ and be increasingly compressed, especially for high-growth companies in innovative or technological fields looking for capital or visibility at an earlier stage.

¹¹ A secondary public offering (SPO), also known as a follow-on offering or seasoned equity offering, is a financial process through which a company that is already publicly traded issues additional shares of its stock to the public. Unlike an IPO, which is the first time a company's shares are offered to the public, an SPO involves the sale of existing shares by the company's current shareholders, such as founders or early investors rather than creating new shares.

also require a distinct and supportive framework to access essential funding via equity markets. This section delves into an overview of the landscape and global developments within public equity markets.

Notably, 68% (49 out of 72) of stock exchanges among WFE members currently offer dedicated SME listing platforms (**Figure 4**). These platforms, some established as far back as 1996 and others introduced more recently, are tailored to enable smaller enterprises to access funding through modified listing and regulatory requirements, diminished fees, relaxed profitability prerequisites, and smaller issuances. In addition to equity platforms, exchanges offer platforms for SMEs to raise capital with other types of securities, different financing options or targeting specific segments. For example, 25% of survey respondents offer a dedicated debt market, 20% offer start-up markets,¹² and 8% offer crowdfunding platforms.

Figure 4. Exchanges with SME platforms/segments



Source: WFE Database and exchange’s websites.

SME markets constitute a significant part of the global economy. At the end of 2022, based on data from the WFE database, there were 8,057 companies listed on SME markets, boasting a total market capitalization of more than USD 2.65 trillion.

In what follows we will analyze differences in the distribution of markets by market capitalization and listings; by regions and by economic development; and by sector; as well as their evolution in the last decade. Unless otherwise stated, throughout this section percentages refer to the 26 (resp. 29) exchanges for which we have consistent listing (resp. market capitalization) data for the last 10 years.

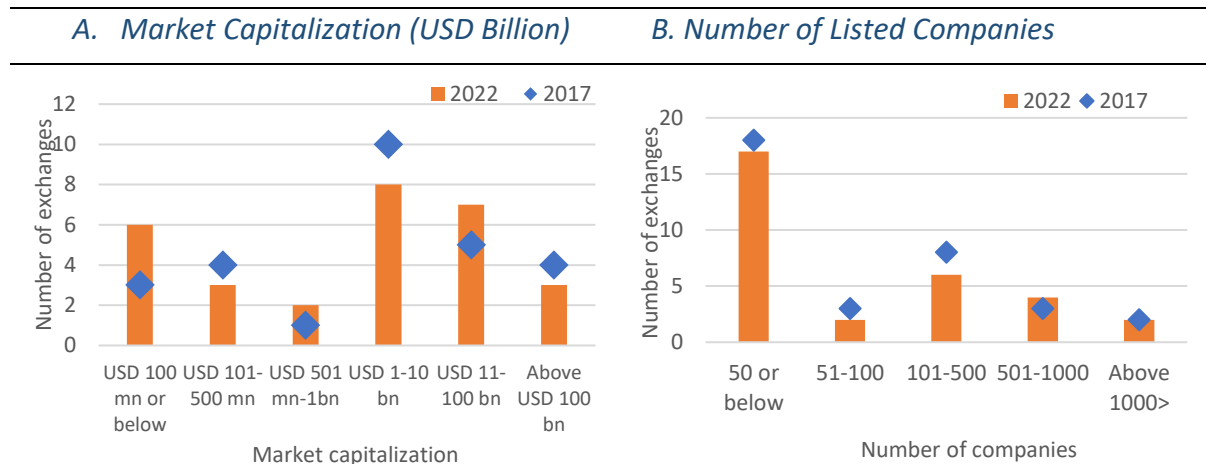
4.1. Distribution of SME platforms by listings and market cap

The distribution of SME platforms according to their market capitalization and the number of listings gives an indication of the diversity of these markets worldwide. In terms of market capitalization, for example, in 2022 about 38% of markets have a market capitalization of less than USD 1 billion, more

¹² A dedicated platform or segment within the exchange designed for early-stage companies.

than 50% are between USD 1-100 billion, and 10% are over USD 100 billion (**Figure 5**).^{13 14} While smaller and larger exchanges constitute distinct segments in terms of market capitalization, a different picture emerges when considering the number of listed companies. Specifically, two SME platforms (**TSX Venture** at the **Toronto Stock Exchange**, and **KOSDAQ** at the **Korea Stock Exchange**) each have over 1,000 listed companies, while more than half of the markets in the sample have fewer than 50. These smaller SME markets (except for the **Athens Stock Exchange** one) are almost all located in emerging or developing economies.¹⁵

Figure 5. Distribution of the Alternative/SME markets in the world



Note: The 2017 data represents the latest available information from 2016-2017 and similarly, the 2022 data corresponds to the most recent data captured from 2021-2022. The differences in the total number of exchanges between 2017 and 2022 is attributed to variations in data availability, consolidation through mergers, and the introduction of new SME markets during this period. Source: WFE Database.

In **Figure 5** we also compare the figures for 2022 with the corresponding figures for 2017. The results suggest that distribution of SME platforms by market capitalisation and by the number of listed companies has not significantly changed in the last five years.

¹³ To ensure a fair comparison that accounts for the varying sizes of exchanges, we also employed a normalisation approach. This approach involves scaling the SME market capitalisation by the total market capitalisation of each exchange to provide a standardised measure of the relative size of the SME market within each exchange. Our findings reveal that a higher concentration of exchanges lies towards the left side of the distribution, indicating a higher concentration of exchanges have a smaller SME market capitalisation relative to the overall broad market capitalisation. In over half of the cases, the ratio of SME market capitalisation to broad market capitalisation falls below 1%. Approximately 40% of these exchanges exhibit ratios ranging from 1% to 25%. In contrast, the **Shenzhen Stock Exchange** and **Cyprus Stock Exchange** stand out with ratios exceeding 25% but remaining below 55%. It is worth noting that this pattern has remained consistent over the last five years. This finding underscores the significance of considering exchange size when analysing SME market capitalisation.

¹⁴ As for the latter group, the **Shenzhen Stock Exchange** does not allow businesses to graduate from the SME market to the main market despite having a significant size. Shenzhen Stock Exchange data covers the period up to April 2021 since the Shenzhen Stock Exchange merged its SME board with its main board that month.

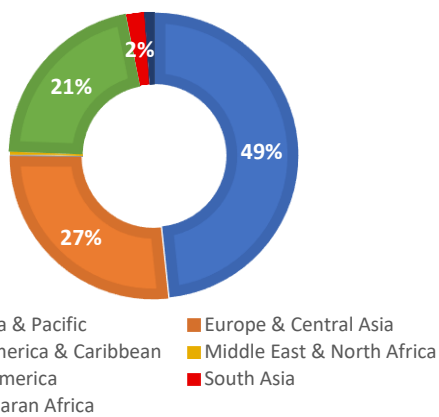
¹⁵ Various factors can influence SME market size, including the size of the underlying economy, relevant regulations and policies, financial literacy and investor bases, and the date when the market was first established. It is important to consider these factors when comparing markets between countries.

4.2. SME markets by regions and economic development

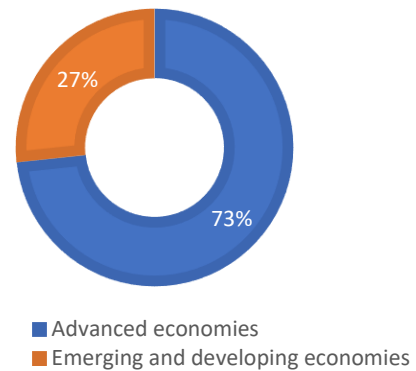
The size of SME markets varies by region and level of economic development and depending on whether we measure it by market capitalisation or by the number of companies listed.

Figure 6. Market capitalisation and number of listed companies, 2022

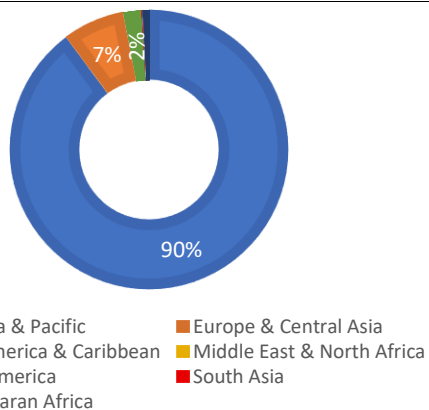
A. Number of listed companies by region



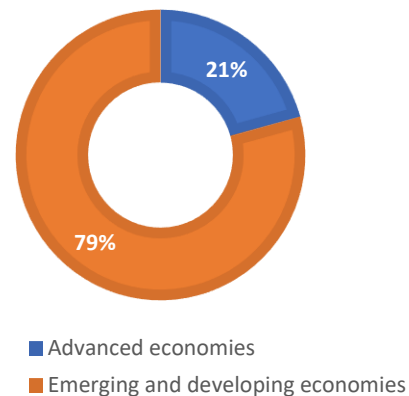
B. Number of listed companies by economy level



C. Market capitalisation by region



D. Market capitalisation by economy level



Source: WFE Database.

Of the 8,057 companies listed on SME markets at the end of 2022, about 49% (3,895 companies) were listed on markets in the East Asia and Pacific region, followed by approximately 27% in the Europe and Central Asia region (2,155 companies), and 21% in North America (1,715 companies). In contrast, the

combined share of Latin America and Caribbean, South Asia, Middle East and North Africa and Sub-Saharan Africa accounted for less than 3% (**Figure 6, Panel A**).¹⁶

The market capitalisation is distributed as follows: East Asia and Pacific accounted for 90% of the overall market capitalisation, amounting to more than USD 2.41 trillion at the end of 2022 (**Figure 6, Panel C**). Europe and Central Asia SME exchanges' market capitalisation stood at USD 191.53 billion (7% of the total), closely followed by North America with a value of USD 55.50 billion (2% of the total).

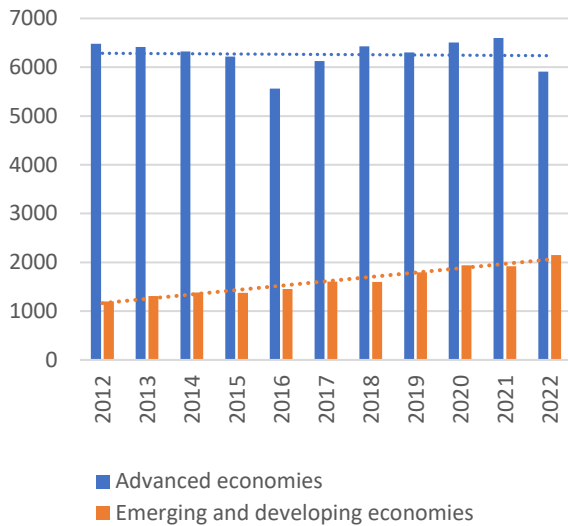
Economic development is also a critical factor: while emerging and developing economies capture around 79% of the SME market capitalisation worldwide (**Figure 6, Panel D**), the relation is inverted when we consider the number of listed SMEs, with emerging and developed economies accounting for around 27% of the total number (**Figure 6, Panel B**).

While public equity SME markets in the advanced economies remain the world's largest, the number of listed companies has made almost no progress in the last decade (**Figure 7, Panel A**). On the other hand, the market capitalisation of SME platforms in emerging and developing countries has increased about thirteen-fold since 2012, reaching roughly USD 2.13 trillion in 2022 (**Figure 7, Panel C**), and the number of listed companies has nearly doubled with a consistent positive trend, increasing from 1,195 to 2,148 (**Figure 7, Panel A**). This rapid increase is largely due to the increasing number of listings in the developing countries in the East Asia and Pacific region, which accounts for about half of the total number of listings in 2022 (**Figure 7, Panel B**). Conversely, the number of listings in the North America and Latin America and Caribbean regions has been decreasing during the same period.

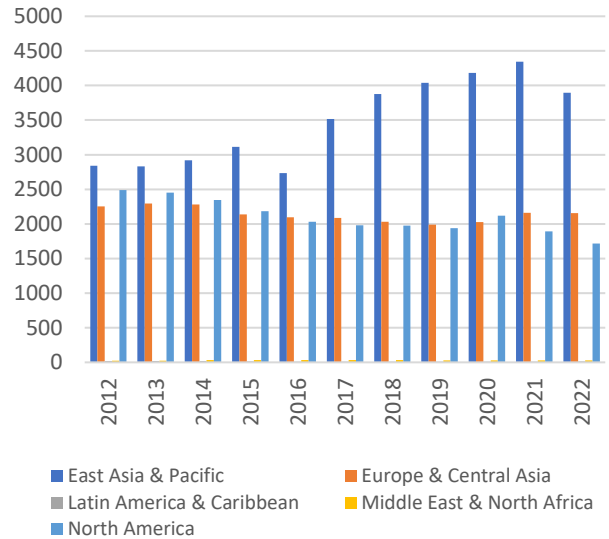
¹⁶ Regions are categorised based on the World Bank classification.

Figure 7. Development in alternative/SME markets in the last decade

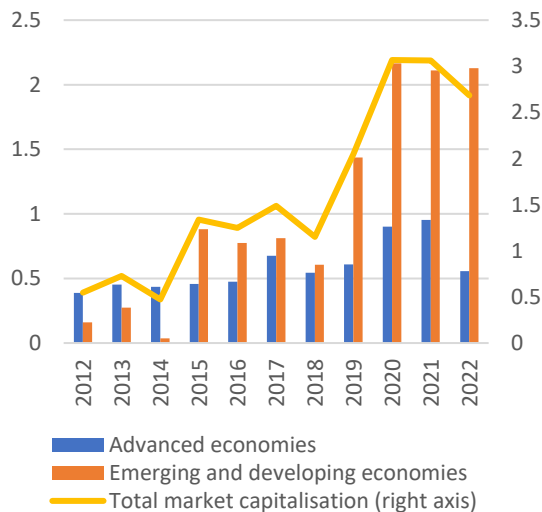
A. Number of listed companies by economy level



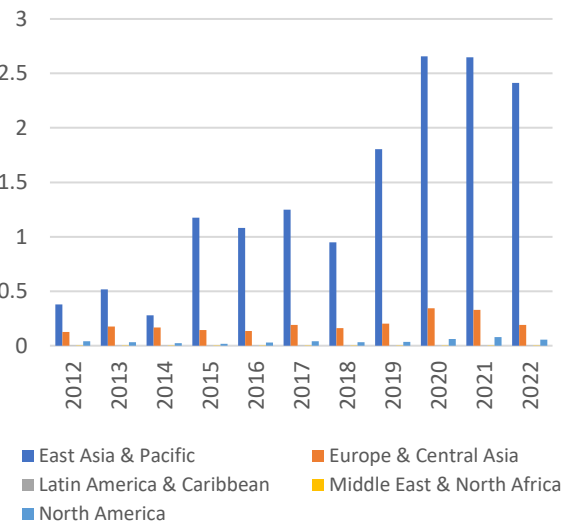
B. Number of listed companies by region



C. Market capitalisation (in USD millions) by economy level



D. Market capitalisation (in USD millions) by region



Note: We analyse 26 exchanges for which there is consistent data over the past decade. **Shenzhen Stock Exchange** data covers the period up to April 2021 since on that month its SME board merged with its main board. Source: WFE Database.

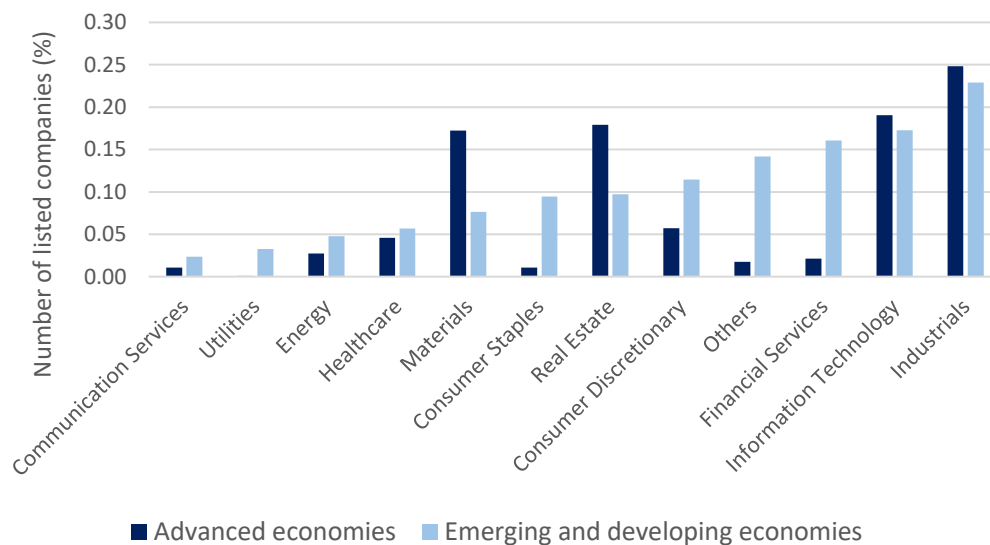
4.3. SME markets by sector

The survey asked exchanges whether their SME frameworks focused on particular types of SMEs/sectors. More than 65% of the 24 exchanges who responded to this question stated that they

do not have sector-specific strategies or targets, while the majority of those that have targets are focusing on high-growth technology companies.

Figure 8 shows the average market share in SME markets by sector. It shows that industrial and information technologies are the most commonly listed sectors for SMEs in both advanced and emerging economies. In emerging and developed economies, financial services and consumer discretionary sectors also have a significant share, while real estate has a significant share in advanced economies.

Figure 8. Average market share in SME markets by sectors



Note: Since the sector classification varies across exchanges, for the analysis we map the sectors reported by the exchange with those of the Global Industry Classification Standard (GICS). Those that do not match the GICS sector breakdown are classified as “Others”. Number of respondents is 19. Source: WFE Survey

4.4. Liquidity in SME markets

Liquidity is often cited as one of the biggest challenges facing SME markets. Lack of liquidity discourages investor participation and new listings; and increases the costs of capital-raising for listed firms. For example, companies from around the world surveyed by PwC (2018) ranked liquidity as the top priority when choosing a listing location.

Overall, liquidity remains a critical concern for SME markets and there is considerable variation in liquidity levels across different markets, with some facing significant challenges in terms of low liquidity, while others have relatively high liquidity levels. There are different ways to measure market liquidity, but a common gauge is turnover velocity. We calculate turnover velocity by dividing the annual total value of shares traded on the electronic order book by the annual market capitalisation.¹⁷ A higher ratio indicates that the market is more liquid, while a lower ratio indicates that the market is less liquid.

¹⁷ Conceptual and statistical limitations of this measure may limit the comparability across jurisdictions. For example, using end-of-period market capitalisation, which can be skewed, may make comparison difficult.

There is no single threshold that can be used to characterise a market as illiquid. The level of liquidity that is considered acceptable will vary depending on the type of security and the investor's risk tolerance. The turnover velocity ratios for 40% (11/26) of the markets covered in the survey were below 0.1, with seven of these coming from emerging and developing markets, compared with 34% in 2017. In nine markets, however, this number was over 50%, and five exchanges had turnover velocity numbers of over 100%.

5. Listing environment: barriers and incentives

5.1. Current listing requirements and recent changes

SME exchanges not only provide a platform for smaller firms to list on markets, but also adapt and modify the initial and ongoing listing requirements to cater specifically to the unique needs of SMEs. Recognising that SMEs typically represent younger companies with a comparatively shorter, or even non-existent profit history, a substantial majority of the scrutinised SME exchanges has implemented more lenient business records and profit prerequisites in contrast to those mandated for the main market listings.

For instance, in the survey, we found that about 7% of the respondents do not require SMEs to provide any historical financial statements, and 63% of them have established distinct requirements from those of the main markets (see **Table 1**). Moreover, we observed that more than half of surveyed exchanges (57%) do not stipulate a minimum profitability prerequisite for SME markets. This adjustment seeks to accommodate the distinct circumstances and realities faced by SMEs in their pursuit of market entry and growth.

However, SMEs may still find the listing requirements complex, costly, and difficult to comprehend. To tackle this challenge, many SME exchanges have adopted an advisor-driven model. SMEs can benefit from the experience of authorised advisors when it comes to navigating the complexities of listing requirements and regulatory compliance. The advisor-driven model enables SMEs to access comprehensive support in various aspects, including due diligence, documentation preparation and application, and ongoing compliance and support. These advisors assist SMEs in meeting the necessary regulatory and corporate governance standards while streamlining the listing process and reducing associated costs. This requirement also promotes transparency, safeguards the interests of investors, and contributes to the overall credibility and integrity of the SME markets.

Furthermore, acknowledging the potential financial burden and administrative challenges associated with IPO reporting and compliance for SMEs, many exchanges have taken steps to mitigate these concerns. These measures include the establishment of less frequent reporting schedules and simplified reporting requirements, as well as the relaxation of corporate governance codes and reporting/disclosure standards. The intention is to alleviate the strain faced by SMEs, enabling them to allocate their limited resources more efficiently towards core business operations and development initiatives. For instance, 33% of covered exchanges ask for less frequent reporting for SMEs.

Table 1. Listing requirements for Alternative/SME markets and differentiation from the main markets

	<u>No requirement</u>	<u>Different from the main market</u>
Minimum profitability	57%	53%
Minimum working capitalisation	40%	7%
Minimum market capitalisation	37%	53%
Minimum number of investors (number)	33%	60%
Regulator visa required	33%	3%
Minimum free float	30%	53%
Prospectus	10%	30%
Historical financial statements required	7%	63%
Threshold crossing notifications	3%	13%
Disclosure of the transactions by management	3%	7%
Accounting standards	0%	7%
Ongoing reporting requirements	0%	33%

Note: Number of respondents is 30. There may be additional listing requirements specific to certain exchanges and which are not listed here. Source: WFE Survey

Exchanges mandate minimum free float requirements to ensure sufficient trading activity and investor participation, thereby increasing liquidity in the market. Moreover, the minimum free float requirement helps dedicated SME markets attract a wider range of investors, including institutional and retail investors, by fostering transparency and creating a level playing field. However, exchanges must also consider issuers' concerns regarding the potential loss of control when determining the minimum free float levels for SMEs. To address this, many exchanges tend to adopt lower minimum free float levels for SME markets compared to main markets, striking a balance between control retention and market participation. For example, there are 9 out of 30 covered exchanges that do not require minimum free-floating for SME markets.

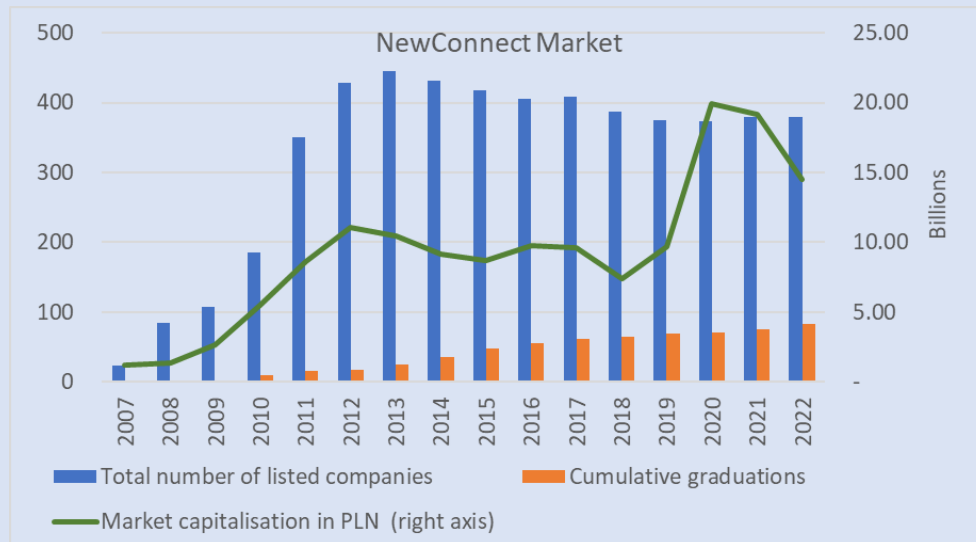
Box 1. Warsaw Stock Exchange Listing Requirements – NewConnect vs. GPW Main Market

NewConnect (NC), alternative trading system, has been operational since August 30, 2007. It is organised, overseen, and supervised by the Warsaw Stock Exchange (WSE) and is tailored for small entities, including start-ups and emerging companies. Notably, NewConnect was granted the SME Growth Market (SME MTF) status in July 2019.

NewConnect is designed for smaller businesses, allowing them to list as joint-stock companies with lower capitalisation requirements (PLN 0.5 million minimum) and less stringent financial reporting (one-year financial statements). Dilution requirements are also lower, at 15%. They require an information document approved by an Authorised Advisor.

In contrast, the GPW Main Market is for more established companies, with higher capitalisation requirements (at least PLN equivalent of EUR 15 million) and stricter financial reporting (three years of financial statements). Dilution requirements are higher, at 25%, and they need a comprehensive

prospectus approved by the competent authority, such as the Polish Financial Supervision Authority (PFSA).



Market capitalisation saw a remarkable sixteen-fold increase since 2007, reaching a substantial PLN 19.1 billion in 2022. The continuous migration of companies from NC to the main market also witnessed consistent growth. The success of NC since its establishment in 2007 can be attributed to several key factors:

- **Receptive Policies and Less Onerous Regulation:** NC's reduced entry requirements, lower costs compared to the main market, less frequent ongoing reporting, and extended timeframes for information delivery attracted issuers who found these regulations more manageable.
- **Well-Regulated Authorised Advisors:** NC had a system of well-regulated Authorised Advisors (AAs) who guided companies through the listing process and vetted them for investors. AAs faced consequences if they supported too many unsuccessful companies, ensuring quality control.
- **Regulatory Adaptations:** In response to market developments, NC underwent regulatory reforms in 2012, tailored to its phase of development and market changes. These modifications aimed to enhance transparency and safety in trading, instilling confidence in the market.
- **Stricter Listing Criteria:** The introduction of stricter criteria for new issuers affected the number of listings, emphasising quality over quantity.
- **Disclosure Obligations:** GPW enforced strict measures for listed companies violating disclosure obligations, including delisting for severe violations, and maintaining market integrity.
- **Continuous Regulatory Adaptations:** GPW continued to adapt its regulations to align with market needs and developments, ensuring the sustainability and effectiveness of NC as a trading platform.
- **Good Timing:** NC was launched at a favorable time when external conditions, including bank deleveraging during the global economic crisis, reduced financing options for SMEs. This led many SMEs to turn to NC as a viable alternative for capital.
- **Dynamic SME Base:** Poland boasts a dynamic private sector, with over 99% of its companies falling into the SME category. This provided a robust pool of potential issuers for NC.

- **Strong Retail Investor Base:** NC benefited from a large number of knowledgeable retail investors who were comfortable with risk-taking. Many of these investors were already active traders in derivative and foreign exchange markets, contributing to liquidity.

As a result of its flexibility, investor-friendly environment, and ability to adapt to changing market conditions, NC is an appealing choice for SMEs and investors alike.

5.2. Barriers and incentives to SME listings

When exchanges were asked about the main concerns that discourage SMEs from going public, losing control of the firm is the factor that most frequently appears as very relevant (**Figure 9**). While going public can provide access to capital and other benefits, it can also lead to a dilution of ownership and increased scrutiny and oversight from outside stakeholders, which can limit the control that SME owners have over their businesses and key business decisions.¹⁸ Furthermore, most of these businesses are family-owned businesses, and they tend to be cautious about sharing their business information with competitors.

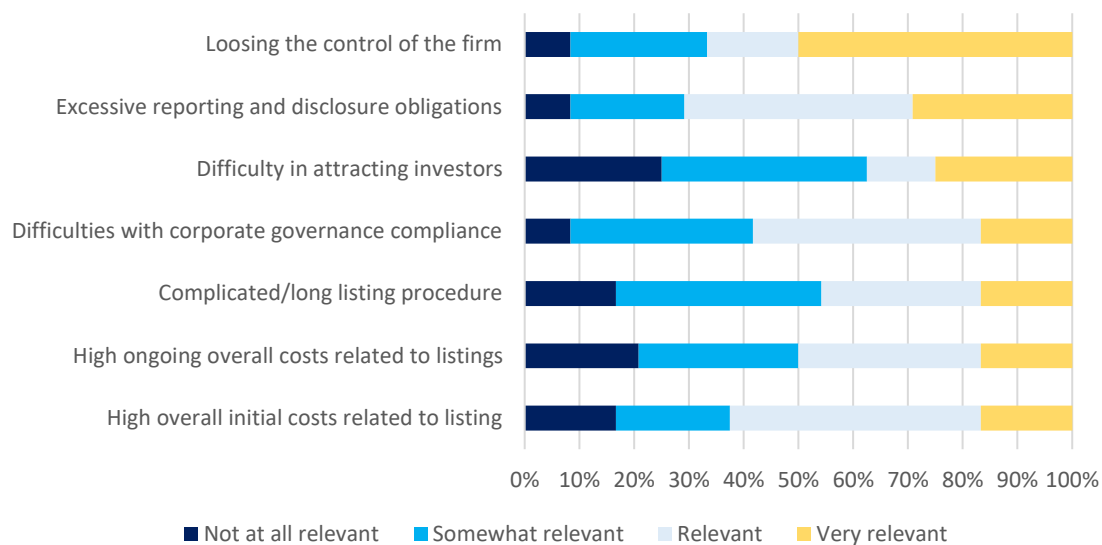
Another primary concern, considered relevant or very relevant, is the excessive reporting and disclosure requirements associated with the listing, followed by concerns about the initial and ongoing costs related to the IPO and listing. While going public can provide firms with new sources of capital and increased visibility, the costs of going public can be substantial, which vary depending on several factors, including the size of the firm, the complexity of the offering, the region, the sectors and the regulatory environment.¹⁹ These costs can be expensive, particularly for those with limited resources, as the process of preparing for and completing an IPO can be extensive. For example, in 2015, The Federation of European Securities Exchanges (2015) estimated that, in Europe, the listing cost was approximately 10 to 15% of the amount raised for initial offerings of less than EUR 6 million, and 3 to 7.5% for offerings of more than EUR 100 million.

Each country's financing and capital markets have different conditions, so the factors determining a successful SME market listing environment vary across jurisdictions. **Figure 10** illustrates the factors exchanges think are important to fostering a successful listing environment that encourages SMEs to list and raise capital. According to this figure, the top five factors (i.e. relevant or very relevant) are: i) Raising funds speedily for SMEs; ii) Support for disclosure requirements; iii) Establishing supervisory and regulatory framework; iv) Financial education for SMEs; and v) Quality, affordable advisory services.

¹⁸ See Mah  rault, 2000; Draho, 2004, Aslan and Kumar, 2011; and Meles et al., 2021.

¹⁹ See Ritter, 1987; IPOHub, 2018.

Figure 9. SMEs' concerns about going public



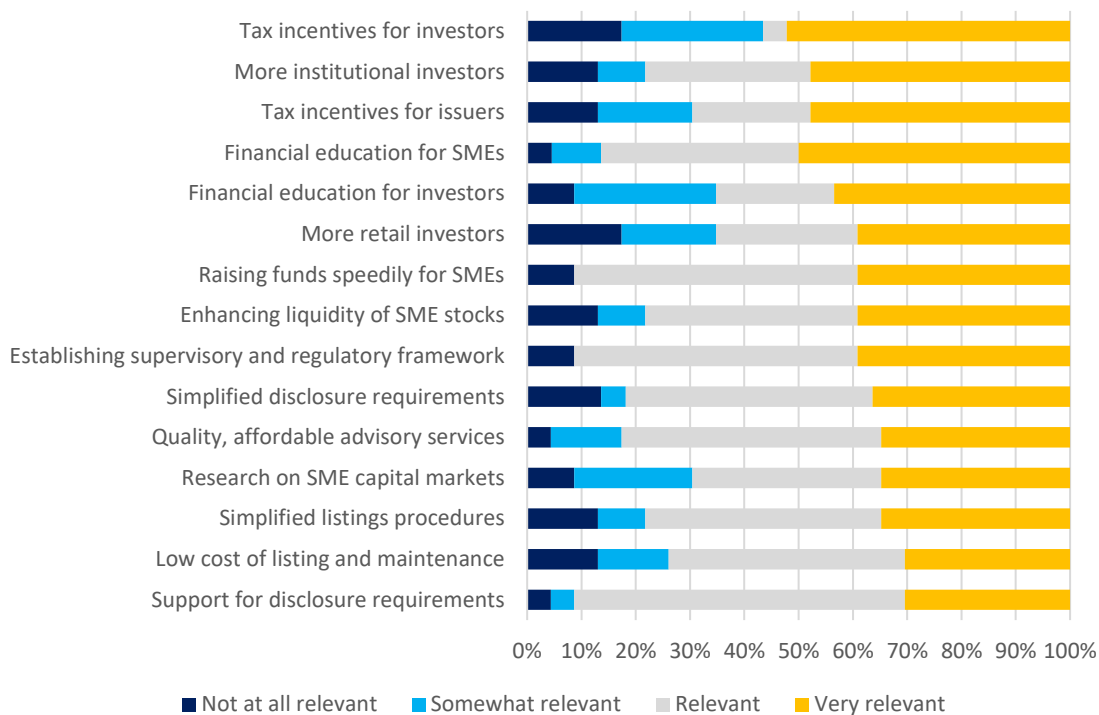
Note: The number of responses is 24. Source: WFE Survey.

Rapidly raising funds for SMEs in the capital market is crucial for their development and prosperity. With better access to capital and expedited financing, SMEs can seize growth opportunities as they emerge, such as investing in new product development, exploring new markets, or acquiring new businesses. It also enables them to handle their finances more efficiently and invest in growth. This creates trust and attracts more investors to build their reputations. According to a 2014 Asian Development Bank survey of SMEs in Asia, reported by Shinozaki (2014) fast capital raising is the topmost priority for SMEs.²⁰

Disclosure and regulatory requirements for listed companies increase transparency, attract more investors, reduce information asymmetries, encourage good governance, and increase market efficiency. This, in turn, can help to promote the growth and development of SMEs, improve their access to funding, and enhance their long-term success. However, SMEs can find the regulations complex, expensive, and difficult to understand, particularly when they are resource-constrained or lack the expertise to navigate them. More than 80% of 23 exchanges stated that it is necessary to simplify disclosure requirements and provide support for regulatory requirements to ensure a successful listing environment.

²⁰ See Shinozaki (2014) for other factors to create a capital market for SMEs between supply- and demand sides in emerging Asia countries.

Figure 10. Creating a successful listing environment for SMEs



Note: The number of responses is 23. Source: WFE Survey.

SMEs may not have the same level of awareness or understanding of the capital markets as larger companies. Respondents stated that financial education for SMEs will contribute to the successful establishment of the market. Such education may also assist SMEs in comprehending the listing process, reporting obligations, and strategies for attracting investments.

Furthermore, the majority of exchanges reported that the SME markets need more institutional investors to create an environment conducive to successful listing. This is because these markets tend to have trouble attracting institutional investors, who are the primary participants in capital markets but prefer large, liquid companies.

5.3. SME promotions and support by exchanges

Exchanges worldwide are taking proactive steps to create a more supportive environment for SMEs and they are implementing initiatives to promote SME markets directly or through their partnerships. These initiatives aim to encourage SMEs to access the capital markets, attract more investors and increase liquidity in these markets.

Support to issuers

The common approach is a creation of a dedicated SME board or platform with a more relaxed regulatory environment and simplified listing requirements that are more appropriate for the size and stage of development of SMEs. They also provide SMEs with access to a wider pool of investors, which can help them raise funds more easily and at lower costs.

In addition, exchanges are offering tailored listing requirements for SMEs. These requirements are often less onerous than those for larger companies and are designed to reduce the compliance burden on SMEs. For instance, exchanges may require SMEs to submit simplified financial statements or to provide less frequent updates on their operations.

Exchanges recognise that SMEs may not have the same level of expertise or resources as larger companies and are therefore taking steps to support their development by providing support services to help them meet the listing requirements and prepare for life as a listed company. These services may include assistance in understanding disclosure and corporate governance requirements, training programs, mentoring, and access to professional advisors.

Figure 11. Services provided by exchanges to SMEs



Note: The number of responses is 23. Source: WFE Survey

In the survey, 17 out of 23 exchanges provide assistance in understanding financial disclosure requirements to SMEs (**Figure 11**). Nearly half of them provide training in investor relations and training in the use of capital market financing. Three exchanges do not provide any special assistance to SMEs.

Support to investors

Just less than half of the covered exchanges think that institutional investors do not have enough information about SME markets to invest in them, while more than half think retail investors do not. Hence, they have implemented measures to encourage investors to invest in SMEs, such as reduced fees, research coverage, and investor training/education programs. The HKEX, for instance, has dedicated web pages for its SME market (GEM), its listed companies (including regular progress reports on new listing applications), and its trading information and news.

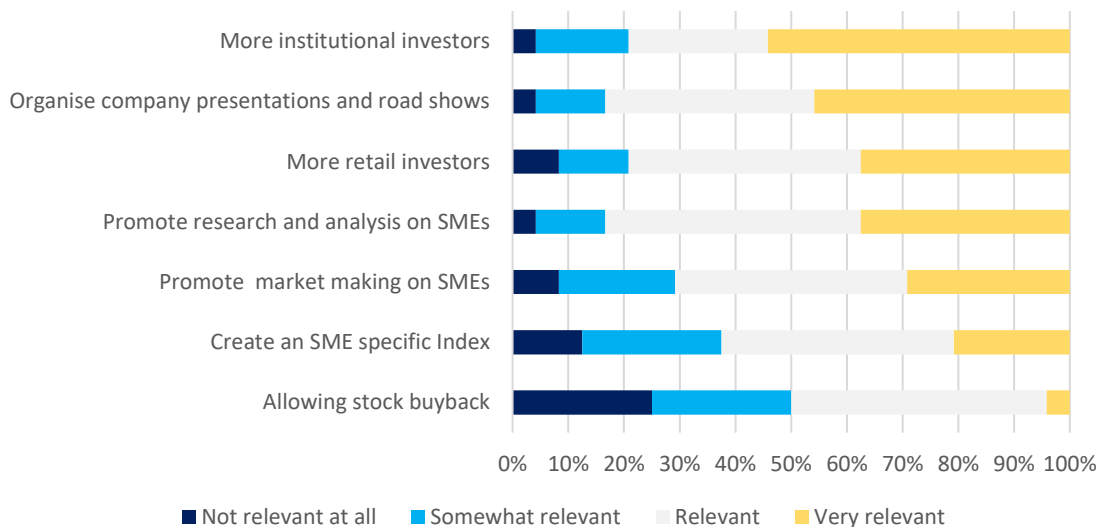
Support to improve liquidity

Lack of liquidity is one of the main concerns in the SME markets, which means that there may not be enough buyers or sellers to create a well-functioning market. This can be particularly problematic as

it can limit SMEs' ability to raise capital through equity financing. If there are few buyers for a company's shares, it can be challenging to sell new shares to raise additional capital. This can constrain the company's growth and limit its ability to invest in new projects.

There are many measures that exchanges can take to improve liquidity in these markets. By providing better incentives, market data, and regulatory frameworks, exchanges can help to create a more efficient and liquid trading environment for SMEs.

Figure 12. Improving liquidity of SME markets



Note: The number of responses is 24. Source: WFE Survey.

According to **Figure 12**, more than 80% of the survey respondents believe that promoting research and analysis on SMEs and organising company presentations and road shows can help improve liquidity. This is because providing more information about SMEs can reduce the information gap between investors and the company, which can make it easier for investors to understand the value of a company's shares and make better trading decisions. Additionally, about 80% of respondents think that attracting more investors and promoting market-making can encourage more trading activity, which is essential for creating a well-functioning trading environment. Creating SME indices can also contribute to a more vibrant and liquid trading environment.

Box 2. Supporting SMEs and start-ups: The Stock Exchange of Thailand

SMEs make up over 99.5% of all registered businesses in Thailand, and they play a vital role in bolstering the country's economy. They serve as a significant means of income distribution and stand as the largest employers in the nation. In today's landscape, Thai SMEs and start-ups confront notable impediments to their growth, with the primary challenges being limited access to financial resources, a lack of business management expertise, and the capacity for expansion.

To tackle these challenges head-on, The Stock Exchange of Thailand (SET), in collaboration with the Securities and Exchange Commission (SEC Thailand), has introduced the LiVE exchange (LiVEx) as an alternative avenue for fundraising for Thai SMEs and start-ups spanning all sectors. The goal is to prepare these enterprises for future listing on SET and mai. By using this strategy, entrepreneurs have access to more funding sources, as well as greater business knowledge and capability. As a result, SET has launched the "LiVE Platform," a valuable tool dedicated to nurturing the capacity and readiness of SMEs and start-ups.

SET collaborates with over 30 partners from diverse sectors across the country, including government agencies, the private sector, universities, and associations, to develop tailored services for entrepreneurs, SMEs, and start-ups. The LiVE Platform serves two primary functions:

Education Platform: This e-learning resource offers essential knowledge for entrepreneurs, with over 500 articles and knowledge clips covering critical topics: management, marketing, accounting, finance, fundraising, sustainable entrepreneurship, and innovation.

Scaling Up Platform: Specifically designed for SMEs and start-ups, this platform equips them for successful fundraising in the capital market. It includes e-learning resources, online assessment tools, standard contract documents from reputable law firms like Baker McKenzie, business advisory services, and matchmaking services to enhance collaborations with listed Thai companies.

Moreover, the LiVE Platform has introduced the "LiVE Academy," an entrepreneurship development initiative comprising the Mini Incubation Program, Incubation Program, and Acceleration Program. This comprehensive project supports entrepreneurs at various knowledge and readiness levels, fostering business growth, scalability, and fundraising through capital market mechanisms, including financial support (Grants) for program participants.



LiVEx: Stock Exchange for SMEs and Start-ups

LiVEx is designed for SMEs and start-ups with the aspiration to grow, but that are lacking the opportunities to access the capital market with more flexible conditions. The new exchange stands ready to push them towards the larger exchanges: SET and mai, with three main concepts:

1. Light-Touch Supervision: Ensuring that share offering and listing criteria are optimised for SMEs and start-ups.
2. Investor Protection: Setting investor types and trading methods that align with the light touch supervision principle and investment risk tolerance levels. SEC Thailand has specified investor types to suit their risk levels. Investors must be knowledgeable, experienced and financially able to accept risks, such as institutional investors, venture capital (VC), private equity (PE) and high net worth investors etc.
3. Information-Based: Requiring listed companies to comply with the disclosure of significant information, enabling investors to directly follow information on listed companies and submit any queries.

To raise funds and register in LiVEx, companies must be medium-sized SMEs or larger. In the case of start-ups, they should have joint venture capital (VC) or private equity (PE) in the company. Financial advisers are not required. However, the company must prepare financial statements according to PAE standards for the past year.

There are currently three companies listed on LiVEx, and five more were in the IPO pipeline for 2023. One of SET's primary goals is to foster long-term growth and a supportive ecosystem for Thailand's start-ups and SMEs, which play a vital role in bolstering the country's economic growth.

6. SME markets' relationship with the main markets

Liquidity

The lack of liquidity in a market is a concern for investors and companies as it results in increased trading costs and market volatility. This poses challenges for SMEs in terms of capital raising, attracting investors, and exiting their businesses with some exceptions.

Figure 13 indicates that SME markets tend to be less liquid compared to main markets in many jurisdictions. However, there are exceptions where SME markets exhibit relatively higher liquidity, such as the Korea Exchange, Japan Exchange Group, Hong Kong Exchanges and Clearing, Nasdaq Nordic and Baltics in advanced economies, and Bursa Malaysia and The Stock Exchange of Thailand in emerging and developing economies. These findings suggest that there are variations in liquidity levels across different jurisdictions.

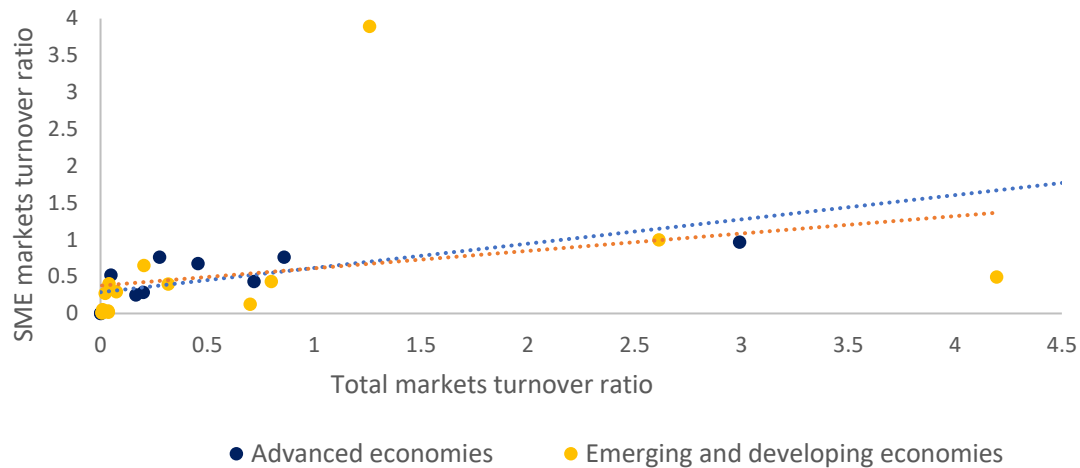
Overall, the lower liquidity in public SME equity markets creates obstacles for SMEs in terms of raising capital, attracting investors, and executing exit strategies. It underscores the importance of addressing liquidity concerns to foster a more supportive environment for SMEs and enable them to thrive in the public equity markets.

Market return and volatility

Globally, there is a strong correlation (average of 53%) between the performances of companies in the SME markets and broader markets (**Figure 14, Panel A**). These markets tend to move in the same direction, and this trend has become more prominent in the post-COVID period (average of 61%). This correlation may be due to changes in economic policy and investor sentiment that affect both markets. SMEs have historically been viewed as a potential source of diversification benefits for investors, as they may not move in lockstep with larger, more established companies. However, the

increasing correlation between SME markets and main markets suggests that the benefits of diversification through SMEs may be diminishing.

Figure 13. Liquidity in SME markets and main markets

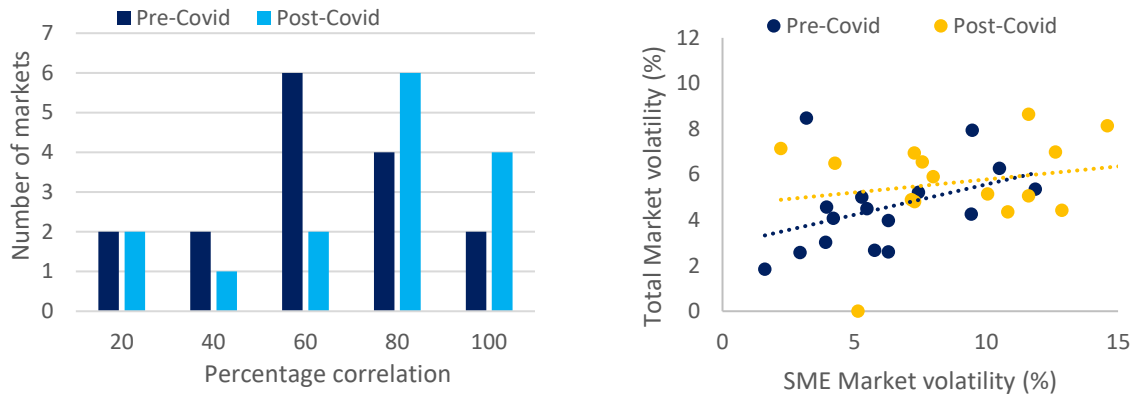


Note: To measure liquidity, the annual total value of shares traded on the electronic order book is divided by the annual market capitalisation for 2021. We assess 26 exchanges based on data availability, encompassing 11 advanced economies and 15 from emerging and developing economies.
Source: WFE Statistics

SME markets are more volatile and carry higher risk than larger companies, as evidenced in the **Figure 14, Panel B**. The post-COVID period has seen an increase in the volatility of SME markets, with small cap stocks being more sensitive to economic fluctuations. For example, the pandemic has led to economic uncertainty and business closures or reduced operations, especially in small enterprises. Governments worldwide have implemented policies such as stimulus packages for retail investors and low-interest rates to mitigate the pandemic's economic impact. These policies have significantly affected the stock market, leading to increased volatility, especially in the SME markets that retail investors dominate.

Figure 14. Distribution of the correlation and volatility of the SME market returns and total market returns

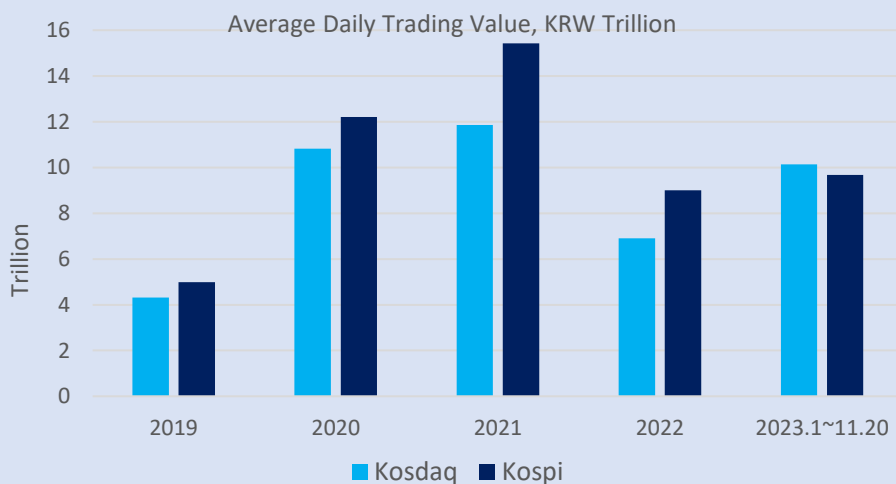
A. Distribution of the correlation between SME market and total market returns B. Volatility of SME market return and total market return



Note: Panel A shows the distribution of correlation between SME market returns and total market returns. Panel B shows volatility of market earnings. Source: WFE survey.

Box 3. Liquidity in the Korea Exchange

The **Kosdaq** market, primarily focused on SMEs, exhibits robust liquidity, with a daily average trading volume of nearly KRW 10.1 trillion (as of January 1 to November 20, 2023). Notably, in 2023, it has surpassed the trading volume of the main market **Kospi**, which stands at KRW 9.7 trillion. The success of Kosdaq can be attributed to several key factors:



- **Robust New Listing Pipeline**

The Kosdaq market boasts 1,684 listed companies (as of November 21, 2023) from diverse industry sectors, offering investors a wide array of investment opportunities. Moreover, the market is garnering significant attention from investors thanks to its rich pool of promising innovative companies driving future growth, such as those in the EV battery sector.

- Active Participation of Retail Investors**
 Approximately 80% of trading in the Kosdaq market is conducted by retail investors. A rich portfolio of tech and growth stocks in the market is catering to diverse investment demands from the investing public.
- Additional Liquidity Provision by Market Makers**
 While the overall market exhibits robust liquidity, there are still illiquid stocks, particularly among small caps. Presently, a total of seven market makers are supplying liquidity for 448 issues, actively supporting participants in executing their trades.
- Efforts to Attract Diverse Investor Liquidity**
 The exchange is exerting various efforts to attract liquidity from a diverse range of investors including domestic and foreign institutions such as long-term funds. As part of the initiatives, they identified promising companies with outstanding technological prowess as ‘Rising Stars,’ and launched the **Kosdaq Global** segment – a league of top-tier companies. They provide corporate IR support for such names, aiming to enhance their visibility among institutional investors.

7. Investor types in the SME markets

Numerous studies have scrutinised the investor composition of SME markets, with a focus on the extent of retail investors' involvement in trading activities. For example, Ivkovic and Weisbenner (2005) find that U.S. households exhibit a strong preference for local and emerging investments.

Figure 15. Distribution of retail share (trade volume %) in SME markets



Note: The plot displays data for the 16 exchanges that replied to the question about investor types, spanning from 2017 to 2021. Source: WFE Survey.

In the WFE survey, 16 exchanges provided information about the split between institutional and retail participation in their SME markets. In this sample, SME markets tend to exhibit predominant retail

investor participation, as illustrated in **Figure 15**. This figure depicts the distribution of retail share (measured by percentage of trade volume) across these SME markets, encompassing developed, emerging, and frontier economies. While a few exchanges, such as those in **Mauritius** and **Tanzania**, observed lower retail participation (under 30%), the majority of respondents (75%) reported retail investors driving over 70% of trading volume in SME markets. Furthermore, a comparison with the 2017 distribution indicates an increase in the number of SME markets with a high retail share.

Box 4. Nasdaq First North Growth

Nasdaq First North Growth Market serves as a marketplace for emerging companies seeking access to the public market. With almost 550 growth companies currently listed, it has been a pivotal platform for Nordic and international entrepreneurs for more than 15 years, facilitating their access to growth capital for business development and expansion. Remarkably, Nasdaq First North Growth Market stands as Europe's premier SME listing venue, surpassing its competitors, including Euronext and the London Stock Exchange, by welcoming a higher number of companies in 2022.

What makes Nasdaq First North Growth Market stand out in a European context is its ability to list small and medium-sized companies. Most of the new listings on First North are of companies with a market cap below EUR 600 million, a distinction that can't be found elsewhere in Europe. There is also a well-functioning eco-system of advisors, micro-cap investors and other stakeholders that makes it possible for smaller companies to list in the public market.

Companies can initiate their public journey on Nasdaq First North in Europe, progress to First North Premier, and eventually join Nasdaq main markets, whether in the Nordics or New York. Impressively, over 120 companies have transitioned from First North to the main markets, with their market capitalisation more than doubling on average since their initial listing.

An analysis carried out by Nasdaq on data from 2014 to 2019 that includes 3,648 Swedish companies, either listed on First North Stockholm or unlisted with sales of SEK 10–500 million, shows that SME companies listed at Nasdaq First North Growth Market outperform its non-listed peers significantly in terms of employment rate and revenue growth. During the study period, the publicly traded companies in the study created more than twice as many jobs and outgrew the unlisted peers by more than 200%.

Nasdaq research strongly indicates that a listed company's ability to fund business needs, enhance productivity, or fulfill business strategies, in combination with an expansion of the shareholders who might have higher expectations on returns, seems to increase the company's ability to grow its business and impact employment positively. The access to the capital market also reduces the economy's reliance on bank lending and enables companies to diversify both the sources of the capital they use and the term over which they allocate funding.

Sweden, as per the European Securities and Markets Authority (ESMA), has emerged as the leading SME market in Europe, surpassing the UK, Italy, and France in both trading volumes and market capitalisation, thanks to Nasdaq First North Growth Market. There is a strong connection between a high proportion of retail trading and a high IPO-activity in the SME segment. The Nordic markets have a uniquely high retail participation with over 30% of the First North markets.

8. Conclusion

SMEs play a critical role in economic development, but access to finance can limit their ability to grow their business and, in extreme situations, to survive. The persistent global financing gap of SMEs points to the limitations of bank financing, as a traditional source of external finance, and has resulted in an increased interest in alternative finance channels such as equity instruments. Public equity markets act as a solution for addressing the funding shortfall for SMEs, offering access to extensive investment resources and bolstering creditworthiness, market transparency, visibility, and the capacity to secure bank financing and manage debt. The last two decades have seen stock exchanges create or improve SME markets worldwide, and there are currently 49 exchanges among WFE members with SME listing platforms/segments.

The market capitalisation of global public equity in the alternative/SME sector has increased five-fold since 2012, surpassing USD 2.65 trillion in 2022, with a concurrent upward trajectory in the number of listed companies, predominantly driven by remarkable expansion in emerging and developing markets.

This study explores the dynamic landscape of SME markets, important for exchanges to effectively tailor their policies and incentives.

In our analysis of the relationship between SME markets and the broader main markets, we focused on three key parameters: liquidity, market return, and volatility. Our findings indicate that SME markets generally exhibit lower liquidity than their broader counterparts, albeit with certain exceptions. A less liquid market makes it difficult for SMEs to raise capital and attract investors. Furthermore, there is a pronounced correlation in the return performance between SME markets and the broader markets, a trend that has been strengthened in the aftermath of the COVID-19 pandemic. It's also noteworthy that volatility in SME markets has surged post-COVID, with policies like stimulus packages amplifying market fluctuations, especially in SME domains dominated by retail investors.

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10. Annex: WFE Survey

We designed a survey to gather information on SME activities and exchange initiatives that support alternative/SME markets across different jurisdictions. The questionnaire was distributed among WFE members and affiliates between July 2022 and January 2023. It comprised two sections: the first section gathered qualitative information, while the second section focused on quantitative data.

We received 35 responses, 10 from advanced economies and 25 from developing economies. The responses came from all regions, with 16 from EMEA, 13 from Asia-Pacific, and 6 from the Americas. Please see the list of respondents in the following page.

Exchanges that participated in the survey

Exchange	SME/Alternative market(s)
Bolsa de Valores de Colombia (nuam)	<i>a2censo (crowdfunding platform)</i>
Bolsa de Valores de Lima (nuam)**	<i>Mercado Alternativo de Valores (MAV)</i>
Bolsa Mexicana de Valores	<i>Sociedad Anónima Promotora de Inversión Bursátil</i>
Bolsas y Mercados Españoles (BME)*	<i>BME Growth</i>
Borsa Istanbul	<i>BIST Emerging Companies</i>
Bourse de Casablanca	<i>Marché Alternatif</i>
Bursa Malaysia	<i>ACE Market, LEAP Market</i>
Cboe Canada*	<i>Neo Exchange</i>
Colombo Stock Exchange	<i>Empower Board</i>
Cyprus Stock Exchange	<i>Emerging Companies Market-Cyprus</i>
Dar es Salaam Stock Exchange*	<i>Enterprise Growth Market Segment (EGMs)</i>
Deutsche Börse	<i>Scale</i>
The Egyptian Exchange	<i>Small & Medium Enterprises Market</i>
Hong Kong Exchanges and Clearing Limited	<i>GEM</i>
Indonesia Stock Exchange	<i>Acceleration Board</i>
Japan Exchange Group	<i>JASDAQ, MOTHERS</i>
Johannesburg Stock Exchange (JSE)**	<i>Alternative Exchange (Alt X)</i>
Kazakhstan Stock Exchange	<i>Alternative Market</i>
Korea Exchange	<i>Kosdaq</i>
London Stock Exchange Group	<i>AIM</i>
Malta Stock Exchange**	
Nasdaq Nordics†	<i>Nasdaq First North</i>
National Stock Exchange of India	<i>SME Emerge</i>
New Zealand Stock Exchange (NZX)	
Nigerian Exchange	<i>The Growth Board</i>
Palestine Exchange*	<i>Second Market</i>
Philippine Stock Exchange	<i>SME Board</i>
Saudi Exchange (Tadawul)	<i>Nomu - Parallel Market</i>
Shenzhen Stock Exchange*	<i>SME Board</i>
SIX Swiss Exchange*	<i>Sparks</i>
Stock Exchange of Mauritius	<i>Development & Enterprise Market</i>
The Stock Exchange of Thailand	<i>mai, Live Exchange (LiVEx)</i>
Taipei Exchange	<i>Emerging Stock Market)</i>
TMX Group Limited	<i>TSX Venture</i>
Warsaw Stock Exchange	<i>New Connect</i>

* The exchange participated solely in the quantitative segment of the survey,

** The exchange contributed solely to the qualitative segment of the survey.

† This includes Copenhagen, Helsinki, Iceland, Riga, Stockholm, Tallin, and Vilnius markets.