Policy Toolkit for Strengthening FDI and SME Linkages

OECD

Policy Toolkit for Strengthening FDI and SME Linkages

Please cite this publication as:
OECD (2023), *Policy Toolkit for Strengthening FDI and SME Linkages*, OECD Publishing, Paris, https://doi.org/10.1787/688bde9a-en.

ISBN 978-92-64-52288-6 (print)
ISBN 978-92-64-47641-7 (pdf)
ISBN 978-92-64-55101-5 (HTML)
ISBN 978-92-64-52760-7 (epub)

Photo credits: Cover © Nur Chusaini/iStock/Getty Images Plus

Corrigenda to publications may be found on line at: www.oecd.org/about/publishing/corrigenda.htm.

Foreword

International investment and trade in global value chains (GVCs) have experienced major disruptions from the COVID-19 crisis and Russia's war of aggression against Ukraine, impacting on growth, productivity and well-being across the globe. Added to these challenges are growing geopolitical tensions, environmental challenges and inequalities within and across countries, as well as other megatrends, such as the digital transition and demographic changes, which are all, collectively, strengthening the spotlight on the need for more resilient, sustainable and inclusive growth pathways.

Boosting productivity, which has slowed across the OECD in recent decades, and innovation will be essential, not least for small and medium-sized enterprises (SMEs), who account for around two-thirds of jobs in OECD countries but typically have significant technology and knowledge gaps relative to their larger peers, in particular foreign-owned firms. Yet, foreign direct investment (FDI) can serve as a source of knowledge and capital for domestic SMEs, and for the places where investment is made if well embedded into local economy. Partnerships with a strong base of domestic firms can reinforce productivity and innovation of foreign-owned firms too.

Fully harnessing the potential of FDI-SME linkages requires conducive policy and institutional frameworks that can leverage existing, and attract new, quality FDI, while also improving SME performance and capabilities, and strengthening spillover channels. The OECD with support of the European Commission (EC) is conducting a multi-year project to advise national and subnational governments on developing and strengthening FDI-SME ecosystems that can drive resilient, sustainable and more inclusive growth. This policy toolkit is the main output of the first phase of that project and includes two parts.

Part I provides a conceptual framework and a set of diagnostic tools to assess the enabling conditions and diffusion channels through which FDI impacts SME productivity and innovation (Chapter 1). It further provides a framework for the assessment of policy, regulatory and institutional settings to help governments identify priority reforms that strengthen FDI and SME linkages and their contribution to productivity and innovation (Chapter 2). The tools and principles presented in Part I build on the lessons learnt from the in-depth pilot country assessments conducted for Portugal and the Slovak Republic, as well as on the analytical work developed in Part II.

Part II provides a mapping of the institutional environment that governs FDI-SME policies across the 27 EU Member States, including the organisational structure, role and responsibilities of the various public institutions involved (Chapter 4). It presents a typology of governance frameworks and sheds light on inter-institutional coordination mechanisms and policy evaluation practices, which are essential elements of a conducive institutional environment. Chapter 5 reviews the mix of policy measures that is currently in place to foster FDI-SME linkages across the 27 EU Member States.

This Toolkit complements the OECD FDI Qualities Policy Toolkit but provides more attention on the role of SME ecosystems and policies to enable FDI-SME linkages, attract investment and increase productivity and innovation. It further contributes to OECD's effort to support SMEs' integration in GVCs and scaling up. The Toolkit was jointly developed and approved by the OECD Committee on SMEs and Entrepreneurship and the OECD Investment Committee and contributes to their respective Programmes of Work.

Acknowledgments

This Policy Toolkit was jointly produced by the OECD Centre for Entrepreneurship, SMEs, Regions and Cities (CFE), led by Lamia Kamal-Chaoui, and the OECD Directorate for Financial and Enterprise Affairs (DAF), led by Carmine Di Noia. The Policy Toolkit was approved by the OECD Committee on SMEs and Entrepreneurship (CSMEE) and the OECD Investment Committee (IC). It also benefited from consultations with the OECD Regional Development Policy Committee (RDPC) and the European Commission (EC)'s Directorate-General for Regional and Urban Policy (DG REGIO).

The Policy Toolkit is the main output of the first phase of a multi-year OECD project conducted with DG REGIO's support to develop policy recommendations on how national and subnational governments can strengthen FDI-SME linkages and increase the potential for productivity and innovation spillovers to local economies.

Sandrine Kergroach, Head of the SME and Entrepreneurship Performance, Policy and Mainstreaming Unit (CFE), and Martin Wermelinger, Head of the Investment Qualities and Incentives Unit (DAF), coordinated the overall project and supervised the development of the Policy Toolkit. Céline Kauffmann, Head of the Entrepreneurship, SME and Tourism Division (CFE), and Ana Novik and Stephen Thomsen, respectively Head and Deputy Head of the Investment Division (DAF) provided guidance.

Part I (Policy Toolkit) including Chapter 1 on the "Conceptual framework and diagnostic tools" and Chapter 2 on "Tools for policy, regulatory and institutional assessment" were prepared by Stratos Kamenis (DAF). Thanks are also due to José Enrique Garcilazo (CFE), Fares Al Hussami (DAF) and Marco Marchese (CFE) for specific comments on the conceptual framework.

Part II (EU country approaches to FDI-SME policy) was prepared by Stratos Kamenis (DAF) and Chiara Petroli (CFE), who respectively authored Chapter 4 on "The institutional environment and governance of FDI-SME policies" and Chapter 5 on "The policy mix for strengthening FDI-SME linkages and spillovers". Stratos Kamenis and Chiara Petroli coordinated the policy and institutional mapping with more than 100 institutions across the 27 EU Member States. Thanks are due to Polina Knutsson (SDD), Juan Felipe Rodrigo Lopez (CFE), Oualid Mokhantar (CFE), Takashi Yukizawa and Thanh Tran for the collection and analysis of policy and institutional information.

Shayne Maclachlan and Pilar Philip (CFE) helped prepare the report for publication. Heather Mortimer Charoy (CFE) and Angèle N'Zinga (DAF) provided project and administrative assistance.

Table of contents

FIGURES

TABLES

BOXES

Executive summary

This Policy Toolkit offers advice to national and subnational governments on how to increase productivity and innovation spillovers from foreign direct investment (FDI) to domestic small and medium-sized enterprises (SMEs) and the local economy. It provides a conceptual framework for understanding the main enabling conditions and channels of FDI and SME spillovers and a set of diagnostic tools to assess potential in countries and regions. It also provides an assessment tool for the effectiveness of policy and institutional frameworks enabling FDI-SME linkages, with a typology of policy initiatives that can increase the impact of FDI on local productivity and innovation. This typology is derived from a mapping of institutions and policies across the 27 EU Member States and an in-depth pilot assessment of FDI-SME ecosystems in Portugal and the Slovak Republic.

Why a policy toolkit for harnessing FDI-SME linkages and spillovers?

Building back better after the COVID-19 crisis, enhancing resilience to future shocks, achieving a net zero transition and reducing inequalities will require higher productivity and more innovation, requiring, in turn, policies and enabling environments that foster greater diffusion of knowledge, technology and skills across heterogeneous regions. As firms and places look for new drivers of competitiveness and resilience within shifting global value chains (GVCs), strengthening FDI-SME ecosystems is key. Beyond its direct contribution to capital and employment, quality FDI can benefit host economies through knowledge and technology spillovers that increase productivity of domestic SMEs. FDI can also transmit new and more sustainable and responsible standards in business practices to SMEs in their value chains. In turn, SMEs and their innovation capacities are an important determinant of FDI location decisions, since foreign investors often choose specific locations based on the quality of local suppliers and the performance of SMEs. Resilient, reliable and innovative SMEs have become a strategic asset in multinationals' investment and due diligence strategies.

What can governments do to build vibrant FDI-SME ecosystems?

Even if countries or regions attract quality FDI and host highly performing SMEs, FDI-SME spillovers may not materialise automatically.

Besides economic and market conditions, public policies and institutional arrangements play an important role in fostering knowledge and technology diffusion from FDI to local economies. A broad mix of policies can increase the magnitude of spillovers, by targeting FDI flows and characteristics, the absorptive capacity of SMEs, or some structural, economic and geographical factors (e.g. regional inequalities, or the presence and size of industrial clusters). Other public policies can also reinforce more specifically the FDI-SME spillover channels by targeting value chain linkages, encouraging strategic partnerships, easing labour mobility, or promoting competition effects.

This broad range of policies is typically implemented by multiple institutions operating at different levels of government (national and/or subnational), and across different sub-national dimensions, as well as at the intersection of investment, SMEs and entrepreneurship, innovation and regional development policies.

This Toolkit identifies the following strategic objectives for policy intervention:

- **Improving the governance framework for FDI-SME policies.** Efficient co-ordination and alignment among the multiple institutions involved in the design and implementation of FDI-SME policies is key to reducing information asymmetries and transaction costs. The design of coordination mechanisms (e.g. formal or informal, top-down or bottom-up) should be carefully tailored to national contexts and their overall governance systems (e.g. federal versus central). Because FDI-SME policies can be introduced by various levels of government, including at the regional and local levels and including between sub-national governments, robust multi-level governance arrangements are instrumental in effective implementation. National strategies or action plans on investment promotion, entrepreneurship and innovation can also help overcome policy silos and create an integrated vision across the government. Good governance practices also include systematically evaluating policy impact and consulting with foreign investors and local SMEs.
- **Attracting productivity-enhancing FDI.** The magnitude of spillovers is influenced by the volume and the type of FDI received, and the degree of FDI local embeddedness – i.e. the depth and extent of the investment's ties to the local environment. An open, transparent and non-discriminatory regulatory environment is fundamental to attract FDI that creates linkages with the host economy. Different types of investment incentives (e.g. direct financial support, tax relief, regulatory concessions) can also be used to promote productivity-enhancing FDI, but their provision should be transparent, subject to regular review, and geared towards economic activities with higher potential for knowledge diffusion. Investment promotion agencies (IPAs) are key actors in delivering targeted investment promotion and facilitation packages, combining intelligence gathering (e.g. market studies), sector-specific events (e.g. business fairs, country missions) and pro-active investor engagement initiatives (e.g. one-to-one meetings, enquiry handling).
- **Fostering SME absorptive capacity.** SMEs with strong absorptive capacity – i.e. ability to identify valuable knowledge from FDI and use it productively to improve their performance – are better positioned to benefit from FDI spillovers. On average across the EU area, 63% of measures in the FDI-SME policy mix are aimed at improving SMEs' performance. Enhancing the quality of the regulatory environment (e.g. in product and labour markets, taxation, competition, insolvency regimes, licensing systems) can help improve SMEs' capacities and incentives to scale up, and engage in knowledge-intensive collaboration with FDI. Beyond conducive regulatory frameworks, strengthening SMEs' absorptive capacity requires a comprehensive mix of business support services to help them access the strategic resources they need to improve productivity (i.e. skills, finance and innovation assets). Raising the quality of local network and knowledge infrastructure, including universities, research institutions, technology transfer offices, business incubators and accelerators and other facilities can also contribute to creating knowledge and synergies.
- **Enhancing economic, structural and geographical factors**. FDI-SME spillovers also depend on the economic, structural and geographical characteristics of the host countries and regions, such as their industrial specialisation, resource endowment or the existence of agglomeration economies. New industrial policies as they increasingly aim to strengthen innovation investment and networks, including through stronger GVC integration, can reinforce specialisation patterns and promote innovation diffusion. Strengthening clusters is also increasingly part of the FDI-SME policy mix as agglomeration facilitate FDI attraction and spillovers.
- **Strengthening the diffusion channels of FDI-SME spillovers**. One way to increase diffusion is by promoting value chain linkages and strategic partnerships between FDI and domestic SMEs, e.g. through supplier development programmes or incentive schemes targeting foreign investors.

Other initiatives can support the mobility of highly skilled workers from FDI to the domestic entrepreneurial ecosystem. Beyond active labour market policies, leveraging spillovers from labour mobility may require addressing structural challenges related to the capacity and skills endowment of domestic SMEs. In this perspective, governments may seek to expand the local talent pool by providing regulatory or financial incentives to facilitate the immigration of business talent from abroad or implementing international work placement and employee exchange programmes. FDI-SME knowledge diffusion can also be incentivised by creating market conditions for fair competition and knowledge exchange between foreign and domestic firms, e.g. through favourable intellectual property rights (IPRs) protection frameworks. Indeed, for innovation to blossom, start-ups and SMEs need to be able to appropriate the benefits of their investments and compete on a level playing field with incumbents and larger actors. When it comes to developing spillovers channels, EU countries appear to put the accent on strengthening value chain linkages and developing strategic partnerships between FDI and domestic SMEs (objectives that are respectively supported by 19% and 13% of FDI-SME measures on average), while only a smaller share of measures (3-4%) address the issues of labour mobility and competition.

Part I Policy toolkit

1 Conceptual framework and diagnostic tools

This chapter presents a conceptual framework to assess the enabling conditions and diffusion channels through which FDI affects SME productivity and innovation. It also provides a set of diagnostic tools to benchmark countries and regions according to their potential to benefit from FDI and SME linkages, taking into consideration the type of investment that they attract, the performance of SMEs, as well as economic, structural and geographical factors. Selected indicators are drawn from a range of OECD and non-OECD databases.

Context and motivation

A complex nexus of short-term and structural changes is transforming international production systems and global value chains (GVCs). COVID-19 and Russia's war against Ukraine hit GVCs very hard, with uneven impact across countries and places in the OECD and partner countries. Asymmetries in the impact of the pandemic reflected differences in the local endowment of health and economic resources, policy reactions, and the strength of disruptions across business activities and value chains. The effects of the war also differ depending on places' exposure to Russia and Ukraine and are diffusing through a variety of channels, including energy and commodities trade; the supply chains of transport equipment, basic metals and non-metallic products; and financial and business linkages. These recent and ongoing transformations add to the challenges and structural changes already at play before the crisis, arising from technological development, regionalisation of trade, increasing international economic and political tensions and growing need to build more sustainable production systems (OECD, forthcoming[1]).

In light of these challenges, innovation and productivity will play an increasingly critical role in helping firms, regions and countries seek greater competitiveness, sustainability and resilience. Besides the contribution of innovation and productivity to economic growth, new rationales have emerged to support and enhance their diffusion – including limiting dependencies in materials and energy sources.

The academic and policy literature has identified small and medium-sized enterprises (SMEs) and foreign direct investment (FDI) as two important contributors to productivity and innovation. On the one hand, SMEs make up the industrial fabric of many places, accounting for about two-thirds of total employment and 50-60% of business sector value added in the OECD area. They are also key actors for social cohesion, the training and integration of young people into the working environment, and the delivery of services in remote areas or niche markets that are not profitable enough for larger-scale firms (OECD, 2019[2]). On the other hand, FDI contributes to the knowledge base and capital stock of host countries and regions. Beyond its direct contribution to capital investment and employment generation, FDI can benefit host economies through knowledge and technology spillovers, which can help drive productivity growth in local firms, especially SMEs.

Changes in the global trading and investment environment provide opportunities for the upgrading of SMEs. Participation in GVCs can enable SMEs to enhance productivity by capturing technology and knowledge spillovers, upgrading workforce and managerial skills and raising innovation capacity. Recent analysis showed that firms engaged in GVCs recovered faster from the COVID-19 crisis, suggesting that GVCs have contributed to their economic resilience (Giglioli et al., 2021[3]; Constantinescu et al., 2022[4]; OECD, forthcoming[1]). SME internationalisation and integration in GVCs can be achieved directly through trade (i.e. by supplying or sourcing companies located abroad) or indirectly by establishing linkages with foreign affiliates of multinational enterprises (MNEs).

While SME performance is influenced by a variety of market, policy and other factors, this Policy Toolkit focuses on the specific role of FDI-SME linkages and spillovers as drivers of productivity and innovation. It aims to provide policymakers with a set of principles and tools to maximise the benefits of FDI to the host economies through knowledge and technology spillovers, ultimately strengthening innovation and productivity growth in local SMEs. Based on existing literature and empirical evidence, Chapter 1 presents a conceptual framework to better understand the nature of FDI-SME relationships. It identifies the core enabling conditions under which FDI can positively affect SME productivity and innovation and the main channels enabling knowledge and technology diffusion from FDI to domestic SMEs. It also provides a set of diagnostic tools to benchmark FDI-SME spillovers' enabling conditions and the performance of diffusion channels across OECD countries and regions. Building on this framework, Chapter 2 then discusses how institutional settings, regulatory conditions, policies and programmes can enable or deter these FDI-SME linkages. It does so by going beyond the evaluation of single policy measures, and rather looking at the policy mix consisting of various policy measures that are developed and implemented with different objectives, target different actors, and involve multiple levels of government.

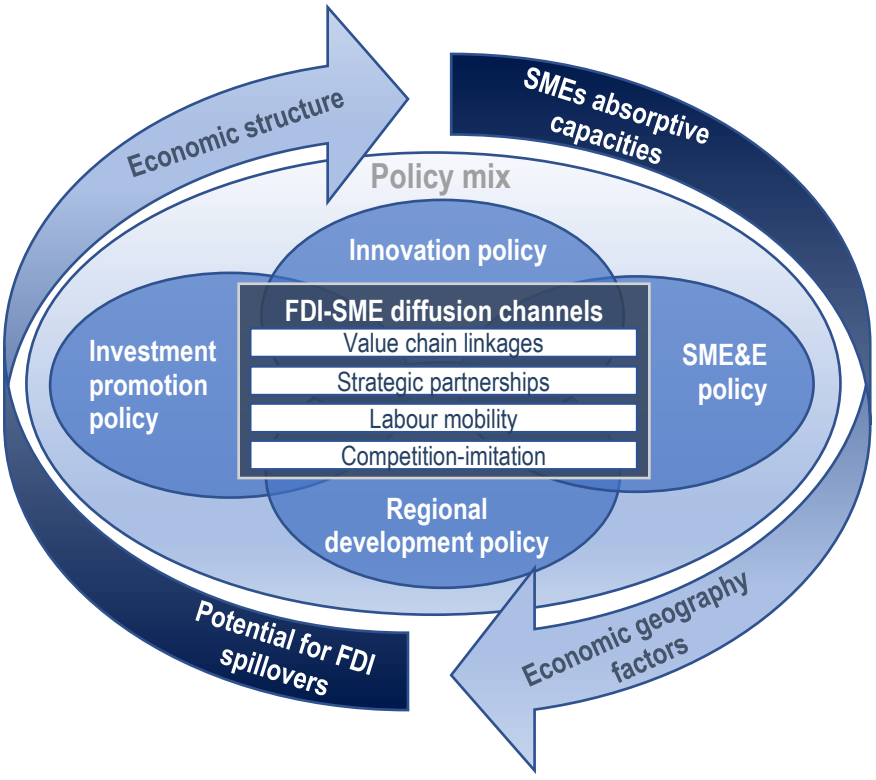
This Policy Toolkit does not investigate the entire spectrum of GVC relationships but focuses only on knowledge spillovers that arise from foreign MNE affiliates in host-economy markets. The scope of the project covers strategic partnerships between SMEs and MNE affiliates based in the same country (excluding overseas/cross-border partnerships) and value chain linkages through buy and supply relationships between SMEs and MNE affiliates based in the same country (excluding cross-border trade).

Spillovers from FDI to domestic SMEs depend on a set of enabling conditions. These include the volume and local embeddedness of foreign-owned affiliates in the host country or region, as well as the existence of a productivity gap between investing foreign MNEs and domestic SMEs, the former having access to a broader range of innovation assets and resources and performing better on average. The potential of spillovers resulting from FDI is also related to the existence of absorptive capacities of local SMEs and the capacity to adapt when they get exposed to activities of foreign firms. Attractiveness, embeddedness, performance and spillovers are affected by a range of enabling conditions related to the economic, geographical and structural characteristics of the host country or region, which hold the potential to enhance (or hamper) knowledge and technology diffusion from FDI.

While adequate enabling conditions are necessary, they are not sufficient. To maximize the potential for FDI spillovers, domestic SMEs need to have linkages (direct or indirect) with foreign MNEs. This may occur through different types of connections and interactions providing opportunities for knowledge and technology transfers. These include buyer-supplier linkages along value chains or formal strategic partnerships (e.g. joint ventures) between foreign MNEs and domestic SMEs. They also include the mobility of workers from affiliates of foreign MNEs towards local SMEs; and the competition or imitation effects that may occur following the market entry of foreign MNEs, e.g. as a response to the introduction of new quality standards or better managerial practices by the foreign entrant.

The scope for productivity and innovation spillovers on domestic SMEs is ultimately determined by the interaction of enabling factors (FDI spillover potential, SME absorptive capacity; economic, geographical and structural characteristics of host countries and regions) and diffusion channels (value chain linkages; strategic partnerships; labour mobility; competition and imitation effects) (Figure 1.1). Besides economic and market conditions, policy, regulatory and institutional settings play an important role in fostering FDI and SME linkages. Public policies aiming to enhance spillovers cut across a range of policy domains, including investment promotion, SME development, innovation and regional development.

Figure 1.1. Understanding FDI spillovers to domestic SMEs: conceptual framework



Source: OECD elaboration.

Box 1.1. Key terms and definitions

What are foreign firms/MNEs?

Although foreign firms generally refer to firms owned or controlled by investors that reside in an economy other than that of the firm, researchers and policymakers alike use different criteria to define foreign firms. It is therefore useful to distinguish between the definition of foreign firms used in the context of analyses of foreign direct investments versus foreign firms defined in the context of activity of multinational enterprises (AMNE).

In the context of FDI, foreign ownership considers cross-border investments made with the objective of establishing a "lasting interest" in an affiliate that is resident in an economy other than that of the direct investor. The lasting interest is evidenced when the direct investor owns at least 10% of the voting power of the direct investment enterprise (OECD, 2009[5]) (OECD, 2023[6]). Therefore, firms are defined as foreign when foreign investors own at least 10% of their equity stocks, in line with the OECD Benchmark Definition of Foreign Direct Investment (OECD, 2009[5]).

In the context of OECD's Activity of Multinational Enterprises database (AMNE Database), foreign ownership is generally determined using the principle of controlling interest. While in most countries the controlling interest is based on majority ownership (owning more than 50% of equity stake), other countries also consider minority control (between 10% and 50%) (Cadestin et al., 2018[7]). The AMNE database identifies three categories of firms: foreign-owned firms (foreign affiliates), domestic multinational enterprises (MNEs), and other domestic firms (Cadestin et al., 2018[7]). Foreign affiliates are firms where more than 50% of the controlling interest is owned by investors outside of the country. MNEs consist of domestically-owned firms with affiliates abroad. Other domestic firms include domestically-owned firms without affiliates abroad.

In this OECD report, the terms "foreign firms", "foreign MNEs", "foreign investors" and "foreign affiliates" are used interchangeably.

What is FDI?

In this OECD report, the term "FDI" is used interchangeably to refer to investment flows and stocks, according to the benchmark definition of FDI (above), and to refer to the activities of foreign affiliates of MNEs.

What are SMEs?

Small and medium-sized enterprises (SMEs) are firms which employ up to 249 employees. It is worth noting that while this size-class breakdown reflects the most common statistical definition across OECD countries and is also used by the European Commission (EC), there are cross-country differences in the definition. For example, the United States considers SMEs to include firms with fewer than 500 employees. In addition to the number of employees, the EC also includes annual turnover and balance sheet total as additional criteria.

Source: (OECD, 2019[8]; Cadestin et al., 2018[9]; OECD, 2018[10]; OECD, 2023[11]).

The potential for FDI spillovers

The technological advantage of FDI can generate knowledge and productivity spillovers to domestic SMEs

Foreign firms can be an important source of knowledge diffusion for domestic firms. The OECD FDI Qualities Indicators suggest that sectors receiving more FDI tend to experience higher growth in labour productivity and in the intensity of research and development (R&D) than other sectors (OECD, 2019[8]; OECD, 2022[12]). One potential explanation for this correlation is that foreign firms are on average more productive than domestic firms (Figure 1.2), which is linked to their greater access to technology, better managerial skills and more adequate resources for capital investment than domestic firms. Recent work at the Bank of England shows that foreign-owned firms in the United Kingdom are around twice as productive as domestically-owned firms (Batten and Jacobs, 2017[13]). Some of this reflects the fact that foreign firms tend to be larger and more export-intensive, both features associated with higher productivity levels. Larger firms can indeed harness economies of scale – including through their relationship with the parent company – which are not available to smaller firms, especially local SMEs (OECD, 2019[2]). Exporters are connected though GVCs to international networks where they can source knowledge. Nonetheless, even after controlling for size, export status, age, and sector, the UK study finds foreign-owned firms to be around 50% more productive than domestically-owned ones (Batten and Jacobs, 2017[13]).

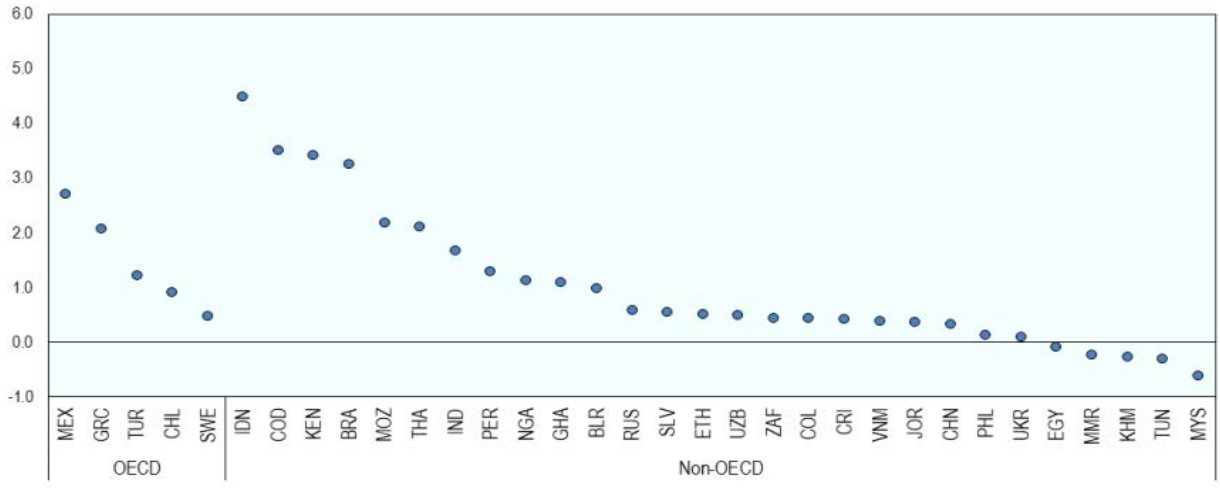
The performance premia of foreign firms, after adjusting for size, sector and other demographic characteristics, suggest that knowledge and technology spillovers of FDI could be leveraged on to close productivity gaps. However, the ability to do so also depends on the capacities of SMEs to absorb knowledge spillovers, which are assessed in the next section. The OECD FDI Qualities Indicators (OECD, 2019[8]) show considerable variation across countries in the productivity gap between foreign-owned and domestic firms, with substantial gaps in some countries and negligible gaps in others (Figure 1.2). The capacity gap between foreign firms and domestic SMEs is often measured in terms of performance gaps (e.g. productivity/technology gaps) (OECD-UNIDO, 2019[14]) (Gal and Witheridge, 2019[15]) (Farole and Winkler, 2014[16]).

When MNEs enter a new market or country, they organise and coordinate their activities in different ways following optimisation strategies. As firms' production processes become more disaggregated, they progressively place functions in the most suitable locations, considering region- rather than just country-specific factors. This includes not just factor endowments, such as capital and labour, but also geographic location and enabling factors including access to skills, accessibility, infrastructure, investment in R&D, quality of institutions and policy framework on tariffs, taxes, product and labour market regulation (Johansson and Olaberría, 2014[17])

The nature of the linkages with local enterprises is typically related to the mode of governance of the GVC, dictated by the MNE leading the chain (Gereffi, Humphrey and Sturgeon, 2005[18]). MNEs can establish a subsidiary (*hierarchy mode/FDI)*, entrust their supply chain activities to independent suppliers through arm's length trade (*market-based mode*), or enter into contractual arrangements with partner firms such as contract manufacturing, joint ventures and licensing agreements (*contractual partnerships*). Evidence suggests that MNE activities are often orchestrated through a combination of different governance modes, reflecting the diversity of relationships with suppliers and partners who operate in the same value chain (Andrenelli et al., 2019[19]).

Figure 1.2. There are large cross-country differences in productivity gaps between foreign and domestic firms

Are foreign firms more productive than their domestic peers? (yes if score > 0; no if score < 0), selected countries, 2016



Note: The figure compares labour productivity levels between foreign and domestic firms. If the score is >0, foreign firms outperform domestic firms and vice versa if it is less than 0. Foreign firms are firms with at least 10% foreign ownership. For more details, please see methodology (Annex B) in (OECD, 2019[8]).
Source: OECD FDI Qualities Indicators, based on World Bank Enterprise Surveys (2019[8]).

The magnitude of spillovers often depends on the type and characteristics of FDI

The potential for spillovers is determined by the volume of FDI inflows received and several MNE characteristics that illustrate to what extent FDI is effectively embedded in the local economy. FDI local embeddedness refers to the depth and extent of a foreign venture's ties to the local environment. Such characteristics include:

The type of FDI: A greenfield investment is more likely to involve the implementation of a leading technology in the host country and to be accompanied by a direct transfer of knowledge and technology from the parent firm to the new affiliate (Farole and Winkler, 2014[16]). On the other hand, the merger or acquisition (M&A) of a domestic firm allows foreign investors to access the host country's technology as well as already established business and knowledge networks. In this case, the deployment of the foreign investor's technology would be implemented more gradually, making additional knowledge spillovers to domestic firms less likely in the short-term (Crespo and Fontoura, 2007[20]) (Braconier, Ekholm and Midelfart Knarvik, 2001[21]). In a study on the effects of Japanese FDI in the US market, Branstetter (2006[22]) confirms that higher spillover effects took place from Japanese affiliates and finds no spillovers from acquisitions. The setting of branch plants of MNEs, which have headquarters located far away, could, however, have negative consequences on local growth (e.g. lack of stable jobs, lack of R&D activities, limited backward linkages, appropriation of government support and lack of spillover effects) in lagging regions of developed countries (Sonn and Lee, 2012[23]).

FDI motives: Foreign investors may enter a country to expand sales in a new, often large, market (i.e. market-seeking); to tap into natural resources (resource-seeking), which is often the case in commodity sectors and agribusiness; or to achieve efficiency (efficiency-seeking) either by reducing costs (e.g. labour costs) or by acquiring new local assets (asset-seeking) in the form of technology, innovation and related skills. In this regard, a distinction is made between technology-exploiting and technology-seeking FDI (Smeets, 2008[24]; Driffield and Love, 2007[25]). Technology-exploiting FDI is motivated by the desire to

exploit a technological advantage abroad, while technology-seeking FDI tries to capture knowledge spillovers from domestic firms in host countries. Perhaps not surprisingly, empirical evidence from the UK shows that technology-seeking FDI does not generate knowledge spillovers, whereas technology-exploiting FDI does (Driffield and Love, 2007[25]). Similarly, market-seeking FDI tends to use more local suppliers than efficiency-seeking FDI, thereby increasing the likelihood of knowledge spillovers taking place on the domestic economy (Jordaan, Douw and Qiang, 2020[26]). It is easier for local SMEs to integrate with an MNE supplying the domestic market as the latter may be more inclined to source inputs locally, as opposed to exporting MNEs that operate within established global supplier networks and have higher product and service quality demands. The motive also influences the location of the investment. Crescenzi, Dyevre and Neffke (2018[27]) note that technological giants are more effective at minimising knowledge leakage by locating their investments in more remote areas or in areas where the cognitive gap between these highly innovative firms and local firms may be too large for any knowledge transfer. In general, FDI motives are often interlinked, so that they cannot be fully separated but rather emerge in combination.

The country of origin of FDI: Recent OECD empirical work finds that FDI from higher-productivity countries generates stronger spillovers in the host economy than FDI from lower-productivity countries (Gal and Witheridge, 2019[15]). Along the same lines, Gorodnichenko, Svejnar and Terrell (2014[28]) find that FDI coming from OECD countries (vis-à-vis FDI from non-OECD countries) brings about stronger productivity benefits for SMEs in the host economy, mostly through backward linkages. Other scholars have looked at the heterogeneity in the origins of FDI, finding that the more diverse the FDI in terms of country of origin, the higher the positive effect on domestic firm productivity. However, in the case of China, FDI from culturally similar places such as Hong Kong and Chinese Taipei has a stronger impact on local SME productivity than FDI from Western countries (OECD, 2017[29]).

The sector in which the investment is made: MNE strategies vary across industries, according to their knowledge, technology or capital intensity (and that of potential partners), with different implications for knowledge transfer (Figure 1.3).

- In resource-based industries, such as mining, spillovers tend to be limited reflecting their high capital intensity and the high degree of specialisation that is required to extract and process raw materials. If governments are to build a stronger base of suppliers, they often need to look beyond the mining industry and strengthen skills in related services (Farole and Winkler, 2013[30]).
- In industries of standardised and simple products for which little formal cooperation between GVC participants is required (e.g. agricultural commodities), arm's-length market transactions are the most preferred MNE strategy (UNCTAD, 2013[31]) (Gereffi and Fernandez-Stark, 2016[32]). In this case, MNEs influence the supply chain through their role as clients (especially if they are large clients in markets with a narrow client base), and suppliers, many of them SMEs, learn from the demands placed upon them and from market feedback.
- In sectors where quality (e.g. pharmaceuticals) and a commercial presence (e.g. marketing/advertising, financial services) are important, the establishment of a subsidiary allows MNEs to secure high levels of quality in production and a direct access to clients in the domestic market. Knowledge and technology transfers are more likely to take place from the parent firm to the local subsidiaries, with potential benefits arising from the diffusion of innovation in the host country.
- In knowledge-intensive sectors such as the IT hardware and automotive industries, contractual partnerships (e.g. contract manufacturing, licensing agreements) seem to matter the most (Andrenelli et al., 2019[19]). MNEs exert some influence over their partners, through contract agreements, or more implicitly via their bargaining power (UNCTAD, 2011[33]). In the car industry, on average, around three quarters of all first-tier suppliers in a manufacturer's global production

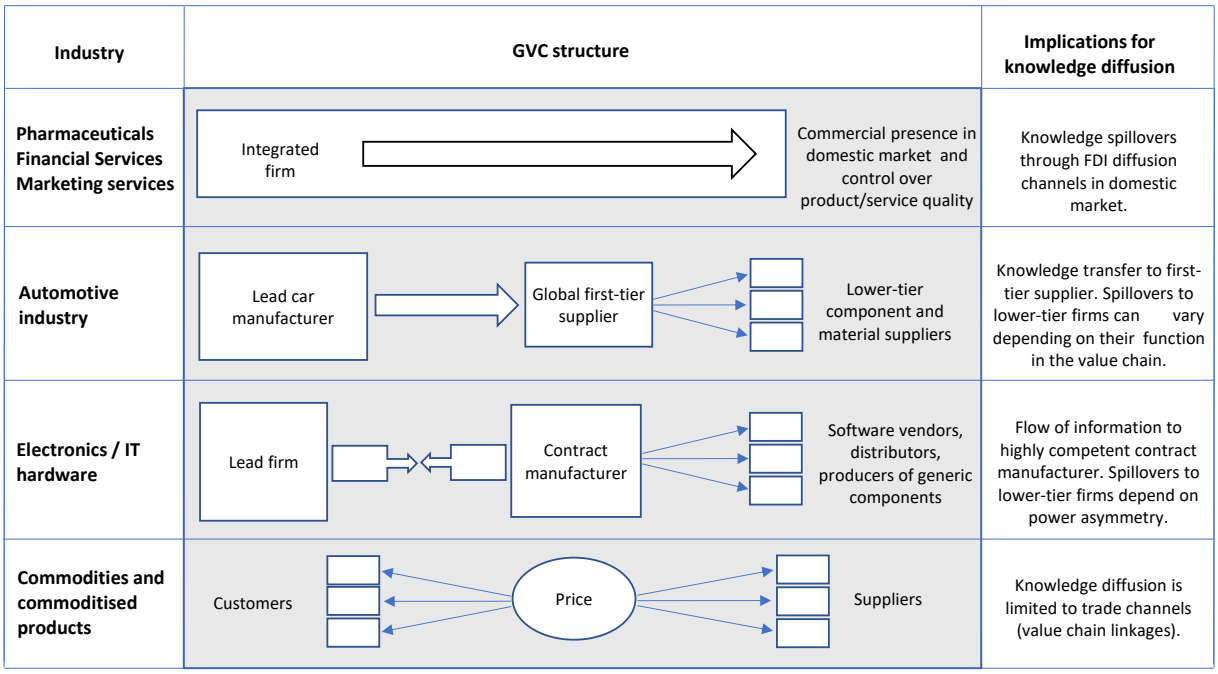
chain operate through contractual partnerships, of which over three quarters are with foreign-owned enterprises (Lejarraga et al., 2016[34]).

- In high-tech sectors, FDI can generate productivity spillovers, if R&D labs are not self-contained and have developed knowledge-intensive partnerships with the rest of the economy (OECD, 2016[35]). At the country level (Bulgaria, Poland and Romania), Nicolini and Resmini (2010[36]) find that horizontal FDI spillovers occur only in labour-intensive sectors, while vertical FDI spillovers are mostly observed in high-tech sectors. In the more advanced context of the United States, Keller and Yeaple (2009[37]) find that FDI spillovers are particularly strong in high-tech sectors, while they are largely absent in low-tech sectors. The size of FDI spillovers is economically important, accounting for about 14% of productivity growth in U.S. firms between 1987 and 1996.

The size of the MNE: Smaller MNEs may be more likely to buy from, or subcontract to, domestic SMEs, increasing the scope for knowledge spillovers, whereas larger MNEs are able to draw on internal resources. An increasing number of small high-growth multinational companies drive job creation and innovation in knowledge-intensive sectors (OECD, 2010[38]).

The degree and structure of foreign ownership is also an important factor affecting the strength of linkages between domestic and foreign firms. Empirical evidence shows that MNEs with fully-owned foreign affiliates exert greater control upon the technologies they transfer to their foreign locations, leading to more consistent efforts to avoid knowledge and technology leakages (Konwar et al., 2015[39]). In contrast, multinationals with more domestic participation may have greater potential for linkages with the local economy due to better knowledge of and well-established relations with domestic supplier networks (Farole and Winkler, 2014[16]). This is particularly the case for joint venture agreements, which have been found to have positive horizontal spillovers as opposed to the presence of fully owned foreign affiliates that have a negative impact on local firms (Abraham, Konings and Slootmaekers, 2010[40]). Joint ventures can also further contribute to spillovers through labour mobility given the increased participation of locals at the owner or top management level and the considerable skill development opportunities that this involves. However, as highlighted in Chapter 2, restrictions on foreign ownership as a means to achieve knowledge spillovers should be generally avoided as they have been found to deter FDI, especially when intellectual property rights are not protected (OECD, 2021[41]).

Figure 1.3. GVC governance of selected industries and knowledge diffusion implications



Source: OECD elaboration based on UNCTAD (2013[31]) and Gereffi, Humphrey and Sturgeon (2005[18]).

Diagnostic tool

Box 1.2 includes a checklist of questions allowing policymakers to assess the potential for FDI spillovers on domestic SMEs, focusing on the type of FDI that the country attracts and the characteristics of foreign MNEs.

Box 1.2. Checklist of questions to assess the potential for FDI spillovers

- What is the volume of FDI that the country attracts and how does it compare with FDI trends in peer economies?
- What type of FDI is more prevalent (e.g. greenfield investment, M&A) and what are the key investment motives of foreign MNEs (e.g. technology-exploiting, market-seeking, efficiency-seeking FDI)?
- What are the main countries of origin of FDI (e.g. higher or lower-productivity economies)?
- What is the sectoral composition of FDI? Is FDI concentrated in sectors with higher average productivity level or technological and R&D intensity?
- What are the characteristics of foreign MNEs operating in the country in terms of size, degree of foreign ownership, productivity and technological intensity?
- How large is the productivity gap between foreign MNEs and domestic SMEs?
- How do foreign MNEs perform in terms of export capacity and contribution to international trade? To what extent does FDI drive the country's integration into GVCs?

The potential for FDI-SME spillovers across countries can be measured and monitored through a range of internationally comparable indicators, as described in Table 1.1. These indicators aim to reflect how a

country/region benchmarks along the dimensions described in this section. The relative position of a country compared to the OECD (or EU) median, and possibly a sample of benchmarking countries, offer insights on the potential for FDI spillovers in the host country.

Table 1.1. Benchmarking the potential for FDI spillovers across countries and regions

	Dimensions	Indicators	Sources	Coverage
Volume of FDI inflows	Stock and trends	FDI inflows as % of GDP	OECD International Direct Investment Statistics	National
		FDI stock as % of GDP	OECD International Direct Investment Statistics	National
		Share of foreign affiliates in value added and exports (%)	OECD AMNE database	National
	Resilience of FDI inflows	Change in inward FDI, latest years available (y-o-y difference)	OECD International Direct Investment Statistics	National
FDI characteristics	Type	Greenfield FDI by sector, country of origin, target region, type of investment project	Financial Times' fDi Markets	National
		Cross-border M&A deals, by sector and acquirer origin	Refinitiv	National
	Country of origin	Stock of FDI by partner as % of total inward FDI stock	OECD International Direct Investment Statistics	National
		Number of MNE employees by investing country	OECD AMNE database	National
	Sectors of investment	Share of foreign affiliates in total VA and exports, by sector	OECD AMNE database	National
		FDI inflows by sector (%)	OECD International Direct Investment Statistics	National
		FDI sectoral concentration in terms of labour productivity and R&D-intensity	OECD FDI Qualities Indicators based on Financial Times' fDi Markets database, OECD National Accounts and OECD MSTI database	National
	Knowledge intensity	Intensity of business R&D expenditure performed by foreign-controlled affiliates, as % of total business enterprise expenditure on R&D	OECD Activity of Multinational Enterprises Database	National
MNE characteristics	Size	Number of affiliates for MNE	OECD ADIMA Indicators	National
	Degree of ownership	MNE affiliates in the country by parent MNE and jurisdiction	OECD ADIMA Physical register	National
	Productivity premium over domestic firms	Labour productivity premium of foreign firms in % of productivity of average firms in the economy (domestic and foreign)	Eurostat's FATS data	National
		Performance differences between foreign and domestic firms across regions	OECD FDI Qualities Indicators based on World Bank Enterprises surveys	National / Subnational

Source: Authors' elaboration.

The absorptive capacity of local SMEs

SMEs with higher productive and innovative capacities are better positioned to absorb knowledge and technology spillovers from FDI

The term "absorptive capacity" refers to the ability of a firm to recognise valuable new knowledge and integrate it productively in its processes, i.e. to innovate. The stronger its absorptive and innovative capacity, the higher its chances to benefit from FDI (Abraham, Konings and Slootmaekers, 2010[40]; Girma, Görg and Pisu, 2008[42]).

The absorptive capacities of SMEs depend on their prior capital endowment and level of productivity, i.e. their endowment of financial, human and knowledge-based capital and efficiency in creating value from it. To innovate, a firm creates, acquires and recombines innovation assets (such as technology, data and brands, organisational settings and processes, business models and networks), using firm-specific skills and know-how as well as transversal and technical skills[1]. The firm also bears a range of costs associated with the innovation process, from investment in innovation assets and the purchase of knowledge services, to hiring and (re)training, to the transaction costs related to the transformation. These costs could become obstacles to the innovation process (e.g. in the digital transition), especially when the firm has limited room (and size) to increase economies of scale (OECD, 2019[2]) (OECD, 2021[43]) (OECD, 2021[41]).

The absorptive capacities also depend on the firm's ability to access the strategic resources needed to adapt to market conditions and innovate. The extent to which SMEs can access and make use of these strategic resources will determine their ability to benefit from knowledge and technology spillovers (OECD, 2019[2]):

Access to finance: Accessing appropriate sources of finance across all stages of their life cycle is critical for SMEs to start their business operations, innovate and grow (OECD, 2019[2]) (OECD, 2020[44]) (OECD, 2022[45]). Conversely, financing constraints can weigh on their investment and innovation capacity, and negatively impact their productivity. SMEs combine different forms of funding, both internal (profits and revenues) and external (bank credit, equity funding, etc.) to support their activities and growth. Internal profits and revenues remain their primary source of funding. Bank credit is their primary source of external funding, but funding options also differ across firms, e.g. alternative debt for SMEs with lower risk of default but limited return on investment, or equity instruments for innovative ventures with high growth potential and higher return on investment, but at higher risk (OECD, 2020[44]) (OECD, 2015[46]; OECD, 2018[47]).

Typically, SMEs face internal and external barriers in accessing finance, due to a lack of collateral to be provided as guarantees, or insufficient financial skills of owners and managers. External market barriers arise from information asymmetries between financial institutions and SMEs, and the relatively higher costs for funding institutions to serve SMEs. For some segments of the business population, especially new firms, start-ups, and innovative ventures with high growth potential, these challenges are more pronounced (higher uncertainty, more intangible and difficult to collateralise assets). The same is true for groups under-represented in entrepreneurship, such as women, youth, seniors and migrants (OECD/EU, 2017[48]).

Access to skills: Skilled workers are a key asset for competition in a knowledge-based economy (Autor, 2013[49]; Grundke, R, et. al., 2017[50]). Highly skilled employees, in particular, are more likely to be involved in performing complex tasks that drive firm competitiveness and productivity growth (Acemoglu, 2002[51]) (OECD, 2018[52]). Skilled employees are also vital for enhancing technology and innovation absorption as well as breaking into new markets. Improving the skills of workers can, for instance, strengthen the position of SMEs in GVCs by helping them specialise in higher value-added activities (e.g. technologically-advanced industries, complex business services) (OECD, 2017[53]). Skilled employees are also valuable for SMEs to manage organisational change encountered during company transitions due to fast growth or when exporting for the first time (OECD, 2015[54]).

SMEs have typically greater difficulty in attracting and retaining skilled employees. They tend to lack the capacity and networks needed to identify talent. They tend to offer less attractive remuneration and working conditions (Eurofound, 2016[55]), paying salaries 20% lower on average than large firms (OECD, 2019[2]). Smaller firms have fewer possibilities and resources to engage in the skills development of their employees; lack dedicated internal training capacity; have a smaller revenue base on which to distribute the fixed costs of training; and have fewer employees to organise replacement once one is on training (OECD, 2021[56]; OECD, 2021[57]). Furthermore, SMEs tend to experience higher job turnover, which limits their capacity and willingness to invest in human capital.

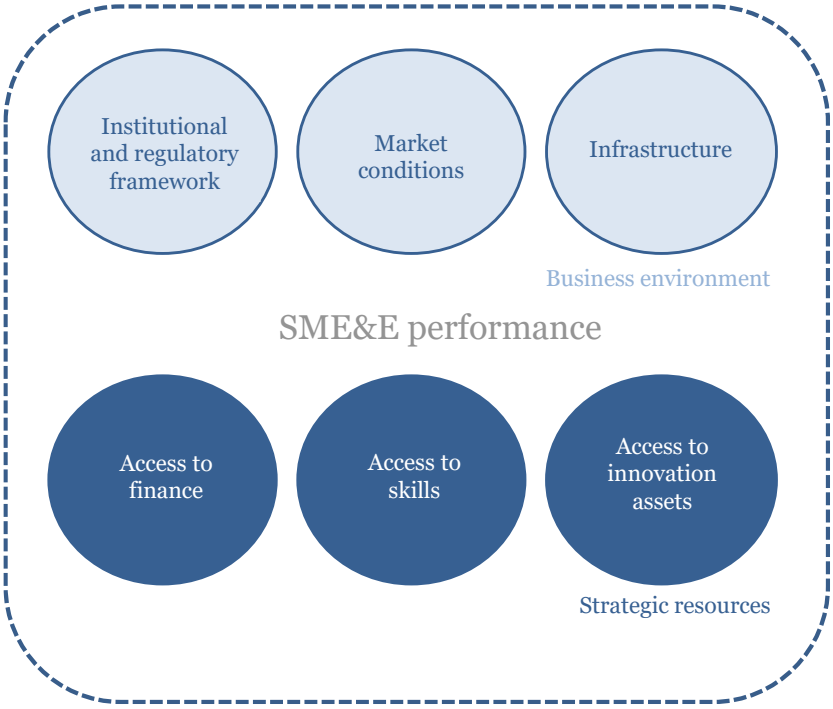
Access to innovation assets: Innovation –from the creation of new ideas in R&D laboratories to the commercial diffusion of technologies – involves the interaction and use of different assets.

- Digital technologies open opportunities for SMEs to reduce costs and achieve economies of scale without mass and enable differentiation and specialisation that are major levers on their competitiveness (OECD, 2021[43]). Digitalisation can trigger a virtuous circle of transformations, as technology adoption reinforces further technology adoption, and supports SME scaling up (OECD, 2022[45]).
- Data have emerged as a strategic asset, enabling efficiency gains (e.g. supply chain dynamic optimisation) and enhancing innovation capacity (e.g. improved products or services with artificial intelligence, or new business models based on the selling or licensing of data) (OECD, 2022[45]).
- Cloud computing (CC) is a pivotal asset for the digital transition of SMEs as it allows them to upgrade without incurring the upfront investments associated with hardware and recurrent expenses on maintenance, IT team and certification. CC services are flexible and scalable, meaning that SMEs can access extra processing power or storage capacity, databases or software, in quantities that suit their needs (OECD, 2019[2]).
- Intellectual Property Rights (IPRs), i.e. patents, trademarks, copyrights or industrial designs, are instrumental for firms to ensure they can appropriate the benefits of their innovations by giving them a temporal monopoly. They also enable the valorisation of intangible assets, for instance through licensing or as collateral for financing growth (OECD, 2022[45]). Recent evidence shows that SMEs with prior IPR activities are more likely to grow than other SMEs, even more if they bundle different types of IPRs (EUIPO, 2020[58]).
- Networks constitute another form of capital as they contribute in different ways to SME performance: knowledge networks for innovation creation and technology transfer, production and supply-chain networks for cost reduction that increasingly support knowledge flows, or strategic and commercial networks for accessing strategic resources and increasing market outreach (Nilsson, Magnusson and Enquist, 2003[59]) (OECD, forthcoming[1]).

While the barriers to the effective use of these technologies have decreased, accessing innovation assets is particularly challenging for smaller firms that struggle to find and use the technology, data, information and networks that would enable them to participate in and benefit from innovation activities. Smaller firms are less likely to engage in R&D, reflecting both lack of capacity as well as incentives. Acquiring frontier technology and related skills remains out of reach for smaller players or requires them to have a high specialisation that limits the scope of R&D spillovers and reduces the financial incentive of taking risks (OECD, 2016[60]). SMEs lag in the digital transition and the more sophisticated the technology, the larger the gap (OECD, 2021[43]). SMEs for instance are 2.4 times less likely to perform big data analysis than larger firms (OECD, forthcoming[1]). SMEs tend to privilege trade secrecy as their default mode of protection and struggle to deal with the large and complex range of IPR mechanisms (OECD, 2019[2]) (OECD, 2022[45]). Although they are more dependent on external sources of knowledge, SMEs are also less well integrated into knowledge networks (OECD, 2013[61]) (OECD, forthcoming[1]). Consequently, their contribution to innovation -and their opportunities to benefit from innovation- remains subdued compared to larger firms.

The absorptive capacities of SMEs also depend on the quality of the business environment and external factors, which vary substantially across countries. A conducive business environment creates the right conditions to do business but also provides incentives to bear the costs and risks of innovating. SME and entrepreneurship performance in relation to innovation is defined by a complex set of business conditions (OECD, 2019[2]), as well as the quality of local entrepreneurship ecosystems (OECD, 2021[62]) (OECD, 2019[63]). These factors include *the institutional and regulatory framework* (e.g. IP laws and enforcement, taxation, regulation), *market conditions* (e.g. competition intensity and neutrality, trade openness, business dynamics), *and infrastructure* (e.g. connectivity and access to affordable and quality broadband, availability of knowledge platforms and networking interfaces) (Figure 1.4). The role of infrastructure in strengthening SME absorptive capacities is examined in the Section below, while the institutional and regulatory framework and market conditions in Chapter 2.

Figure 1.4. Drivers of SME and entrepreneurship performance



Source: OECD SME and Entrepreneurship Outlook (2019[2]).

The heterogeneity of the SME population explains differences in their capacity to benefit from FDI spillovers

SMEs vary in terms of age, size, business model, market orientation, sector and geographical area of operation. This means that different types of SMEs have different growth trajectories and therefore different chances to enter into knowledge-sharing relationships with foreign MNEs and benefit from FDI spillovers (OECD, 2019[2]). Not all SMEs are able or willing to scale up and participate in global markets and value chains. The following SME characteristics therefore matter to appreciate their absorptive capacity.

Age: The existing evidence on the implications of a firm's age for its absorptive capacity is not conclusive. According to some studies, the experience accumulated by mature firms would be an asset in identifying and exploiting valuable external knowledge (Cohen, 1990[64]); (Zahra, 2002[65]). Additionally, higher reputation and status would make older firms more likely to access diverse knowledge sources and thus become early movers in exploiting useful knowledge (Nooteboom, 2000[66]). Better human capital and HR management practices are also found to be enhancing factors of older firms' absorptive capacity by some scholars (Lund Vinding, 2006[67]); (Minbaeva, 2014[68]); (Hayton, 2005[69]). Recent empirical work based on firm microdata show that most high-growth firms are in fact mature firms of six-years and more (OECD, 2021[70]). Other studies suggest that younger firms, although often smaller and thus equipped with less financial resources, would be more flexible to innovate and less affected by organisational inertia (e.g. rigid and formalised routines, roles and behaviours) than their older counterparts, making them more likely to benefit from knowledge spillovers (Huergo, 2004[71]); (Hannan, 1984[72]); (Hansen, 1992[73]). Tengjian Zou (2018[74]) found an average negative effect of age on firms' absorptive capacities. This, however, appears to be more relevant for mature firms. The relationship between age and absorptive capacity seems to be less significant for young firms.

There are a few "born global" SMEs that aim for international markets from the start (Lamotte and Colovic, 2015[75]; OECD, 2019[2])). They usually operate in knowledge-intensive niche markets and can serve as

key partners of foreign multinationals in developing new products and providing knowledge-based services. In France, for example, the presence of "born global" SMEs is significant, particularly in services where around 65% of firms fall under this category (Lejarraga et al., 2016[34]). These highly innovative young SMEs invest in R&D, technology upgrading, training and organisational innovation.

Size: Larger SMEs are often found to benefit more than smaller ones from the presence of FDI (Crespo and Fontoura, 2007[20]). Recent OECD empirical work shows that small firms experience very few or no positive spillovers from FDI, as they are less likely to invest in innovation or have access to knowledge networks. There is, however, a small positive impact on the productivity of medium-sized companies, if these are located geographically close to the foreign investor (Lembcke and Wildnerova, 2020[76]). Empirical work based on US data shows, however, opposite results, with low-productivity small firms benefitting more from FDI spillovers than high-productivity larger firms (Keller and Yeaple, 2009[37]).

Sector and position in value chain: SMEs that operate in tradable sectors, sectors with stronger linkages to more productive foreign buyers/suppliers or sectors that have become more central to global production, display faster productivity growth (Criscuolo and Timmis, 2018[77]) (OECD, 2019[2]). Firms and industries operating at the core of complex production networks have access to a greater variety of foreign inputs, and potentially a broader range of technologies, as compared to those at the periphery.

Being part of a large corporate group and/or foreign ownership: Finally, the ownership structure of the firm is likely to have an impact on its absorptive capacity. Being part of an international business group, either domestically- or foreign-owned, can be a factor of SME performance (Dachs and Ebersberger, 2009[78]). On the one hand, foreign subsidiary SMEs can overcome some obstacles to the innovation process such as the lack of funding or market information as they can rely on the financial resources, technology and managerial expertise of their parent multinational group, and therefore become themselves a source of knowledge spillovers for domestically-owned firms. Comparative advantages of group membership may also stem from the possibility of learning from the previous experience of the parent MNE in other countries and markets.

Foreign ownership can also help overcome the constraints that usually affect the performance of smaller businesses, by facilitating access to knowledge, global marketing linkages, and better managerial and financial resources. Corsi and Prencipe (2018[79]) found that foreign venture capital and private equity have a higher potential to spur the innovation performance of independent SMEs as compared to other forms of foreign investment. The integration of an SME into the global network of a foreign company via a "brownfield" investment can also spur productivity growth. Benefits may extend to other companies in the same region via the local supply and demand linkages of the acquired company (Lembcke and Wildnerova, 2020[76]). Guadalupe, Kuzmina and Thomas (2010[80]) found that acquisitions via brownfield investments lead to improvements in firm performance, with acquired firms being more likely to engage in innovation and assimilate new foreign technology – although it cannot be excluded that this is partly due to foreign firms selecting the best performers within local industries in view of the acquisition.

On the other hand, non-subsidiary SMEs may have greater flexibility and less restrictions than subsidiary SMEs, and therefore may have greater capacity to customise and differentiate products and services.

Diagnostic tool

Box 1.3 includes a checklist of questions allowing policymakers to assess the absorptive capacities of domestic SMEs, focusing on firm performance and capacity to access strategic resources.

Box 1.3. Checklist of questions to assess the absorptive capacities of SMEs

- What are the characteristics of the SME population in terms size, average age, location, sector and position in GVCs (upstream or downstream position in GVCs)?
- What is the share of SMEs belonging to an enterprise group relative to independent SMEs?
- What is the contribution of SMEs to value added, employment and exports?
- What are the main internal and external barriers that SMEs face in accessing finance?
- How do SMEs perform in terms of access to skills, including with regard to entrepreneurial skills, workforce skills, and on-the-job training opportunities?
- How do SMEs perform in terms of access to innovation assets, including technology, innovation networks, R&D investment, data, IPRs and information?
- What is the degree of digitalisation of SMEs?

The SME absorptive capacities can be measured and monitored through a range of internationally comparable indicators, as described in

Table 1.2. These indicators aim to reflect how a country benchmarks along the dimensions described in this section. The relative position of a country as compared to the OECD (or EU) median, and possibly a sample of benchmarking countries, provide some insights on the absorptive capacities of SMEs in the country. The following table focuses on metrics aiming to assess internal SME capacities, with the exception of indicators monitoring the business environment that are discussed in the section 0.

It is worth noting that while these indicators provide an international comparable measure of SME capacities, some limitations have to be considered. First, although these indicators are generally available at the national level, the data availability at the sub-national level is scanter and/or less timely. Second, while the proposed indicators capture a wide range of SME absorptive capacities, some areas are still under development. These include indicators related to environmental, social, and governance criteria that could potentially increase SME absorptive capacities and GVC integration. Ongoing OECD work is examining how different ESG indicators – such as emissions by SMEs and information on decent work – and other indicators that could be relevant to benchmark SME performance along the framework presented above (OECD, 2019[2]) could be compiled into the OECD Data Lake on SMEs and Entrepreneurship, which serves as a one-stop-shop platform for SME&E policy analysis and mainstreaming (Box 1.4).

Table 1.2. Benchmarking SME absorptive capacities at country or regional level

	Dimensions	Indicators	Sources	Coverage
Firm characteristics	Age	Share of start-ups (0–2-year-old) in active employer enterprises, total and by sector (%)	OECD Structural and Demographic Business Statistics (SDBS)	National / sectoral
	Size	Share of MSMEs in total value added and employment (%)	OECD Structural and Demographic Business Statistics (SDBS)	National / sectoral
	Sector and position in value chain	Share of MSMEs in total enterprises by sector (%)	OECD Structural and Demographic Business Statistics (SDBS)	National / sectoral
	Capital endowment	Labour productivity of MSME, total and by sector (%)	OECD Structural and Demographic Business Statistics (SDBS)	National / sectoral
		Share of high-growth firms, total and by sector (%)	OECD Structural and Demographic Business Statistics (SDBS)	National / sectoral

	Ownership/ be part of a group	Share of firms belonging to an enterprise group, by sector and size class (%)	OECD Trade by Enterprise Characteristics (TEC) database Eurostat CIS surveys	National / sectoral
		Share of SMEs having introduced innovation in cooperation within the enterprise group (%)	Eurostat CIS surveys	National / sectoral
Access to strategic resources	Finance	SME profit margin, gross operating surplus as a percentage of production	OECD Structural and Demographic Business Statistics (SDBS)	National
		Interest rate spread, small firms vs large firms	OECD Financing SMEs and Entrepreneurship Scoreboard	National
		Share of long-term loans (more than one year) in total SME loans (%)	OECD Financing SMEs and Entrepreneurs Scoreboard	National
		SME loan rejection rate	OECD Financing SMEs and Entrepreneurs Scoreboard	National
		Venture capital, as a percentage of GDP	OECD Entrepreneurship Financing database	National
		Share of SMEs that access debt finance or equity finance for R&D and innovation, by sector (%)	Eurostat CIS surveys	National / sectoral
		Share of SMEs that get intra-group loans, by sector (%)	Eurostat CIS surveys	National / sectoral
	Skills	Adult educational attainment at tertiary level, as a percentage of 25-64-year olds	OECD Education database	National
		% of top performing adults in problem-solving in total working-age population	OECD PIAAC report 2015	National
		Share of employees receiving on-the-job training (%)	OECD Job Quality Database	National
		Share of SMEs providing ICT training to their employees (%)	OECD ICT use by Businesses Database	National
		SME expenditure on staff training	Eurostat CIS surveys	National / sectoral
		Lack of ICT specialists in SME	OECD ICT use by Businesses Database	National
		Balance of innovation skills on labour market, index (-1 to 1)	OECD Skills for Jobs database	National
	Innovation	R&D intensity of SMEs, as a % of total business R&D expenditure	OECD R&D Statistics Database	National
		% of SMEs performing R&D, by firm size	Eurostat CIS surveys	National
		Share of innovative SMEs, by type of innovation and by sector (%)	Eurostat CIS surveys	National / sectoral
		Major obstacles to innovation, by sector, as % of total innovative and non-innovative SMEs	Eurostat CIS surveys	National / sectoral
		Digital uptake by small or medium-sized enterprises, by main ICT, as % of total class size	OECD ICT use by Businesses Database	National
		% of SME purchasing cloud computing services	OECD ICT use by Businesses Database	National
		% of SMEs acquiring machinery, equipment and tangible assets	Eurostat CIS surveys	National
		SME expenditure in software development and data work	Eurostat CIS surveys	National / sectoral
		Share of SMEs that cooperate on R&D or innovation activities, by type of cooperation partners and by location of cooperation partners	Eurostat CIS surveys	National / sectoral
		SME expenditure on Intellectual Property Rights	Eurostat CIS surveys	National / sectoral

Source: Authors' elaboration based on the OECD Data Lake on SMEs and Entrepreneurship.

Box 1.4. The OECD Data Lake on SME and Entrepreneurship

Infrastructure in support of SME&E policy analysis and mainstreaming

Benchmarking SME&E performance and policies requires mobilising a wealth of indicators and policy information across a broad range of domains of expertise (OECD, 2019[2]). Data drawn from both OECD and non-OECD sources are available in a variety of formats and can be organised in different ways according to their primary source. Accessing SME&E policy data could be made more cost-efficient by enabling data concentration in a single platform and automating updates. Risks related to data treatment could also be reduced.

Such a data management system that covers the full spectrum, from data collection, to storage, to treatment, to analysis, to dissemination, could enhance analytical capacity and broaden the knowledge base on SME&E business conditions, performance and policy. It could enable more in-depth data exploration, e.g. relationships between business conditions and SME&E sector features, or country patterns in business conditions and similarities in national SME&E system, etc.

A "data lake" is aimed to break the silos of data organisation that often reflect silos of expertise. It also aims to enable the use of big data (e.g. by making possible to store large volumes of unstructured data and apply new data analytics methods). Unlike relational databases and traditional data warehouses, data lakes are also less dependent on original data architecture and more flexible to adjustments in time. Along those lines, the OECD is developing a new "data lake" (platform) of relevant indicators and policy information in order to expand the SME&E policy knowledge base and develop cross-cutting evidence that could contribute to the mainstreaming of SME&E policy considerations in other policy domains (OECD, 2023[81]).

Economic, structural, and geographical characteristics of countries and regions

The magnitude of FDI-SME spillovers depends on several economic, geographical and structural characteristics of the host country and its subnational regions. Factors relating to the national endowment, the macroeconomic context, structure of the national/regional economy, sectoral drivers of growth, productivity and innovation as well as to the level of integration in the global economy are expected to affect the potential for FDI-SME spillovers.

The industrial structure, specialisation and technological sophistication of the domestic economy influences SME capacities and the type of FDI attracted

Structural factors such as a country's specialisation, industrial structure, positioning in GVCs and the sophistication of its infrastructure and technology are crucial determinants of a dynamic FDI-SME ecosystem. These factors are overall difficult to reverse or alter in the short term, being the outcome of natural configurations, market dynamics and past economic and policy choices (OECD, 2021[82]). Also, not all countries have the same technological assets and capacities. There is a high degree of heterogeneity in endowment and industrial patterns, leading to differentiated impacts on FDI and SME performance.

Differences in the comparative advantage of economies result in differing FDI profiles, with some countries attracting more knowledge-intensive investment than others. These differences are not static, however, and may evolve over time. Countries with more advanced industrial structures tend to attract FDI in higher value added value chains, involving more productive and technology-intensive activities, that allow them to further advance the industrialisation process (Benfratello and Sembenelli, 2006[83]; Criscuolo and Martin, 2003[84]). Economies characterised by a high degree of technological sophistication may also appeal more

to investors seeking to gain from domestic technology and acquire knowledge and technical capabilities. On the other hand, economies at early stages of the industrialisation process may benefit more from investments in lower value added sectors where local producers, often SMEs, have a comparative advantage, allowing them to move up the value chain within those sectors into more complex activities and increase their chances to engage with internationally-oriented firms (OECD, 2019[8]).

Being driven by natural endowments and regional assets such as geographic location, natural resources, urban or rural settings and demographics, these specialisation patterns may differ even within countries (OECD, 2007[85]) (OECD, 2022[86]). Urban centres tend to have greater endowment of human and physical capital than rural areas, including more favourable demographic trends, high skills intensity and quality infrastructure, leading to higher concentration of knowledge-intensive FDI and SMEs with strong absorptive capacities. In many OECD economies, rural regions have found ways to exploit their resource endowment in an efficient manner and achieve growth levels similar to those seen in metropolitan areas by specialising in activities that take into account location-specific comparative advantages (OECD, 2009[87]).

The size and exposure of the economy to international markets also matters for the development of FDI-SME linkages. The OECD FDI Qualities Indicators suggest that smaller OECD economies like Luxembourg, Ireland, Belgium and Hungary have lower shares of domestic sourcing by foreign MNEs due to their smaller domestic market for inputs while larger economies (e.g. France, Italy, United States) have significantly higher shares (OECD, 2019[8]). When considering the potential for FDI-SME spillovers in small versus large economies, these findings should be interpreted with caution. GVC integration typically reduces the share of domestic linkages while disproportionately increasing the pace of domestically produced value added growth due to efficiency gains. SMEs operating in small economies can therefore still benefit from knowledge spillovers arising from the internationalisation of the economy. In fact, integration into GVCs is an important driver of productivity growth and can have important consequences on the ability (and incentives) of local SMEs to exploit the knowledge transmitted through international production networks (Gal and Witheridge, 2019[15]). For this reason, a potentially more important policy objective for small economies could be the growth in the absolute value of domestic linkages.

Economic geography factors matter for knowledge diffusion

Economic geography factors matter in MNEs' optimisation strategies and for knowledge spillovers. When deciding where to invest, foreign firms are considering the specific factor endowment of a region - rather than just country - following market-seeking, resource-seeking, asset-seeking, or efficiency-seeking rationales (i.e. FDI motives) (OECD, 2019[8]). SMEs and their innovation capacities are also an important determinant of FDI location decisions. Foreign MNEs choose to invest in specific countries or regions based on the availability of local suppliers and partners and the capabilities of local entrepreneurial ecosystems. SMEs too remain predominantly local actors embedded in nearby markets and ecosystems. SME activity and performance are unevenly distributed within countries, with high concentration of R&D and innovation activities and investments in a few regions, and large cross-regional disparities in productive capacities (OECD, 2016[88]). Some regions have a disproportionate share of SMEs often attributed to differences in entry costs, input factors or talent across regions (Ponzetto, 2009[89]); (Guiso and Schivardi, 2011[90]); (Lucas, 1978[91]).

The attractiveness of regions to investors and entrepreneurs depends on a number of factors like the availability of land, the qualifications of the local workforce and/or cost of the available labour force, proximity to key international and domestic markets, and the presence of an ecosystem conducive to attracting researchers in the R&D field, which are all highly territorialised and vary geographically within a country (OECD, 2022[86]). Access to quality public services (including health and education) and attention to well-being, including social and environmental concerns, are important arguments for attracting talent and boosting the supply of more qualified local labour, capable of meeting the needs of companies and of innovating. To capture these dimensions, measurement initiatives to quantify the attractiveness and

competitiveness of regions beyond economic performance are fundamental (OECD, 2022[86]). Under this lens, local conditions of quality of life are taking the front seat in regional policy and planning strategies, with the recognition that economic development and human and planetary well-being are inextricably linked.

The localised nature of FDI and SMEs means that geographical proximity between the two affects the likelihood of knowledge spillovers, especially as far as tacit knowledge is concerned (Jacobs, 1993[92]). Recent OECD work confirms that domestic firms which are located near foreign firms in the same region are more likely to benefit from knowledge spillovers than other firms (Lembcke and Wildnerova, 2020[76]). Knowledge spillovers from MNEs have been found to be the strongest up to 10 km from the lead firm and progressively decay between 10 and 50 km, partly reflecting production linkages but also through other channels such as the mobility of managers. Knowledge flows to geographically closely located domestic firms are also higher when regions host smaller and non-frontier innovator MNEs. This is explained by lower technology gaps between non-frontier MNEs and domestic firms and thus improved absorptive capacities of domestic firms, enabling them to benefit from the presence of FDI (Crescenzi, Dyevre and Neffke, 2018[27]).

These spatial and agglomeration effects point towards the important role that industrial clustering can play in supporting SME participation in GVCs (Kergroach, 2018[93]) and attracting FDI that creates linkages with the local economy. Positive agglomeration economies occur when the spatial proximity of firms, workers and customers reduces production costs through external economies of scale and network effects (OECD, 2019[2]). Clusters create an environment that is conducive to productivity growth through the presence of interconnected companies, specialised suppliers, specialised workers, service providers and firms in related industries (Porter, 1990[94]; OECD, 2009[95]). These effects can lower market entry costs for SMEs, promote risk sharing of sector-specific infrastructure, provide access to better intermediate inputs and enlarge the pool of workers with similar skills (Delgado, Porter and Stern, 2010[96]; Puga, 2010[97]), thus attracting further entrepreneurial activity and forming larger business networks.

Evidence from the United Kingdom shows that firms located in clusters benefit from FDI, both in the same sector of the foreign affiliate and in other sectors (De Propris, Driffield and Menghinello, 2005[98]). However, these benefits do not materialise for companies located outside the clusters. Clusters that are built bottom up from regional industrial specialisation are more likely to lead to long-term spillovers as they have a greater ability to evolve to fit into continually useful niches in GVCs. Menghinello et al. (2010), using evidence from Italy, found that the joint presence of inward FDI and industrial clusters generates a positive effect on local enterprise productivity (Menghinello, De Propris and Driffield, 2010[99]). In the context of Eastern Europe (Poland and Romania), Franco and Kozovska (2008[100]) found that FDI has a positive impact on the productivity of local clusters, but that there are also “reverse spillover effects” through which MNEs benefit from local clusters by sourcing local knowledge and technology (Franco and Kozovska, 2008[100]). Some other studies find that while the advantage of clustering exists, it tends to decline over time.

The quality of the network and knowledge infrastructure is key for building resilient FDI-SME ecosystems

Infrastructure is a key enabler of agglomeration and connectivity. Network infrastructure is critical for a dynamic business ecosystem and for firms’ entry into distant markets and engagement in GVCs (OECD, 2019[2]). A well-functioning infrastructure (including logistics, energy, Internet) ensures secure and cost-efficient access to strategic resources, including skills and business partners. A recent study of the World Trade Organisation shows that logistics and infrastructure costs remain among the major challenges SMEs face in joining GVCs, and lead firms within GVCs face in finding suppliers (World Trade Organisation, 2016[101]).

Transport infrastructure can influence the decision of where to locate new investment projects. Air connectivity, for instance, can help attract FDI and the most talented individuals who also tend to be the most internationally mobile (Oxford Economic Forecasting, 2006[102]) (OECD, 2018[103]). Transport infrastructure allows regions and cities to leverage benefits from concentration by expanding commuting opportunities for their workers and facilitating access to markets. This creates benefits for places and for workers who can access better-matching and better-paid jobs without bearing the burden of moving to a different place. Intra-urban and suburban transport infrastructure serves to integrate rural regions into the local labour market of the cities located in their proximity, thereby creating a greater variety of job opportunities and raising the living standards of their inhabitants.

Information and communication technologies (ICT) infrastructure sustains the digital transformation of SMEs and their participation in innovation activities. Accessing high speed networks allows SMEs to connect with suppliers and customers, obtain real-time information and provide real-time responses to fast-evolving markets and supply chains (OECD, 2019[2]). Results of a sample survey of UK firms with low-speed and high-speed internet connection show that greater ICT intensity is positively related to firm level productivity (OECD, 2015[104]). Other studies on German and Irish firms pointed out that the use of broadband connections has a positive and significant impact on their innovation activity (Bertschek, Cerquera and Klein, 2013[105]; Haller and Lyons, 2015[106]). A recent OECD report on the digital transformation of SMEs shows that access to high-speed broadband is a prerequisite for their transformation and, despite the diverse forms of digitalisation across industries, explains cross-industry differences in value creation (OECD, 2021[41]). The COVID-19 pandemic has accelerated the need for better digital infrastructure as more people than ever work from home, engage in distance learning and even access healthcare online.

Energy infrastructure also matters for SME operations. Affordable energy supply can influence the cost of doing business and bring multiple benefits to SMEs, including reducing intermediate consumption and costs, raising product quality and visibility, improving operations and workplace environment, gaining access to new markets, reducing vulnerability to energy price volatility or ensuring compliance with environmental standards (OECD, 2019[2]). The quality of the energy infrastructure also has implications for FDI location decisions. Foreign MNEs may be put off by the lack of sustainable and affordable green energy in a specific country or region.

Finally, R&D infrastructure is critical for developing vibrant entrepreneurial ecosystems, where foreign MNEs and local SMEs can engage in knowledge-intensive collaborations (OECD, 2019[2]). R&D and innovation facilities as well as e-infrastructure such as e-libraries, online platforms and databases give SMEs access to cutting-edge technologies and act as a catalyst for attracting technology-intensive FDI, innovative startups, and world-class researchers. In increasingly knowledge-based economies, the availability of this type of infrastructure allows SMEs to develop their digital capabilities and access innovation assets while it also serves as a platform of public-private collaboration bringing together actors across disciplines, sectors and borders.

Diagnostic tool

Box 1.5 includes a checklist of questions allowing policymakers to assess the enabling conditions for FDI-SME spillovers.

Box 1.5. Checklist of questions to assess the economic, structural and geographical characteristics of the host country and region

- What is the industrial structure and specialisation of the economy?
- What sectors and value chains drive economic growth, productivity and innovation? Is economic activity concentrated in high-technology and knowledge-intensive sectors?
- What is the level of GVC integration (both through backward and forward linkages)? What sectors are better integrated into GVCs? Are there opportunities for increased integration in underperforming sectors?
- Are there regional disparities in economic growth, productivity and innovation performance? What is the industrial structure and specialisation of regions?
- What is the geographic distribution of FDI in the host economy?
- To what extent does SME performance vary across regions (e.g. in terms of innovation, skill-intensity, internationalisation, access to finance, etc.)?
- How do regions perform across key factors that shape their attractiveness to investors and entrepreneurs, including proximity to domestic and international markets, availability of skills, employment, well-being, environmental quality and social cohesion?
- Is there any evidence of market-driven industrial clustering either at the sectoral or regional level?
- Do foreign MNEs and local SMEs have access to well-functioning network and knowledge infrastructure (e.g. transport, energy, high-speed broadband, R&D and networking infrastructure)?

The enabling conditions for FDI-SME spillovers can be measured and monitored through a range of internationally comparable indicators, as described in Table 1.3.

Table 1.3. Benchmarking economic, structural and geographical conditions for FDI-SME spillovers

	Dimensions	Indicators	Sources	Coverage
Economic structure and specialisation	Sectoral distribution of economic activity	Total value added by sectoral groups (%)	OECD National Accounts database OECD STAN Database for Structural Analysis	National
		Gross exports by sectoral groups (%)	OECD Trade in Value Added Database	National
		Wages and salaries of employees by sectoral groups	OECD STAN Database for Structural Analysis	National
	Specialisation patterns	Krugman specialisation index (relative concentration of value added, employment, profits, gross fixed capital formation, wages and salaries)	OECD STAN Database for Structural Analysis	National
		Revealed Technological Advantage (RTA)	OECD Patent Statistics Database	National
		Revealed Comparative Advantage (RCA)	OECD ITCS and TiVA databases	National
	GVC integration	Foreign value-added content of exports (%)	OECD Trade in Value Added Database	National / Sectoral
		Domestic value-added content of exports (%)	OECD Trade in Value Added Database	National / Sectoral
		Trade volume, as % of GDP	OECD Trade in Goods and Services Indicators	National / Sectoral

Economic geography	Regional FDI and SME&E performance	Greenfield FDI by target region	Financial Times' fDi Markets	National / Subnational
		Cross-border M&A by target region	Refinitiv data	National / Subnational
		Regional entrepreneurship development	EC Regional Entrepreneurship Development Index	Subnational
		SMEs introducing product innovations by region (index)	EU Regional Innovation Scoreboard	Subnational
		SMEs introducing business process innovations by region (index)	EU Regional Innovation Scoreboard	Subnational
		Innovative SMEs collaborating with others by region (index)	EU Regional Innovation Scoreboard	Subnational
		Cluster development (index)	World Economic Forum Global Competitiveness Index	National
		Share of firms using material inputs and/or suppliers of foreign origin by region (%)	OECD Trade by Enterprise Characteristics (TEC) database World Bank Enterprise Surveys	National / Subnational
		Proportion of total inputs that are of foreign origin by region (%)	OECD Trade by Enterprise Characteristics (TEC) database World Bank Enterprise Surveys	National / Subnational
		Share of firms offering formal training by region (%)	World Bank Enterprise Surveys	National / Subnational
		Proportion of skilled workers by region (out of all workers, %)	World Bank Enterprise Surveys	National / Subnational
	Regional economic characteristics	Share of the population who think that their city or region is a good place for people starting new businesses (%)	Gallup World Poll	Subnational
		Productivity levels by region (gross value added per worker)	OECD Regional Statistics Database	Subnational / Sectoral
		Regional employment by industry	OECD Regional Statistics Database	Subnational / Sectoral
		Employment in high-technology manufacturing and services (% of total regional employment)	OECD Regional Statistics Database	Subnational / Sectoral
		Employment in innovative enterprises (index)	EU Regional Innovation Scoreboard	Subnational
		R&D expenditure by region	OECD Regional Statistics Database	Subnational / Sectoral
		R&D personnel by region	OECD Regional Statistics Database	Subnational / Sectoral
		Individuals with above basic digital skills by region (index)	EU Regional Innovation Scoreboard	Subnational
Infrastructure	Transport and logistics	Quality of transport infrastructure index	WEF Global Competitiveness Index	National
		Share of firms identifying transportation as major constraint for doing business (%)	World Bank Enterprise Surveys	National
		Time and cost of domestic transport of imported / exported shipments	World Bank Trading across Borders	National
		Domestic Logistic Performance (LPI index)	World Bank / Turku Logistic Performance Index Surveys (domestic)	National
		Total inland transport investment (% of GDP)	OECD International Transport Forum Database	National
		Number of airports per million inhabitants	OECD International Transport Forum Database	National
		Share of high-speed rail lines in total rail network	OECD International Transport Forum Database	National
		Share of motorways in total road length	OECD International Transport Forum Database	National
	Energy	% firms identifying electricity as a major constraint for doing business	World Bank Enterprise Surveys	National

		Energy price index for industry	OECD IEA Energy Prices and Taxes Statistics	National
		Electricity prices for industry	OECD IEA Energy Prices and Taxes Statistics	National
		Share of firms that experienced power outages (%)	World Bank Enterprise Surveys	National
		Renewables balance in electricity output (GWh) (Ktoe)	OECD IAE Renewables Information database	National
		Per capita CO2 emissions by sector	IEA GHG emissions database	National
	High-speed broadband	Share of SMEs with a high-speed fixed broadband connection (%)	OECD ICT usage by businesses database	National / Sectoral
		High-speed fixed broadband subscriptions (per 100 inhabitants)	OECD Digital Economy	National
		Average Internet connection speed (mb/s)	Akamai state of the Internet report 2016	National
	R&D and networking infrastructure	Intensity of government expenditure on R&D, as a % of GDP	OECD MSTI database	National
		Share of industry-funded university R&D (%)	OECD RDS Database	National
		Share of industry-funded public R&D labs (%)	OECD RDS Database	National
		Share of university-funded business R&D (%)	OECD RDS Database	National
		Industry-science linkages (% of GDP)	OECD RDS Database	National
		Share of innovative firms collaborating on innovation with higher education or research institution (%)	OECD RDS Database	National
		Foreign ownership of domestic inventions (number)	OECD Patents Statistics	National
		Share of patents owned by foreign residents (%)	OECD Patents Statistics	National
		Domestic ownership of inventions made abroad (number)	OECD Patents Statistics	National
		Share of patents invented abroad (%)	OECD Patents Statistics	National
		Share of patents with foreign co-inventors (%)	OECD Patents Statistics	National

Source: Authors' elaboration.

The diffusion of FDI-SME spillovers

For FDI-SME spillovers to occur, domestic SMEs should be exposed directly or indirectly to foreign MNE activities. SMEs are directly exposed to MNE activities when they are tied to them through business linkages. They are indirectly exposed to MNE activities through market mechanisms or the influence MNEs can exert on their ecosystems.

Prior research has identified a set of channels through which FDI can contribute to SME productivity and innovation (Görg and Strobl, 2005[107]; Crespo and Fontoura, 2007[20]; Smeets, 2008[24]):

- **Value chain linkages**, involving knowledge spillovers from foreign MNEs to their suppliers (upstream) and customers (downstream).
- **Strategic partnerships**, which involve knowledge and capacity transfer during formal collaborations, for example in the area of R&D or workforce/managerial skills upgrading.
- **Labour mobility**, which induces spillovers when workers move from foreign MNEs to local companies or when they start their own company (corporate spin-outs).
- **Competition effects**, when an above-average efficient MNE enters the market, particularly if domestic companies are operating in the same sector or value chain segment, and even when they are not located in the same region.

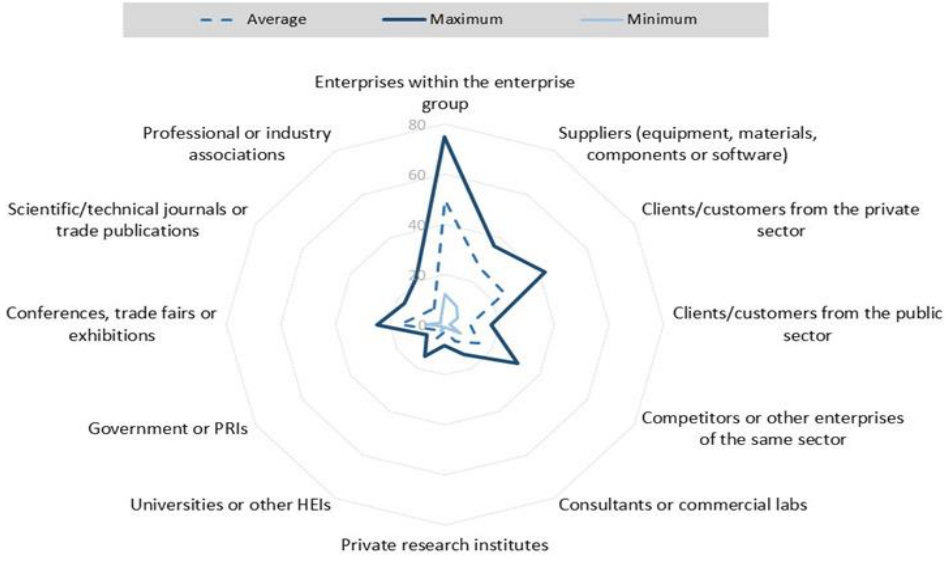
- **Imitation effects**, which arise when domestic firms imitate the products and practices of the foreign MNE. These effects are more likely to occur at the local level.

Value chain linkages involve knowledge spillovers from foreign MNEs to their suppliers and customers

Value chain linkages refer to the relationships of foreign-owned companies with local buyers (downstream linkages) or suppliers (backward linkages). FDI spillovers are more commonly found in these vertical relationships than in the relationship between MNEs and potential local competitors (horizontal spillovers), as rivalry is more naturally embedded in the latter (Rojec and Knell, 2017[108]); (Javorcik, 2004[109]); (Blalock and Gertler, 2008[110]). Buyer-supplier networks play a key role in business innovation processes as firms, beyond their own group, turn more often towards clients and the market to source knowledge. A large empirical literature has investigated the influence of business linkages on the firm's innovation performance (Faems, van Looy and Debackere, 2005[111]); (Miotti and Sachswald, 2003[112]); (Modi and Mabert, 2010[113]); (Nieto and Santamaría, 2007[114]), arguing that supplier involvement adds expertise and gives a different perspective on problem solving and product development by the firm. Collaborating with customers also helps identify market opportunities and trends earlier, and improve design at earlier stages of development. Collaboration for innovation is more frequent with suppliers and customers than competitors, especially with suppliers in the case of large firms whose value chains are more integrated (OECD, 2017[115]). In fact, collaboration is seen as a driving force in supply chain management and a key component of corporate strategies for mitigating risks and developing resilient supply chains (Horvath, 2001[116]).

Figure 1.5. Importance of buyer-supplier linkages for the innovative firm

Percentage of product/process innovative firms which use and consider different sources of information of high importance for their innovative activities; average, minimum and maximum percentage shares across EU countries



Source: Kergroach (2020[117]) based on the EU community innovation survey 2016 (Eurostat, 2016).

Forward linkages between MNEs and local buyers have a positive impact on local enterprise productivity mostly through the acquisition of better quality inputs, which were not locally available before (Criscuolo and Timmis, 2017[118])). Many MNEs, especially in industrial sectors such as machinery, often offer training

to their customers on the use of their products as well as information on international quality standards (Jindra, 2006[119]). Backward linkages with suppliers will generate knowledge spillovers when MNEs require better quality inputs from local suppliers and are willing to share knowledge and technology with them to encourage the adoption of good business practices. Doan, Maré and Iyer (2014[120]) find positive backward spillovers for small firms in New Zealand and give two main possible explanations: small domestic firms in upstream position benefit from economies of scale when they jointly supply MNEs and/or, given the technology gap between the local small firms and the MNE, they use the supply relationship to catch up technologically.

The training and on-the-job learning opportunities offered by MNEs may also be extended to the workforce of local companies with which they develop buyer-supplier linkages. For instance, foreign-owned firms provide staff training to domestic suppliers to ensure efficiency and product quality (OECD, 2019[8]) or to local customers as a service and a way to consolidate their client base. This is the case in the digital economy, where large platforms provide online and free training to their users, often SMEs, to help them adopt their technology and software package (OECD, 2021[41]).

Not all MNE suppliers can benefit to the same extent from knowledge transfers, tier 1 suppliers being more likely to get more. In many value chains, tier 1 suppliers are typically a small number of large enterprises that supply inputs or services directly to the lead MNE through contractual partnerships such as contract manufacturing and services outsourcing agreements (UNCTAD, 2013[31]; Abonyi, 2005[121]; ABDI, 2015[122]) (see also Figure 1.3). Depending on the industry, they can be highly specialised and usually capture the bulk of knowledge spillovers by working closely with the MNE to ensure that inputs adhere to global quality standards. These large enterprises are generally surrounded by a pool of smaller suppliers, often SMEs, who operate predominantly through arm's length market transactions at the bottom of the supply chain. These are usually SMEs with low absorptive capacity and can be easily replaced by other suppliers that offer better comparative advantages, such as lower labour costs (Abonyi, 2005[121]) . In rigid GVC structures, there is little room for direct knowledge transfer from the lead MNE to lower-tier suppliers. Therefore, SMEs in the lower tiers can only benefit from spillovers from larger enterprises that are located on the second and third tiers. This may be particularly important in sectors that have a large productivity gap between SMEs and MNEs. Further examples are provided below.

In the car manufacturing industry, lead car manufacturers (often MNEs) are responsible for design, branding and final assembly, while first-tier suppliers (often successful domestic companies) support them by producing complete subsystems in cooperation with a large network of lower-tier suppliers and subcontractors. These first-tier suppliers have increasingly developed into global suppliers with highly specialised capabilities as they work with the lead firm to deliver customised car parts and components, and sometimes take a larger role in the production process, including design (Lejarraga et al., 2016[34]). They often have the intellectual property of the components' design and cannot be easily replaced by other lower-tier suppliers.

In the electronics industry, the GVC consists of lead firms and contract manufacturers, followed by a vast pool of other market players such as software vendors, distributors and producers of more generic components (Kawakami and Sturgeon, 2010[123]); (Nathan, 2020[124]); (de Backer and Miroudot, 2014[125])). The rise of supplier capabilities has allowed large firms (MNEs) to outsource their operations to contract (domestic) manufacturers who have become "turn-key suppliers" with a high degree of autonomy, offering a full package of services to lead firms, and often managing the entire manufacturing network with minimal support. Evidence shows that the expansion of these turn-key suppliers towards new functions in the value chain has occurred in conjunction with diversification into new industries such as the automotive, aerospace and defence sectors (Raj-Reichert, 2018[126]). The activities undertaken by contract manufacturers differ across companies, although they can range from providing only production services to undertaking production as well as design activities.

Strategic partnerships are increasingly common in knowledge-intensive and high-tech industries

The emergence of GVCs has brought new types of MNE-SME partnerships, especially in high-tech and knowledge-intensive industries, where knowledge transfer and cross-border R&D projects are a common practice. These partnerships can take many forms, including joint ventures, licensing agreements, research collaborations and R&D and technology alliances (Andrenelli et al., 2019[19]). The form the co-operation will take will depend on each partner's comparative advantage. For instance, in case of cultural or spatial barriers difficult to manage, the MNE can rely on small locally embedded distributors. If the market is hard to transact in, it could set up a joint venture, as opposed to a simpler license agreement. Overall, strategic partnerships are frequently deployed in knowledge-intensive and high-technology sectors, which rely heavily on R&D, while they seem to be less important for MNEs in medium- and low-technology industries. An explanation may be the fast-changing nature of these industries and their products, which may favour the flexibility of strategic partnerships over FDI (Andrenelli et al., 2019[19]).

Strategic partnerships are the result of a shift towards an open mode of innovation, which has made innovation more accessible to SMEs (OECD, 2019[2]). Open innovation has increasingly been seen as a way for accelerating internal innovation and expanding the markets for external use of innovation (Chesbrough, 2003[127]). Large firms have increasingly taken part in the open innovation transformation by developing strategic partnerships with smaller enterprises or by setting up innovation labs and accelerators where start-ups and other small firms can nurture new business ideas and business models. Recent OECD work on Southeast Asia finds that productivity spillovers from strategic partnerships, such as manufacturing/marketing agreements and joint ventures, depend on firm-level characteristics, such as firm size, (foreign) ownership, internationally-recognised certifications and staff training, i.e. absorptive capacities (OECD-UNIDO, 2019[14]).

The movement of highly skilled workers from foreign MNEs to domestic SMEs can bring new knowledge and skills to local markets

Labour mobility can be an important source of knowledge spillovers in the context of FDI, notably through the move of MNE workers to local SMEs – either through temporary arrangements such as detachments or long-term arrangements such as open-ended contracts – or through the creation by MNE workers of start-ups (i.e. corporate spin-offs).

Existing evidence suggests that firms established by MNE managers are more productive than other local firms (Görg and Strobl, 2005[107]). Similarly, evidence from manufacturing in Norway suggests that workers who moved from foreign-owned to domestic firms retain part of their knowledge and that they contribute 20% more to the productivity of their firm than workers without foreign firm experience (Balsvik, 2011[128]). Recent OECD research on Ireland shows that over the period 2009-15 more than one in four employees at foreign-owned companies either moved to a domestic firm or became self-employed. In addition, more than one in three start-up founders had previously worked at a foreign-owned company (OECD, 2020[129]). Labour mobility within Ireland is also very common among high-skilled researchers who have produced patents. One out of two patent inventors changed employer at least once during the period 2006-2016. As most inventors are based in foreign-owned companies, FDI spillovers related to inventor mobility play an important role in Ireland.

On the other hand, research on Portugal provides a more sceptical perspective on potential productivity spillovers on domestic firms resulting from the mobility of workers (Martins, 2011[130]). Domestic firms in Portugal tend to hire 'below-average' workers from foreign firms who take, on average, pay cuts (which is consistent with involuntary mobility). It suggests that worker mobility is unlikely to be a major source of productivity spillovers from foreign to domestic firms. However, movements from domestic to foreign firms translate into considerable pay increases in Portugal but also in other EU Member States (Becker et al.,

2020[131]). This pay increase is consistent with generally higher remunerations paid by foreign firms vis-à-vis their domestic counterparts (OECD, 2022[132]). As foreign firms attract some of the best workers in domestic firms where they experience a wage increase and acquire new knowledge, productivity spillovers from worker mobility may also (or rather) occur from domestic to foreign firms.

Competition with foreign MNEs and imitation of their business practices provide significant learning and upgrading opportunities for domestic SMEs

The entry of foreign-owned firms will also heighten the level of competition on domestic companies, putting pressure on them to become more innovative and productive. The new standards set by foreign-owned firms – in terms of product design, quality control or speed of delivery – can stimulate technical change, the introduction of new products, and the adoption of new management practices in local companies, all of which are possible sources of productivity growth. Foreign-owned firms can also become a source of emulation for local companies, for example by showing better ways to run a business. Imitation and tacit learning can, therefore, become a channel to strengthen enterprise productivity at the local level. This is particularly relevant for activities that are deemed positive but risk bearing. Evidence from Scotland points to SMEs benefiting from MNE and other large firms' experimentation on the implementation of new green technologies and techniques (Medhurst et al., 2014[133]).

However, if local companies are not quick to adapt, competition from foreign-owned companies may also result in the exit of some domestically-owned firms. Increased competition for talent may also make it more difficult for local companies to recruit skilled workers, particularly in more remote areas where this labour pool is smaller (Lembcke and Wildnerova, 2020[76]). These effects are more likely to happen to local companies which operate in the same sector or value chain function of the foreign-owned company, which is the main reason why horizontal spillovers from FDI are so rare and, when they happen, they mostly involve larger domestic companies (Gorodnichenko, Svejnar and Terrell, 2014[28]).

Diagnostic tool

Box 1.6 includes a checklist of questions allowing policymakers to assess the extent to which spillovers take place through the FDI-SME spillover channels.

Box 1.6. The diffusion channels of FDI-SME spillovers: Checklist of questions for policymakers

- To what extent do foreign MNEs source intermediate goods and services from domestic SMEs (relative to sourcing from abroad or from other large domestic enterprises)?
- To what extent do domestic SMEs purchase inputs from foreign MNEs (i.e. share of foreign MNEs' total output that is purchased by local SMEs as an input to their production)?
- What is the position of domestic SMEs in global value chains (GVCs)? To what extent are they engaged in GVCs?
- How do the activities of foreign investors align with the activities of SMEs (e.g. in terms of sector and value chain segment in which they operate)?
- How common are strategic partnerships between foreign affiliates and local SMEs (e.g. joint ventures, licensing agreements, research collaborations, business networks, etc.)?
- How common and likely is the mobility of workers from foreign MNEs to domestic firms? What is the wage premium of foreign MNEs compared to domestic firms?
- What extent are new standards set by foreign affiliates (e.g. product design, quality control, speed of delivery, etc.) adopted by domestic SMEs?
- Is there any evidence of tacit learning/imitation by domestic SMEs of foreign MNEs operating in the same sector or value chain?
- Is the high level of market competition a hampering factor for innovation in SMEs? How common is cooperation on R&D and other innovation activities between domestic SMEs and competitor enterprises in the same sector?

The depth and breadth of FDI-SME spillover channels can be measured and monitored through a range of internationally comparable indicators, as described in Table 1.4.

Table 1.4. Benchmarking FDI-SME spillover channels at country and region level

	Dimensions	Indicators	Sources	Coverage
Value chain linkages and strategic partnerships	Backward linkages	Sourcing structure of foreign affiliates, by supplier size / ownership (%)	OECD AMNE database	National / Sectoral
	Forward linkages	Use of outputs of foreign affiliates, by buyer size / ownership (%)	OECD AMNE database	National / Sectoral
	Technology licensing	Share of manufacturing firms using technology licensed from foreign-owned firms	World Bank Enterprise Surveys	National
		Share of firms that licensed in or purchased IP rights by sector and size class	Eurostat CIS surveys	National / sectoral
	Co-operation in R&D an innovation activities	Share of innovative SMEs collaborating on R&D and innovation with clients and suppliers from the private sector	Eurostat CIS surveys	National / Sectoral
Labour mobility	Wage premia	Foreign firms wage premia relative to domestic firms, as % of wage of average domestic firm	World Bank Enterprise Surveys	National
	Staff training	% of firms with formal training for staff	World Bank Enterprise Surveys	National
		Share of employees receiving on-the-job training (%)	OECD Job Quality Database	National
		Share of SMEs providing ICT training to their employees (%)	OECD ICT use by Businesses Database	National
		SME expenditure on staff training	Eurostat CIS surveys	National / sectoral
	Job mobility	Job-to-job mobility of S&T staff by sector and	Eurostat CIS surveys	National /

		age		Sectoral
Competition / imitation	Market competition	Relative importance of high competition as a hampering factor for innovation activities in SMEs	Eurostat CIS surveys	National / Sectoral
		Share of SMEs that co-operated on R&D and other innovation activities with competitors or other enterprises in the same sector	Eurostat CIS surveys	National / Sectoral
		SME having introduced innovation in cooperation with competitors	Eurostat CIS surveys	National / Sectoral
		SMEs which used information from competitors or other business in the same sector for their innovation activities	Eurostat CIS surveys	National / Sectoral

Source: Authors' elaboration.

References

ABDI (2015), "Integrating SMEs into global value chains: Challenges and policy actions in Asia.", https://www.adb.org/sites/default/files/publication/175295/smes-global-value-chains.pdf. [122]

Abonyi, G. (2005), *Integrating SMEs into global and regional value chains: implications for*, UNESCAP:, https://www.adb.org/sites/default/files/publication/156086/adbi-wp231.pdf. [121]

Abraham, F., J. Konings and V. Slootmaekers (2010), "FDI spillovers in the Chinese manufacturing sector", *Economics of Transition*, Vol. 18/1, pp. 143-182, https://doi.org/10.1111/j.1468-0351.2009.00370.x. [40]

Acemoglu (2002), "Technical Change, Inequality, and the Labor Market", *Journal of Economic Literature*, Vol. 40.1, pp. 7-72. [51]

Andrenelli, A. et al. (2019), "Micro-Evidence on Corporate Relationships in Global Value Chains: The Role of Trade, FDI and Strategic Partnerships", *OECD Trade Policy Papers*, No. 227, OECD Publishing, Paris, https://doi.org/10.1787/f6225ffb-en. [19]

Autor, D. (2013), "The 'task approach' to labour markets: an overview", *Journal of Labour Market Research*, Vol. 46/3, pp. 3-30. [49]

Balsvik, R. (2011), "Is Labor Mobility a Channel for Spillovers from Multinationals? Evidence from Norwegian Manufacturing", *Review of Economics and Statistics*, Vol. 93/1, pp. 285-297, https://doi.org/10.1162/rest_a_00061. [128]

Batten, S. and D. Jacobs (2017), "Foreign-owned firms and productivity", *BankUnderground*, https://bankunderground.co.uk/2017/08/17/foreign-owned-firms-and-productivity/. [13]

Becker, B. et al. (2020), "FDI in hot labour markets: The implications of the war for talent", *Journal of International Business Policy (2020)*, pp. 107–133. [131]

Benfratello, L. and A. Sembenelli (2006), "Foreign ownership and productivity: Is the direction of causality so obvious?", *International Journal of Industrial Organization*, Vol. 24/4, pp. 733-751, https://doi.org/10.1016/j.ijindorg.2005.07.012. [83]

Bertschek, I., D. Cerquera and G. Klein (2013), "More Bits - More Bucks? Measuring the Impact of Broadband Internet on Firm Performance", *Dusseldorf Institute for Competition Economics - Discussion Paper*, http://www.dice.hhu.de/fileadmin/redaktion/Fakultaeten/Wirtschaftswissenschaftliche_Fakultaet/DICE/Discussion_Paper/086_Bertschek_Cerquera_Klein.pdf. [105]

Blalock, G. and P. Gertler (2008), "Welfare gains from Foreign Direct Investment through technology transfer to local suppliers", *Journal of International Economics*, Vol. 74/2, pp. 402-421, https://doi.org/10.1016/j.jinteco.2007.05.011. [110]

Braconier, H., K. Ekholm and K. Midelfart Knarvik (2001), "In search of FDI-transmitted R&D spillovers: A study based on Swedish data", *Review of World Economics*, Vol. 137, pp. 644–665, https://doi.org/10.1007/BF02707427. [21]

Branstetter, L., R. Fisman and C. Foley (2006), "Do Stronger Intellectual Property Rights Increase International Technology Transfer? Empirical Evidence from U. S. Firm-Level Panel Data", *The Quarterly Journal of Economics*, Vol. 121/1. [22]

Cadestin, C. et al. (2018), "Multinational enterprises and global value chains: the OECD analytical AMNE database", *OECD Trade Policy Papers*, No. 211, OECD Publishing, Paris, https://doi.org/10.1787/d9de288d-en. [7]

Cadestin, C. et al. (2018), "Multinational enterprises and global value chains: New Insights on the trade-investment nexus", *OECD Science, Technology and Industry Working Papers*, No. 2018/05, OECD Publishing, Paris, https://doi.org/10.1787/194ddb63-en. [9]

Chesbrough, H. (2003), *Open innovation: The new imperative for creating and profiting from technology*, https://books.google.fr/books?id=4hTRWStFhVgC&dq=Chesbrough,+2003&lr=&source=gbs_navlinks_s. [127]

Cohen, W. (1990), "Absorptive capacity: A new perspective on learning and innovation", *Administrative Science Quarterly* 35(1), pp. 128–152, https://doi.org/10.2307/2393553. [64]

Constantinescu, C. et al. (2022), "Globally Engaged Firms in the COVID-19 Crisis", *Policy Research working paper ; no. WPS 9991; COVID-19 (Coronavirus) Washington, D.C. : World Bank Group*, https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099358404042267302/idu0ee5e862a091220479d0ab0a016c582c2bd (accessed on 18 January 2023). [4]

Corsi, C. and A. Prencipe (2018), ""Foreign ownership and innovation in independent SMEs. A cross-European analysis"", *Journal of Small Business & Entrepreneurship*, Vol. 30:5, pp. 397-430, https://doi.org/10.1080/08276331.2017.1413751. [79]

Crescenzi, R., A. Dyevre and F. Neffke (2018), *Regional Innovation: How Foreign Firms allow New Places to Join the Global Innovation Contest, Presentation at OECD Applied Economic Research Seminar*. [27]

Crespo, N. and M. Fontoura (2007), "Determinant Factors of FDI Spillovers - What Do We Really Know?", *World Development*, Vol. 35/3, pp. 410-425, https://doi.org/10.1016/j.worlddev.2006.04.001. [20]

Criscuolo, C. and R. Martin (2003), *Multinationals, foreign ownership and US productivity leadership: Evidence from the UK*, Royal Economic Society Annual Conference 2003 50, Royal Economic Society. [84]

Criscuolo, C. and J. Timmis (2018), "GVC centrality and productivity: Are hubs key to firm performance?", *OECD Productivity Working Papers*, No. 14, OECD Publishing, Paris, https://doi.org/10.1787/56453da1-en. [77]

Criscuolo, C. and J. Timmis (2017), *The Relationship Between Global*, pp. 61-83, https://www.oecd-ilibrary.org/docserver/9789264279179-en.pdf?expires=1671121474&id=id&accname=ocid84004878&checksum=E26E4E85B8AD3AE43D0251F0BCB34A2A#page=65. [118]

Dachs, B. and B. Ebersberger (2009), ""Does foreign ownership matter for the innovative activities of enterprises?"", *Int Econ Econ Policy 6*, pp. 41–57, https://doi.org/10.1007/s10368-009-0126-3. [78]

de Backer, K. and S. Miroudot (2014), "Mapping Global Value Chains", *SSRN Electronic Journal*, https://doi.org/10.2139/ssrn.2436411. [125]

De Propris, L., N. Driffield and S. Menghinello (2005), "Local industrial systems and the location of FDI in Italy", *International Journal of the Economics of Business, Taylor & Francis Journals*, Vol. vol. 12(1), pp. pages 105-121. [98]

Delgado, M., M. Porter and S. Stern (2010), "Clusters and Entrepreneurship", *SSRN Electronic Journal*, https://doi.org/10.2139/ssrn.1689084. [96]

Doan, T., D. Maré and K. Iyer (2014), "Productivity spillovers from foreign direct investment in New Zealand", *New Zealand Economic Papers*, Vol. 49/3, pp. 249-275, https://doi.org/10.1080/00779954.2014.945229. [120]

Driffield, N. and J. Love (2007), "Linking FDI motivation and host economy productivity effects: conceptual and empirical analysis", *Journal of International Business Studies*, Vol. 38/3, pp. 460-473, https://doi.org/10.1057/palgrave.jibs.8400268. [25]

EUIPO (2020), *High-growth firms and intellectual property rights: IPR profile of high-potential SMEs in Europe*, https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2019_High-growth_firms_and_intellectual_property_rights/2019_High-growth_firms_and_intellectual_property_rights.pdf (accessed 17 January 2023). [58]

Eurofound (2016), *Sixth European Working Conditions Survey – Overview report*, http://eurofound.link/ef1634. [55]

Faems, D., B. van Looy and K. Debackere (2005), ""Interorganizational collaboration and innovation: Toward a portfolio approach"", *Journal of Product Innovation Management*, Vol. Vol. 22(3), pp. pp.238-250, https://doi.org/10.1111/j.0737-6782.2005.00120.x. [111]

Farole, T. and D. Winkler (eds.) (2014), *Making Foreign Direct Investment Work for Sub-Saharan Africa:Local Spillovers and Competitiveness in Global Value Chains*, The World Bank, https://doi.org/10.1596/978-1-4648-0126-6. [16]

Farole, T. and D. Winkler (2013), "Firm location and the determinants of exporting in low- and middle-income countries", *Journal of Economic Geography*, Vol. 14/2, pp. 395-420, https://doi.org/10.1093/jeg/lbs060. [30]

Franco, C. and K. Kozovska (2008), "Mutual Productivity Spillovers and Clusters in Eastern Europe: Some Empirical Evidence", *SSRN Electronic Journal* September 20, https://doi.org/10.2139/ssrn.1317334. [100]

Gal, P. and W. Witheridge (2019), "Productivity and innovation at the industry level: What role for integration in global value chains?", *OECD Productivity Working Papers*, No. 19, OECD Publishing, Paris, https://doi.org/10.1787/a5cec52c-en. [15]

Gereffi, G. and Fernandez-Stark (2016), *Global Value Chains: a primer*, https://gvcc.duke.edu/wp-content/uploads/Duke_CGGC_Global_Value_Chain_GVC_Analysis_Primer_2nd_Ed_2016.pdf. [32]

Gereffi, G., J. Humphrey and T. Sturgeon (2005), "The governance of global value chains", *Rev. Int. Polit. Econ., 12 (1)*, Vol. 12/1, pp. 78-`04, https://doi.org/10.1080/09692290500049805. [18]

Giglioli, S. et al. (2021), "The Resilience of Global Value Chains during the Covid-19 pandemic: the case of Italy", *Working Paper N. 07/2021*, https://www.disei.unifi.it/upload/sub/pubblicazioni/repec/pdf/wp07_2021.pdf (accessed on 18 January 2023). [3]

Girma, S., H. Görg and M. Pisu (2008), "Exporting, linkages and productivity spillovers from foreign direct investment", *Canadian Journal of Economics/Revue canadienne d'économique*, Vol. 41/1, pp. 320-340, https://doi.org/10.1111/j.1365-2966.2008.00465.x. [42]

Görg, H. and E. Strobl (2005), "Spillovers from Foreign Firms through Worker Mobility: An Empirical Investigation*", *The Scandinavian Journal of Economics*, Vol. 107/4, pp. 693-709, https://doi.org/10.1111/j.1467-9442.2005.00427.x. [107]

Gorodnichenko, Y., J. Svejnar and K. Terrell (2014), "When does FDI have positive spillovers? Evidence from 17 transition market economies", *Journal of Comparative Economics*, Vol. 42/4, pp. 954-969, https://doi.org/10.1016/j.jce.2014.08.003. [28]

Grundke, R, et. al. (2017), *Skills and global value chains: A characterisation*, OECD Publishing. [50]

Guadalupe, M., O. Kuzmina and C. Thomas (2010), "Innovation and Foreign Ownership", *NBER Working Paper No. 16573* December, https://www.nber.org/papers/w16573. [80]

Guiso, L. and F. Schivardi (2011), "WHAT DETERMINES ENTREPRENEURIAL CLUSTERS?", *Journal of the European Economic Association*, Vol. 9/1, pp. 61-86, https://doi.org/10.1111/j.1542-4774.2010.01006.x. [90]

Haller, S. and S. Lyons (2015), "Broadband Adoption and Firm Productivity: Evidence from Irish Manufacturing Firms", *Telecommunications Policy*, https://doi.org/10.1016/j.telpol.2014.10.003. [106]

Hannan, M. (1984), "Structural inertia and organizational change", *American Sociological Review* 49(2), pp. 149–164, https://doi.org/10.2307/2095567. [72]

Hansen, J. (1992), "Innovation, firm size, and firm age", *Small Business Economics* 4(1), pp. 37–44, http://cel.webofknowledge.com/InboundService.do?app=wos&product=CEL&Func=Frame&SrcApp=literatum&SrcAuth=atyponcel&locale=en-US&SID=D2PvW1VdQNPSqNUMhKv&customersID=atyponcel&smartRedirect=yes&mode=FullRecord&IsProductCode=Yes&Init=Yes&action=retrieve&UT=WO. [73]

Hayton, J. (2005), "Venture team human capital and absorptive capacity in high technology new ventures", *International Journal of Technology Management*, Vol. 31(3/4), pp. 256–274, https://doi.org/10.1504/IJTM.2005.006634. [69]

Horvath, L. (2001), ""Collaboration: the key to value creation in supply chain management"", *Supply Chain Management: An International Journal*, Vol. Vol 6(5), pp. pp.205-207, https://doi.org/10.1108/EUM0000000006039. [116]

Huergo, E. (2004), "How does probability of innovation change with firm age?", *Small Business Economics* 22(3/4), pp. 193–207, https://doi.org/10.1023/B:SBEJ.0000022220.07366.b5. [71]

Jacobs, J. (1993), *The Economy of Cities*, Random House. [92]

Javorcik, B. (2004), "Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In Search of Spillovers Through Backward Linkages", *American Economic Review*, Vol. 94/3, pp. 605-627, https://doi.org/10.1257/0002828041464605. [109]

Jindra, B. (2006), "The Theoretical Framework: FDI and Technology Transfer", in *Technology Transfer via Foreign Direct Investment in Central and Eastern Europe*, Palgrave Macmillan UK, London, https://doi.org/10.1057/9780230524484_2. [119]

Johansson, Å. and E. Olaberría (2014), "New Evidence on the Determinants of Industrial Specialisation", *OECD Economics Department Working Papers*, No. 1112, OECD Publishing, Paris, https://doi.org/10.1787/5jz5m893txq2-en. [17]

Jordaan, J., W. Douw and C. Qiang (2020), *Foreign Direct Investment, Backward Linkages and Productivity Spillovers: What Governments Can Do to Strengthen Linkages and Their Impact*, https://documents1.worldbank.org/curated/en/255331589314877764/pdf/Foreign-Direct-Investment-Backward-Linkages-and-Productivity-Spillovers-What-Governments-Can-Do-to-Strengthen-Linkages-and-Their-Impact.pdf. [26]

Kawakami, M. and T. Sturgeon (2010), *Global value chains in the electronics industry : was the crisis a window of opportunity for developing countries ?*, The World Bank, https://doi.org/10.1596/1813-9450-5417. [123]

Keller, W. and S. Yeaple (2009), "Multinational Enterprises, International Trade, and Productivity Growth: Firm-Level Evidence from the United States", *Review of Economics and Statistics*, Vol. 91/4, pp. 821-831, https://doi.org/10.1162/rest.91.4.821. [37]

Kergroach, S. (2020), *"Benchmarking National Innovation Policy Mixes for Technolgy Diffusion"*, Technische Universitat Berlin. [117]

Kergroach, S. (2018), "National innovation policies for technology upgrading through GVCs: A cross-country comparison", *Technological Forecasting and Social Change*, https://doi.org/10.1016/J.TECHFORE.2018.04.033. [93]

Konwar, Z. et al. (2015), "Do Foreign Ownership Modes Matter for FDI Spillovers?", in *The Rise of Multinationals from Emerging Economies*, Palgrave Macmillan UK, London, https://doi.org/10.1057/9781137473110_14. [39]

Lamotte, O. and A. Colovic (2015), "Early Internationalization Of New Ventures From Emerging Countries: The Case of Transition Economies", *M@n@gement*, Vol. 18/1, p. 8, https://doi.org/10.3917/mana.181.0008. [75]

Lejarraga, I. et al. (2016), *Upgrading pathways in the automotive value chain, Background document for the 7th Plenary Meeting of the OECD Initiative for Policy Dialogue on GVCs, Production Transformation and Upgrading, OECD, Paris*, http://www.oecd.org/dev/Upgrading-pathways-in-the-automotive-value-chain.pdf. [34]

Lembcke, A. and L. Wildnerova (2020), "Does FDI benefit incumbent SMEs?: FDI spillovers and competition effects at the local level", *OECD Regional Development Working Papers*, No. 2020/02, OECD Publishing, Paris, https://doi.org/10.1787/47763241-en. [76]

Lucas, R. (1978), "On the Size Distribution of Business Firms", *The Bell Journal of Economics*, Vol. 9/2, p. 508, https://doi.org/10.2307/3003596. [91]

Lund Vinding, A. (2006), "Absorptive capacity and innovative performance: A human capital approach", *Economics of Innovation and New Technology* 15(4-5), pp. 507–517, https://doi.org/10.1080/10438590500513057. [67]

Martins, P. (2011), "Paying More to Hire the Best? Foreign Firms, Wages, and Worker Mobility", *Economic Inquiry*, Vol. 49/2, pp. 349-363, https://doi.org/10.1111/j.1465-7295.2010.00301.x. [130]

Medhurst, J. et al. (2014), "AN ECONOMIC ANALYSIS OF SPILLOVERS FROM PROGRAMMES OF TECHNOLOGICAL INNOVATION SUPPORT Report prepared by: ICF GHK". [133]

Menghinello, S., L. De Propris and N. Driffield (2010), "Industrial districts, inward foreign investment and regional development", http://publications.aston.ac.uk/id/eprint/18825/1/Industrial_districts_inward_foreign_investment_and_regional_development.pdf. [99]

Minbaeva, D. (2014), "MNC knowledge transfer, subsidiary absorptive capacity and HRM", *Journal of International Business Studies* 45(1), pp. 38–51, https://link.springer.com/article/10.1057%2Fjibs.2013.43. [68]

Miotti, L. and F. Sachswald (2003), ""Co-operative R&D: why and with whom?: An integrated framework of analysis"", *Research Policy*, Vol. Vol.32(8), pp. pp.1481-1499, https://doi.org/10.1016/S0048-7333(02)00159-2. [112]

Modi, S. and V. Mabert (2010), ""Exploring the relationship between efficient supply chain management and firm innovation: an archival search and analysis"", *Journal of Supply Chain Management*, Vol. Vol 46(4), pp. pp.81-94, https://doi.org/10.1111/j.1745-493X.20. [113]

Nathan, D. (2020), "Digitization and the Reorganization of GVCs", *The Indian Journal of Labour Economics*, Vol. 63/S1, pp. 173-179, https://doi.org/10.1007/s41027-020-00274-x. [124]

Nicolini, M. and L. Resmini (2010), "FDI spillovers in new EU member states", *Economics of Transition*, Vol. 18/3, pp. 487-511, https://doi.org/10.1111/j.1468-0351.2009.00379.x. [36]

Nieto, M. and L. Santamaría (2007), ""The importance of diverse collaborative networks for the novelty of product innovation"", *Technovation*, Vol. Vol. 27(3), pp. pp.367-377, https://doi.org/10.1016/j.technovation.2006.10.001. [114]

Nilsson, A., J. Magnusson and H. Enquist (2003), *SME network practice: a qualitative study of network management practice and design implications for ICT-support*, https://www.researchgate.net/publication/221408025_SME_network_practice_a_qualitative_study_of_network_management_practice_and_design_implications_for_ICT-support (accessed on 6 September 2022). [59]

Nooteboom, B. (2000), "Learning by interaction: Absorptive capacity, cognitive distance and governance", *Journal of Management and Governance* 4(1/2), pp. 69–92, https://doi.org/10.1023/A:1009941416749. [66]

OECD (2023), *A new knowledge infrastructure on SMEs and entrepreneurship*, https://www.oecd.org/cfe/datalake.htm (accessed on 19 January 2023). [81]

OECD (2023), *Foreign Direct Investment Statistics: Data, Analysis and Forecasts*, https://www.oecd.org/daf/inv/mne/statistics.htm (accessed on 14 February 2023). [6]

OECD (2023), *Structural and Demographic Business Statistics (SDBS)*, https://www.oecd.org/sdd/business-stats/structuralanddemographicbusinessstatisticssdbsoecd.htm (accessed on 19 January 2023). [11]

OECD (2022), *FDI Qualities Indicators 2022*, OECD Publishing, Paris, https://read.oecd-ilibrary.org/view/?ref=1144_1144750-u5ks4jvtnl&title=FDI-Qualities-Indicators-2022. [12]

OECD (2022), *Financing Growth and Turning Data into Business: Helping SMEs Scale Up*, OECD Studies on SMEs and Entrepreneurship, OECD Publishing, Paris, https://doi.org/10.1787/81c738f0-en. [45]

OECD (2022), "Measuring the attractiveness of regions", *OECD Regional Development Papers*, No. 36, OECD Publishing, Paris, https://doi.org/10.1787/fbe44086-en. [86]

OECD (2022), *Strengthening FDI and SME Linkages in Portugal*, OECD Publishing, Paris, https://doi.org/10.1787/d718823d-en. [132]

OECD (2021), *Incentives for SMEs to Invest in Skills: Lessons from European Good Practices*, Getting Skills Right, OECD Publishing, Paris, https://doi.org/10.1787/1eb16dc7-en. [56]

OECD (2021), "Local entrepreneurship ecosystems and emerging industries: Case study of Cambridgeshire and Peterborough, United Kingdom", *OECD Local Economic and Employment Development (LEED) Papers*, No. 2021/01, OECD Publishing, Paris, https://doi.org/10.1787/044ffc1d-en. [62]

OECD (2021), *OECD Investment Policy Reviews: Thailand*, OECD Investment Policy Reviews, OECD Publishing, Paris, https://doi.org/10.1787/c4eeee1c-en. [41]

OECD (2021), *OECD SME and Entrepreneurship Outlook 2021*, OECD Publishing, Paris, https://doi.org/10.1787/97a5bbfe-en. [82]

OECD (2021), *The Digital Transformation of SMEs*, OECD Studies on SMEs and Entrepreneurship, OECD Publishing, Paris, https://doi.org/10.1787/bdb9256a-en. [43]

OECD (2021), *Training in Enterprises: New Evidence from 100 Case Studies*, Getting Skills Right, OECD Publishing, Paris, https://doi.org/10.1787/7d63d210-en. [57]

OECD (2021), *Understanding Firm Growth: Helping SMEs Scale Up*, OECD Studies on SMEs and Entrepreneurship, OECD Publishing, Paris, https://doi.org/10.1787/fc60b04c-en. [70]

OECD (2020), *FDI Qualities Assessment of Ireland*, http://www.oecd.org/investment/FDI-Qualities-Assessment-of-Ireland.pdf. [129]

OECD (2020), *Financing SMEs and Entrepreneurs 2020: An OECD Scoreboard*, https://doi.org/10.1787/061fe03d-en. [44]

OECD (2019), "Developing entrepreneurship competencies", in *Strengthening SMEs and Entrepreneurship for Productivity and Inclusive Growth: OECD 2018 Ministerial Conference on SMEs*, OECD Publishing, Paris, https://doi.org/10.1787/d34b2900-en. [136]

OECD (2019), *FDI Qualities Indicators: Measuring the sustainable development impacts of investment*, http://www.oecd.org/fr/investissement/fdi-qualities-indicators.htm. [8]

OECD (2019), "Local entrepreneurship ecosystems and emerging industries: Case Study of Mazowieckie, Poland", *OECD Local Economic and Employment Development (LEED) Papers*, No. 2019/06, OECD Publishing, Paris, https://doi.org/10.1787/e11d7a26-en. [63]

OECD (2019), *OECD SME and Entrepreneurship Outlook 2019*, OECD Publishing, Paris, https://doi.org/10.1787/d2b72934-en. [2]

OECD (2018), *Enhancing Productivity in SMEs*. [52]

OECD (2018), *Enhancing SME access to diversified financing instruments*, https://www.oecd.org/cfe/smes/ministerial/documents/2018-SME-Ministerial-Conference-Plenary-Session-2.pdf (accessed 16 January 2023). [47]

OECD (2018), *International Migration Outlook 2018*, OECD Publishing, Paris, https://doi.org/10.1787/migr_outlook-2018-en. [103]

OECD (2018), *OECD Investment Policy Reviews: Cambodia 2018*, OECD Publishing, Paris. [10]

OECD (2017), *Enhancing SMEs productivity*, mimeo. [29]

OECD (2017), *OECD Science, Technology and Industry Scoreboard 2017: The digital transformation*, OECD Publishing, Paris, https://doi.org/10.1787/9789264268821-en. [115]

OECD (2017), *OECD Skills Outlook 2017: Skills and Global Value Chains*, OECD Publishing, Paris, https://doi.org/10.1787/9789264273351-en. [53]

OECD (2017), *The Next Production Revolution: Implications for Governments and Business*, OECD Publishing, Paris, https://doi.org/10.1787/9789264271036-en. [135]

OECD (2016), *OECD Regions at a Glance 2016*, OECD Publishing, Paris, https://doi.org/10.1787/reg_glance-2016-en. [88]

OECD (2016), *OECD Science, Technology and Innovation Outlook 2016*, OECD Publishing, Paris, https://doi.org/10.1787/sti_in_outlook-2016-en. [60]

OECD (2016), *SME and Entrepreneurship Policy in Israel 2016*, OECD Studies on SMEs and Entrepreneurship, OECD Publishing, Paris, https://doi.org/10.1787/9789264262324-en. [35]

OECD (2015), "Development of high speed networks and the role of municipal networks", *Working Party on Communication Infrastructures and Services Policy*. [104]

OECD (2015), *New Approaches to SME and Entrepreneurship Financing: Broadening the Range of Instruments*, OECD Publishing, Paris, https://doi.org/10.1787/9789264240957-en. [46]

OECD (2015), *The Innovation Imperative: Contributing to Productivity, Growth and Well-Being*, OECD Publishing, Paris, https://doi.org/10.1787/9789264239814-en. [54]

OECD (2013), *Skills Development and Training in SMEs*, OECD Skills Studies, OECD Publishing, Paris, https://doi.org/10.1787/9789264169425-en. [61]

OECD (2010), *High-Growth Enterprises: What Governments Can Do to Make a Difference*, OECD Studies on SMEs and Entrepreneurship, OECD Publishing, Paris, https://doi.org/10.1787/9789264048782-en. [38]

OECD (2009), *Clusters, Innovation and Entrepreneurship*, Local Economic and Employment Development (LEED), OECD Publishing, Paris, https://doi.org/10.1787/9789264044326-en. [95]

OECD (2009), *Investing for Growth: Building Innovative Regions, Background report for the Meeting of the Territorial Development Policy Committee (TDPC) at Ministerial Level*, https://www.oecd.org/regional/ministerial/42531915.pdf. [87]

OECD (2009), *OECD Benchmark Definition of Foreign Direct Investment 2008: Fourth Edition*, OECD Publishing, Paris, https://doi.org/10.1787/9789264045743-en. [5]

OECD (2007), *OECD Regions at a Glance 2007*, OECD Publishing, Paris, https://doi.org/10.1787/reg_glance-2007-en. [85]

OECD (forthcoming), *FDI Qualities Indicators*, OECD Publishing, Paris. [134]

OECD (forthcoming), *SMEs and Entrepreneurship Outlook 2023*, OECD Publishing, Paris. [1]

OECD/EU (2017), *The Missing Entrepreneurs 2017: Policies for Inclusive Entrepreneurship*, https://doi.org/10.1787/9789264283602-en. [48]

OECD-UNIDO (2019), *Integrating Southeast Asian SMEs in Global Value Chains: Enabling Linkages with Foreign Investors*, http://www.oecd.org/investment/Integrating-Southeast-Asian-SMEs-in-global-value-chains.pdf. [14]

Oxford Economic Forecasting (2006), *"Economic Benefits from Air Transport in the UK"*, https://airlinesuk.org/wp-content/uploads/2015/03/Oxford-Economics-2014.pdf. [102]

Ponzetto, E. (2009), "Clusters of Entrepreneurship", *National Bureau of Economic Research, Inc.* 15377, https://ideas.repec.org/p/nbr/nberwo/15377.html. [89]

Porter, M. (1990), *The Competitive Advantage of Nations*, Free Press, New York. [94]

Puga, D. (2010), "THE MAGNITUDE AND CAUSES OF AGGLOMERATION ECONOMIES", *Journal of Regional Science*, Vol. 50/1, pp. 203-219, https://doi.org/10.1111/j.1467-9787.2009.00657.x. [97]

Raj-Reichert, G. (2018), *The Changing Landscape of Contract Manufacturers in the Electronics Industry Global Value Chain*, Cambridge University Press, https://www.researchgate.net/publication/323749821_The_Changing_Landscape_of_Contract_Manufacturers_in_the_Electronics_Industry_Global_Value_Chain. [126]

Rojec, M. and M. Knell (2017), "WHY IS THERE A LACK OF EVIDENCE ON KNOWLEDGE SPILLOVERS FROM FOREIGN DIRECT INVESTMENT?", *Journal of Economic Surveys*, Vol. 32/3, pp. 579-612, https://doi.org/10.1111/joes.12207. [108]

Smeets, R. (2008), "Collecting the Pieces of the FDI Knowledge Spillovers Puzzle", *The World Bank Research Observer*, Vol. 23/2, pp. 107-138, https://doi.org/10.1093/wbro/lkn003. [24]

Sonn, J. and D. Lee (2012), "Revisiting the branch plant syndrome: Review of literature on foreign direct investment and regional development in Western advanced economies", *International Journal of Urban Sciences*, pp. 243-259, https://doi.org/10.1080/12265934.2012.733589. [23]

Tengjian Zou, G. (2018), "The capacity to innovate: a meta-analysis of absorptive capacity", *Innovation* 20:2, pp. 87-121, https://doi.org/10.1080/14479338.2018.1428105. [74]

UNCTAD (2013), *World Investment Report 2013: Global Value Chains: Investment and Trade for Development*, https://unctad.org/en/PublicationsLibrary/wir2013_en.pdf. [31]

UNCTAD (2011), *World Investment Report 2011, Non-equity modes of international production and development*, https://unctad.org/en/PublicationsLibrary/wir2011_en.pdf. [33]

World Trade Organisation (2016), *"World Trade Report 2016: Levelling the trading field for SMEs"*, https://www.wto.org/english/res_e/booksp_e/world_trade_report16_e.pdf. [101]

Zahra, S. (2002), "Absorptive capacity: A review, reconceptualization, and extension", *Academy of Management Review* 27(2), pp. 185–203, https://doi.org/10.5465/amr.2002.6587995. [65]

Note

[1] There is a wide range of innovation skills that are relevant to the innovation processes. Skilled workers typically have strong cognitive (e.g. literacy, numeracy and problem solving), management and communications skills, and a readiness to learn. ICT skills are of particular relevance for making use of emerging digital technologies, such as cloud computing, the Internet of things or big data (OECD, 2017[135]). However, firms also need workers with strong social and emotional skills (e.g. communication, self-organisational skills) that complement cognitive skills. Successful employers also need employees with entrepreneurial skills and mindsets to help firms identify, create and act upon opportunities, and adapt to change (OECD, 2019[136]) (OECD, 2019[2]).

2 Tools for policy, regulatory and institutional assessment

This chapter presents a framework for the assessment of policy, regulatory and institutional settings to help national and subnational governments identify priority reforms that strengthen FDI and SME linkages and their contribution to productivity and innovation. Drawing on good practices from different policy areas and country contexts, it provides a typology of policy instruments that can be used by policymakers and offers guidance on important aspects of policy making.

Introduction

FDI spillovers on domestic SMEs may not materialise automatically. Besides economic and market conditions, public policies and institutional arrangements play an important role in fostering FDI and SME linkages. The quality of the legal and regulatory environment affects the capacity of SMEs to scale up, innovate and join GVCs; it also determines whether a country can attract and embed knowledge-intensive investment that creates spillovers for the host economy. A number of more targeted business support policies can also foster dynamic FDI-SME ecosystems and strengthen the diffusion of knowledge, technology and skills in local economies. Many of these policies are implemented by multiple institutions at different levels of government and belong to different policy domains, i.e. relating to investment promotion, SMEs and entrepreneurship, innovation, and regional development. These laws, regulations and policy initiatives cannot be considered in silos but in the framework of an adequate and coherent policy mix. The main challenge for governments is to ensure that the policy mix takes into account the country's economic structure and specialisation, industrial capabilities, technological sophistication and economic geography.

The "policy mix" concept refers to the set of policy rationales, arrangements and instruments implemented to deliver one or several policy goals, as well as the interactions that can possibly take place between these elements (Meissner and Kergroach, 2019[1]). An effective policy mix can make use of various policy instruments (e.g. financing, technical support, regulation, rewards and incentives), address several strategic objectives, and cut across different policy domains, reflecting the many pathways to achieving knowledge diffusion from foreign MNEs to local SMEs. It places emphasis on questions of completeness, balance and interaction among strategic objectives, policy goals, instruments, sectors and populations targeted, and institutional actors involved. These policy mix components should be used in complementary and mutually reinforcing ways to achieve the desired outcomes, i.e. strengthening FDI and SME linkages and their impact on productivity and innovation.

The *Tools for policy, regulatory and institutional assessment* allow policymakers to conduct a thorough assessment of policy initiatives, from national strategies and regulations to financial incentives and technical assistance programmes, to enable FDI and SME linkages. It outlines what institutional settings, regulatory conditions, policies and programmes are important ingredients of an effective policy mix, and provides guidance on important aspects of policy design and implementation, including the sectoral and geographical scope of implemented measures, their degree of selectivity (e.g. SME targeting), the conditions attached to business support schemes, their mode of implementation, and governance framework. The guidance is complemented with a checklist of questions and a list of indicators and other sources of policy information that allow for an assessment of these policy dimensions.

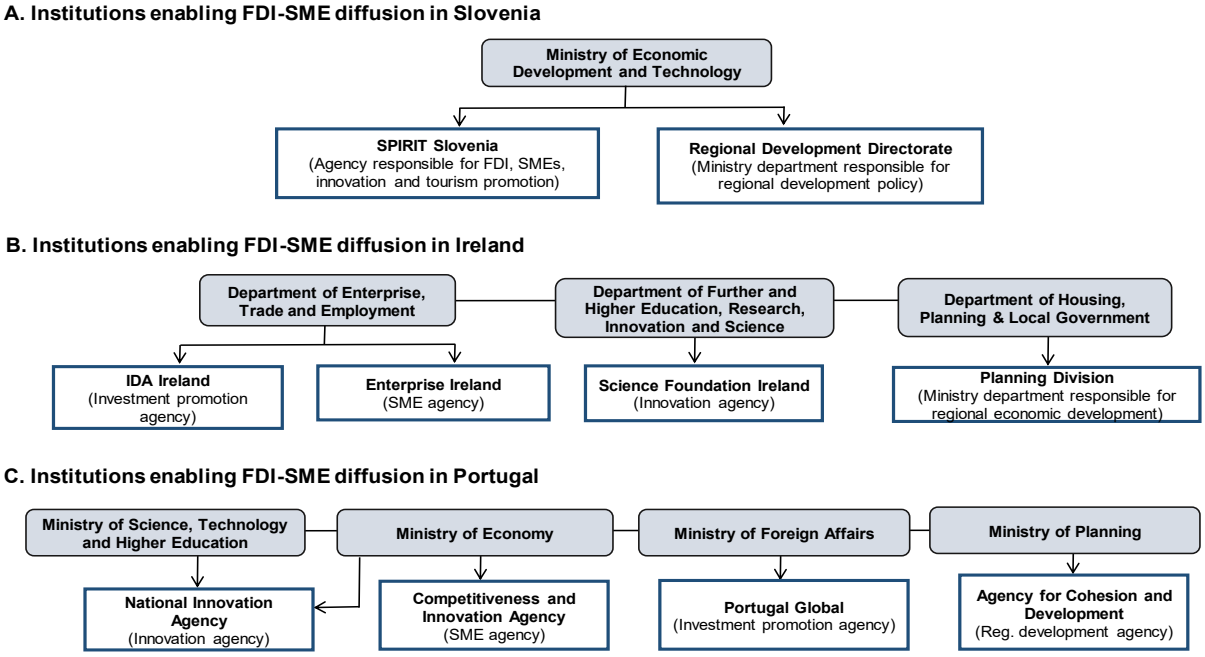
The governance framework for FDI-SME policies

Policy coordination across the investment, SME, innovation and regional development policy areas is necessary to support FDI-SME ecosystems

Strengthening FDI and SME linkages and their impact on innovation and productivity requires public action to be taken in different policy domains related to investment promotion, SME development, innovation and regional development. The institutional framework that governs these policy areas differs from country to country (Figure 2.1). In many EU Member States, several implementing agencies operate across these policy areas under the supervision of different ministries. Such institutional settings may induce more complex governance systems with higher risks of information asymmetry, transaction costs and trade-offs. In contrast, other governments (e.g. Croatia, Finland, Lithuania, Slovenia), target the entire FDI-SME ecosystem through a single Ministry or implementing agency to facilitate interaction and synergies across policy areas.

Different governance structures are feasible and one institutional setting is not necessarily better than another as long as appropriate coordination mechanisms are in place to ensure policy alignment across Ministries, implementing agencies, advisory bodies and subnational authorities. Although coordination is a fundamental and longstanding problem for public administration, there is still no standardised method for approaching related issues, and much of the success or failure of attempts to coordinate appear to depend upon country contexts, including the complexity of the institutional environment, the coordination instruments at play, the working culture and incentives for civil servants and public administration staff to collaborate (Peters, 2018[2]).

Figure 2.1. Institutional arrangements for FDI-SME linkages and spillovers in selected EU Member States



Source: Authors' elaboration based on (OECD, 2022[3])

Irrespective of the complexity of the institutional setting, the set-up of effective inter-institutional co-ordination mechanisms at the strategic (i.e. policy design) and operational (i.e. policy implementation) levels is key. Instruments of coordination can be formal or informal; based on regulation, incentives, norms and information sharing; top-down relying on the authority of a lead government actor or bottom-up and emergent (Peters, 2018[2]). For instance, high-level policy councils bringing together line ministries and implementing agencies responsible for investment, SME, innovation and regional development policy can help identify priority areas where cross-ministerial policy planning and decision-making is necessary. In many countries, these councils are also responsible for the overall coordination, monitoring and evaluation of national strategies while others have been given broader mandates to foster policy dialogue, convene stakeholders and issue opinions on policy and legislative initiatives (OECD, 2022[4]). In highly fragmented governance settings, where a large number of institutional actors are involved in investment promotion and SME policy, the Centre of Government, i.e. the office serving the highest level of the executive branch of government (e.g. presidents, prime ministers), can also play an important role in bridging bureaucratic boundaries across ministries and improving the enforcement of policy decisions (OECD, 2018[5]). At the policy implementation level, the establishment of inter-agency working groups, committees and task forces can help policymakers pool resources from different parts of government to effectively advance their policy

agendas. Inter-agency joint programming can foster a culture of cooperation among civil servants and facilitate the implementation of government initiatives that span several policy areas.

Finally, national strategies and action plans are important instruments for ensuring policy coherence as they are cross-cutting in nature and often require whole-of-government responses to ensure their effective implementation. The development of national strategies also involves public consultations and policy dialogue with various stakeholders, which can serve as an effective bottom-up approach to policy planning and coordination. Although investment and SME policy considerations are often mainstreamed in broader economic reform programmes, adopting dedicated national strategies on investment promotion, SME development and innovation can help overcome policy silos and create an integrated vision across government. As part of their policy response to the supply chain disruptions caused by the COVID-19 pandemic, both Ireland and the Czech Republic have recently developed an SME and entrepreneurship strategy, focusing on strengthening SME productivity, internationalisation and innovation including through linkages with foreign MNEs (OECD, 2021[6]). Such strategic documents allow policymakers to set out quantifiable targets, specific policy pillars, related programme actions and clearly defined roles for all the institutions involved in their implementation. They constitute, therefore, important tools to enhance collaboration among different government actors whose role is important to enable FDI-SME linkages and spillovers.

Effective multi-level governance is key to enabling FDI-SME linkages in local economies

Policies that enable FDI-SME linkages can be introduced by various levels of government, including at the regional and local levels. Robust multi-level governance arrangements, i.e. institutional frameworks and territorial governance processes that clearly assign responsibilities and mandates among national, regional and local governments, are therefore instrumental in the effective implementation of policies enabling FDI-SME linkages (OECD, 2017[7]). Such policy interventions often require synergies among various levels of government and complementary expertise from subnational actors who have better knowledge of local market needs and greater potential to interact with local business enterprises, foreign or domestic. Responsibilities assigned to different government levels should therefore be clearly defined to reduce potential duplication and overlaps.

Although establishing sound multi-level governance arrangements is of utmost importance, it is often context-specific and can vary by country, region and policy area (OECD, 2019[8]). There are wide cross-country disparities in the way responsibilities and mandates are organised between central government institutions and subnational actors. In some countries where inter-institutional coordination is limited, local presence of national implementing agencies in the form of secondary offices may be crucial to ensure that local SMEs in all regions can benefit from tailored support and that foreign investors have access to aftercare services. In other cases, national agencies coordinate activities with subnational actors such as local governments and regional development agencies, who possess knowledge of the local context. In more than two thirds of OECD economies, significant decentralisation reforms have been implemented over the past decades, resulting in an increase in the economic importance of subnational authorities (OECD, 2019[8]). For instance, Belgium, Denmark, Latvia, and Poland largely deliver business development services through subnational governments (OECD, 2019[9]). Likewise, in France, the national IPA collaborates with local autonomous agencies that provide aftercare services to foreign firms in specific regions (OECD, 2018[10]). In these cases, coordination and collaboration with subnational governments is necessary to ensure an end-to-end service to foreign and domestic firms.

The involvement of subnational governments in the design and implementation of policies enabling FDI-SME linkages can help unlock the growth potential of the territories where these are implemented by drawing on the knowledge and expertise of local actors and linking investment promotion and SME policies to local development strategies (Larrea, Estensoro and Pertoldi, 2019[11]). Proximity can be a strong enabling factor of efficient policy delivery. Recent findings from EU countries show that FDI responds better

to the activity of Investment Promotion Agencies (IPAs) operating in closer proximity to investors' operations (Crescenzi, Di Cataldo and Giua, 2019[12]). Similarly, the availability of appropriate business development services is a local issue because SMEs and entrepreneurs generally access the services within a narrow local area (e.g. approximately 50 kilometres) and are therefore dependent on the quality of local supply (OECD, 2019[9]). Subnational governments should have the necessary financial, human and organisational capacities to participate in whole-of-government policy-setting exercises such as those required by the EU's smart specialisation framework and play a strategic role in policy design and implementation. This is particularly important for economically weaker regions that may face challenges in mobilising public and private actors in support of local FDI-SME ecosystems.

Aiming for more systematic impact assessments and consulting with foreign investors and local SMEs can improve the effectiveness of the policy mix

Policy evaluations are important instruments to assess the effectiveness of policies enabling FDI-SME linkages, identify potential policy gaps and make adjustments to the policy mix. Some countries have made major steps in recent years to assess the impacts of new laws and regulations on SMEs through ex ante regulatory impact assessments and SME tests (OECD, 2021[13]). However, widespread and systematic SME policy evaluations continue to be lacking (OECD, 2019[14]). Similarly, in a recent OECD survey of 32 investment promotion agencies (IPAs), only 28% of them reported having undertaken quantitative impact evaluations of their services while relatively few use sustainability-related key performance indicators (KPIs) to monitor and evaluate their investment promotion activities (Sztajerowska and Volpe Martincus, 2021[15]).

For many EU and OECD countries, the development of better systems to track and collect reliable statistical data based on international standards is a pre-requisite for effective monitoring and evaluation. Such data often exist within different parts of the public administration. Collaboration among government bodies responsible for investment promotion, SME development, innovation and regional development – for instance through the organisation of joint evaluation exercises, open access to government databases, and sharing of information on supported businesses – can ensure that relevant and reliable information on the impact of policy interventions is available. This is particularly important when measuring impacts on SMEs, which are affected by measures introduced by different parts of the government in multiple policy areas (e.g. taxation, business regulation, competition, social security) (OECD, 2019[14]). The OECD Framework for the Evaluation of SME and Entrepreneurship Programmes and Policies provides governments with a guiding tool for monitoring and evaluating SME and entrepreneurship policies, including national and local programmes as well as cross-cutting initiatives, whose monitoring and evaluation (M&E) requires a whole-of-government approach (OECD, 2023[16]).

The implementation of comprehensive M&E frameworks requires the use of quantifiable outcome-based indicators and robust internal capacities to execute whole-of-government policy assessments. For instance, although the majority of investment promotion agencies favour qualitative evaluation methodologies (e.g. benchmark comparisons, client surveys, stakeholder consultations), such assessments provide only partial information and incomplete or ambiguous results (OECD, 2018[10]). Qualitative tools should ideally be complemented by more quantitative and systematic approaches that integrate sustainability-related KPIs (e.g. econometric impact evaluations, cost-benefit analyses). In the case of IPAs, this would mean using a variety of outcome-based indicators that capture the contribution of supported investment projects to productivity growth, innovation and the capacities of local SMEs. Governments should ensure that implementing agencies have the necessary capacities to systematically collect reliable data and contribute to policy evaluations throughout the policy cycle (*ex ante*; mid-term; *ex post*). Capacities for analysis can be supported through the provision of specialised training to raise education and awareness of public servants on M&E good practices.

Beyond policy evaluations, active engagement and consultation with foreign investors and local SMEs is necessary to enhance the effectiveness of policies enabling FDI-SME linkages. Through their interactions with the private sector, government actors are able to understand the challenges and expectations of foreign investors and local SMEs, receive feedback on the relevance of their policy programmes, and enrich policy-making processes with insights from various stakeholders. Mechanisms for regular public-private dialogue within specific sectors and supply chains could be combined with bottom-up communication processes to ensure that local level market needs and perspectives are fed into higher level policy processes. Emphasis can be placed on raising awareness of participatory processes among potentially under-represented segments of the business population, such as young firms and start-ups, which may have less resources to engage in discussions with the public administration.

Assessment tool

Box 2.1 includes a checklist of questions allowing policymakers to assess the governance framework and identify options to ensure clarity in institutional roles and coordination on policy issues affecting the potential for FDI-SME linkages.

Box 2.1. Checklist of questions to assess the governance framework for FDI-SME policies

- Are there dedicated national strategies that articulate the government's action on investment promotion, SME development, innovation and regional development? If yes, do these strategies set out specific policy priorities, actions and institutional arrangements to strengthen FDI-SME linkages?
- Are responsibilities across ministries and implementing agencies on investment, SME, innovation and regional development clearly defined, and mutually understood by all actors?
- Is there horizontal coordination between different ministries and implementing agencies involved in the design and implementation of policies enabling FDI-SME linkages? Are coordination mechanisms formal (e.g. inter-ministerial councils, working groups, inter-agency committees, joint programming) or informal?
- What coordination mechanisms and institutional arrangements are in place to ensure effective multi-level governance?
- Are the mandates and internal governance structures of coordinating bodies clearly defined and supported with sufficient human and financial resources?
- Do national implementing agencies responsible for investment promotion, SME policy and innovation operate at the subnational level (e.g. through secondary offices)?
- What is the role of subnational governments in the design and implementation of FDI-SME policies? Do they have sufficient resources and capacities to fulfill their responsibilities and complement policy efforts undertaken at the national level to strengthen FDI and SME linkages?
- Do relevant institutions systematically evaluate the effectiveness of policy initiatives in promoting FDI-SME linkages? Do implementing agencies have the necessary analytical capacities to monitor and collect information on the impact of their FDI-SME policies?
- Are there formal or informal mechanisms for policy dialogue with foreign firms, local SMEs and other actors of the domestic research and innovation ecosystem?

The governance framework for FDI-SME spillovers can be measured and monitored through a range of internationally comparable indicators as well as OECD policy surveys that allow for a qualitative assessment of key governance dimensions, as described in Table 2.1.

Table 2.1. Examples of policy instruments for improving the governance framework and key assessment tools

	Policy instruments	Indicators and key assessment dimensions	Source
Governance	Centre of Government	Government Office/Prime Minister's Office (GO/PMO) expertise (index)	Sustainable Governance Indicators
	Implementing agencies	Effective policy implementation (index)	Sustainable Governance Indicators
	High-level inter-ministerial councils	Inter-ministerial coordination (index)	Sustainable Governance Indicators
	Inter-institutional committees, working groups and task forces	Availability and quality of coordination mechanisms (qualitative assessment)	EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages
	National strategies and action plans	Assessment of strategic frameworks for investment promotion, SMEs, innovation and regional development (qualitative assessment)	EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages
	Multilevel governance systems	Subnational government structure and finance (database)	OECD Regional Statistics Database
	Policy evaluations and programme reviews	Frequency, quality and transparency of regulatory impact assessments and ex post evaluations (index)	OECD Regulatory Policy & Governance Indicators
		Use of evidence-based instruments (index)	Sustainable Governance Indicators
	Policy dialogue and consultation mechanisms	Stakeholder engagement in developing regulations (index)	OECD Regulatory Policy & Governance Indicators
		Societal consultation (index)	Sustainable Governance Indicators

Source: Authors' elaboration.

Policy options to increase the potential for FDI spillovers

An open, transparent and non-discriminatory regulatory environment is fundamental for attracting knowledge- and technology-intensive investment

An open, transparent, predictable and non-discriminatory regulatory environment is a critical determinant of investment decisions. Open economies with fewer market access restrictions for foreign equity investments are associated with higher FDI stocks (Mistura and Roulet, 2019[17]). FDI liberalisation reforms targeting more productive, innovative and knowledge-intensive sectors can increase the direct impact that foreign firms have through their own activities on productivity growth. Similarly, FDI openness in downstream sectors where domestic SMEs have a comparative advantage and strong absorptive capacities can help attract FDI that creates linkages with the host economy through local sourcing. SMEs in these sectors may benefit from potentially better access to high quality inputs and services from foreign firms. Findings from a recent OECD-UNIDO study of investment trends in Southeast Asia shows that liberalising FDI in services is positively associated with productivity gains in downstream manufacturing industries, where local SMEs benefit in particular (OECD-UNIDO, 2019[18]).

FDI spillovers also tend to be larger in countries that are more open towards trade (Meyer and Sinani, 2009[19]; Havranek and Irsova, 2011[20]; Du, Harrison and Jefferson, 2011[21]). A study on Thailand's manufacturing sector, found that technology spillovers from FDI to the domestic economy happen

predominantly in sectors with low trade restrictions, while evidence from China's entry into the World Trade Organisation (WTO) suggests that vertical backward spillovers increased after its accession when tariffs were lowered and domestic content restrictions relaxed (Du, Harrison and Jefferson, 2011[21]).

FDI spillovers may not automatically materialise just because a country is able to attract FDI and engage in international trade (Alfaro, 2017[22]). Competition rules that ensure a level playing field for domestic and foreign firms are necessary to attract FDI with a positive footprint on domestic productivity. Industries facing greater competition experience faster productivity growth, because competition allows more efficient firms to enter and gain market share at the expense of less efficient ones (OECD, 2015[23]). Pro-competitive product market reforms and competition policy enforcement can therefore help achieve fairer sharing of productivity gains by foreign firms. Competition authorities should have the necessary power and tools to impose sanctions for infringements and guarantee the transparency of competition policy enforcement procedures.

The potential for FDI spillovers also depends on the willingness of foreign MNEs to transfer their technology, know-how and other market advantage to their affiliates abroad, and the latter's confidence to share new technologies with domestic firms. A strong legal framework for the protection of intellectual property rights (IPRs) can give foreign firms an incentive to increase the technological intensity of their investments, conduct R&D locally and engage in the development of successful innovations that result in knowledge diffusion within and across economies. Branstetter et al. (2006[24]) found that US MNEs responded to changes in IPR regimes abroad by increasing technology transfer to their affiliates in countries that undertook reforms to strengthen IPRs. Similarly, Javorcik (2004[25]) found that, in Central and Eastern Europe, the strength of patent laws as well as the overall level of IPR protection increased the likelihood of attracting FDI in several high technology sectors where IPRs play an important role.

Incentives for knowledge-intensive FDI should be transparent, targeted and clearly evaluated

Investment incentives are widely used to promote FDI and induce firms to invest in knowledge-intensive sectors and activities, create jobs, train workers and collaborate with domestic firms. They can take the form of direct financial support (e.g. grants, subsidies loans), tax relief (e.g. tax holidays, tax credits, accelerated depreciation allowances), and regulatory concessions (e.g. fast-track and strategic investment status). Cross-country differences in the generosity of R&D tax allowances can lead to differences in the cost of capital faced by firms – and subsequently encourage or discourage them from increasing their R&D investment or locating their R&D functions in a given country (González Cabral, Appelt and Hanappi, 2021[26]). Incentives can distort competition, however, and are not always cost-effective in attracting quality investment that creates linkages with the local economy. If used, governments should ensure that they address well-identified market failures such as knowledge asymmetries between foreign and domestic firms, the inherent risks and uncertainty arising from engaging in innovation and the high fixed costs of undertaking technological developments (Martin and Scott, 2000[27]).

Different types of incentives present advantages and disadvantages related to their financial and administrative costs, their impact on economic, social and environmental conditions, and their effectiveness in fostering linkages with local SMEs. There is growing anecdotal evidence suggesting that income-based tax incentives (e.g. tax holidays, preferential tax rates), which reduce the rate applied to profits/income already secured, tend to attract mobile activities rather than long-term FDI projects that are more likely to create linkages with the local economy and generate knowledge spillovers (OECD, 2019[28]; IMF-OECD-UN-World Bank, 2015[29]). Income-based tax incentives may also have limited effectiveness in attracting new investment and often come at a substantial cost to a country by resulting in windfall gains for projects that would already have taken place in the absence of the incentive. In contrast, expenditure-based tax incentives – such as tax deductions and credits, accelerated depreciation and trade tax exemptions – that lower the cost of specific inputs of production factors allow to link investments to

performance criteria that support progress towards specific development objectives, including linkages with local SMEs.

OECD research has found that an increasing number of governments designs investment incentive schemes with more targeted eligibility conditions and performance criteria to achieve specific policy goals related to sustainable development. To strengthen FDI-SME linkages and spillovers, for instance, governments can make the granting of financial support conditional to creating linkages with local SMEs, undertaking R&D locally, or investing in more productive, knowledge-intensive and high-tech sectors. Over half of the countries included in the OECD Investment Tax Incentives database use tax incentives with specific design features to boost exports, while 12 of 36 countries use incentives with the objective of creating employment and improving job quality (Celani, Dressler and Wermelinger, 2022[30]).

Many countries also make use of tax incentives with explicit reference to sectors or sub-sectors (Celani, Dressler and Wermelinger, 2022[30]). Countries may prefer to target narrowly, instead of providing incentives broadly to all activities within a sector, if their development or upgrading takes an important part of their economic strategy. Narrow sector targeting may also contribute to a smaller share of investors qualifying for a certain incentive, reducing the potential forgone revenue resulting from an incentive. The benefits and costs of narrow as opposed to broad sector targeting are currently not extensively developed in the tax incentive literature.

The conditions and criteria for the granting of incentives should be transparent, clearly defined and rules-based to facilitate their verification and avoid discretionary and distortive granting decisions (Celani, Dressler and Wermelinger, 2022[30]). They should be also reviewed periodically to ensure that benefits materialise and outweigh the costs, and that their scope continues to reflect the evolving market needs and capacities of the domestic production base. Serious policy consideration should be also given to the impact that incentive schemes have on the complexity of the tax system and the capacity of the public administration to implement such targeted approaches. Country contexts and institutional arrangements discussed in the previous section should be considered.

When incentives take the form of regulatory concessions, governments should ensure that these do no lead to a “race to the bottom” in terms of social and environmental standards. Special regulatory regimes for investments deemed to be of strategic importance for the host economy are often predicated on certain conditions such as creating a number of jobs, investing in knowledge-intensive sectors or benefitting specific geographic areas. However, the benefits of reducing the regulatory burden on business should be weighed against potential risks, in particular in industries driven by digital innovation, which often rely on alternative business models and may lead to new and more precarious forms of employment or weakened social protection conditions (OECD, 2020[31]). In fact, regulation should mitigate the potential socio-economic risks arising from the adoption of new, innovative and digitally enabled business models while at the same time ensuring that regulatory responses are proportional, set out some level of certainty and predictability, and do not stifle the innovation potential of the economy (Davidson, Kauffmann and de Liedekerke, 2021[32]).

Investment promotion and facilitation can help embed foreign investors in the host economy

IPAs are key players in promoting investment with higher potential for knowledge-intensive linkages with the host economy. Effective investment promotion includes raising potential investors’ awareness of the host country’s strengths, branding the country as an attractive investment destination, and directly reaching out to potential investors to generate leads and investment projects (OECD, 2018[10]). IPAs should review and identify specific economic activities where they see a potential to enhance productivity growth and strengthen the technological sophistication and knowledge base of the economy. On this basis, they can design investment promotion packages geared towards these objectives, combining a variety of investment generation tools such as intelligence gathering (e.g. raw data analysis, market studies), sector-

specific events (e.g. road-shows, business fora and fairs, country missions), and pro-active investor engagement (one-to-one meetings, email/phone campaigns, enquiry handling). These activities provide potential investors with information that allows them to identify investment opportunities with the highest potential for spillovers, including information on the host country's knowledge infrastructure and the capabilities of domestic SMEs.

Implementing investment prioritisation strategies aligned with the economy's industrial capabilities is another way through which IPAs can influence the impact of FDI on productivity and innovation. Most IPAs prioritise certain types of investments over others by selecting priority sectors, countries or investment projects, and allocating resources accordingly (OECD, 2018[10]). Such an approach allows governments to focus on investments that have a higher probability of being realised and may bring unique benefits to the host economy. Evidence from 97 IPAs worldwide shows that the prioritisation of specific economic activities translates into higher levels of FDI in the targeted sectors (Harding and Javorcik, 2011[33]). Recent OECD evidence from 32 OECD IPAs also shows that investment policymakers increasingly take into account sustainable development considerations when setting their prioritisation strategy, with 90% of them using productivity and innovation-related indicators to prioritise investment attraction (Sztajerowska and Volpe Martincus, 2021[15]).

To leverage the potential of FDI for productivity spillovers, IPAs can prioritise FDI in knowledge and technology-intensive sectors, target countries with higher average productivity levels, or focus on specific types of foreign investors such as top R&D performers. Targets and promotional activities should be coherent with national strategies and reasonably reflect the country's production capacities, knowledge base and innovation potential. The use of prioritisation tools such as sustainability-related KPIs, scoring mechanisms, surveys and big data analytics, can help IPAs focus their limited resources on the most valuable deals (Sztajerowska and Volpe Martincus, 2021[15]).

Assessment tool

Box 2.2 includes a checklist of questions allowing policymakers to assess the policy environment and identify policy options to strengthen the potential for FDI spillovers.

Box 2.2. Checklist of questions to assess the policy framework for FDI spillovers

- Are sectors that drive productivity growth and innovation open to FDI and trade? Are there any regulatory restrictions in downstream sectors? Does the government impose any restrictions or performance requirements (e.g. local content requirements) for foreign investors to gain market access?
- What steps has the government taken to ensure that laws and regulations dealing with investments and investors, and their implementation and enforcement, are clear, transparent, readily accessible and do not impose unnecessary burdens?
- Do competition rules ensure a level playing field for foreign and domestic firms alike?
- What laws and regulations are in place to protect intellectual property rights (IPRs)? Is IPR legislation effectively enforced?
- Has the government enacted investment incentive schemes targeting productive and knowledge-intensive activities or sectors where SME absorptive capacities are strong? Are the criteria for the granting of incentives clearly defined, transparent, and rules-based?
- What types of incentives are provided (e.g. grants, profit-based tax incentives, cost-based tax exemptions, regulatory concessions) and what eligibility criteria or performance requirements apply (e.g. R&D, supplier linkages, skills development, size)?
- If regulatory incentives are made available to foreign investors, are accompanying measures and standards in place to avoid a regulatory "race-to-the-bottom" and mitigate potential socio-economic risks?
- Within the agency(ies) responsible for investment promotion and facilitation, are there clear goals and sectoral targets defined to help attract productivity-enhancing and knowledge-intensive FDI that creates linkages with the local economy? Are there sufficient staff and resources available to achieve these goals?
- How does the agency(ies) responsible for investment promotion and facilitation divide its resources among its core functions, i.e. image building, investment generation, investment facilitation and aftercare, and policy advocacy? How does this compare to international experience?
- Are specific sectors, markets and investors targeted as part of the investment promotion activities undertaken by the government? If so, what are the investment prioritisation criteria used for the implementation of these activities?
- What information pertaining to investment measures and the capacities of domestic SMEs is made readily available, or available upon request, to foreign investors? What are the main vehicles of information on investment measures of interest to foreign investors?

The policy framework for investment promotion can be measured and monitored through a range of internationally comparable indicators as well as OECD policy surveys that allow for a qualitative assessment of key policy dimensions, as described in Table 2.2.

Table 2.2. Examples of policy instruments for increasing the potential for FDI spillovers and key assessment tools

	Policy instruments	Indicators and key assessment dimensions	Source
Regulatory framework	FDI and trade openness	Regulatory restrictions to FDI (index)	OECD FDI Regulatory Restrictiveness Index
		Barriers to trade and investment (index)	OECD Product Market Regulation Indicators
		Restrictions on foreign entry (index)	OECD Services Trade Restrictiveness Index
		Restrictions to services trade (index)	OECD Services Trade Restrictiveness Index
		Barriers to trade facilitation (index)	OECD Trade Facilitation Indicators
	Competition law and policy	Restrictions in product market regulations (index)	OECD Product Market Regulation Indicators
		Barriers in service and network sectors (index)	OECD Product Market Regulation Indicators
		Barriers to competition (index)	OECD Services Trade Restrictiveness Index
		Involvement in business operations (index)	OECD Product Market Regulation Indicators
	IP protection	Perception of IP protection (index)	WEF Global Competitiveness Index
Investment incentives	Regulatory incentives	Design features of investment incentives (qualitative assessment): • Type of instrument (e.g. regulatory easing, fast-track regimes, investment grants, income-based tax relief, expenditure-based tax relief) • Duration and generosity of investment support Eligibility conditions (qualitative assessment): • Sectoral targeting (e.g. more productive and knowledge-intensive sectors) • Value chain targeting (e.g. R&D, sales, production methods) • Outcome-based conditions (e.g. FDI-SME linkages, use of technology, skills building) • Investment size conditions Legal basis and governance framework (qualitative assessment): • Legal provisions introducing the incentives • Granting authority	EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages
	Financial incentives		OECD Investment Tax Incentives Database OECD R&D Tax Incentives Database
Investment promotion	Targeted investment generation activities	IPA's resource allocation and scope of activities: • Share of financial and human resources dedicated to investment generation activities • Type of investment generation activities (e.g. sector- or investor-specific missions, sector-specific events, market studies, campaigns) (qualitative assessment) Prioritisation strategies for FDI generation: • Priority sectors/countries and criteria used (e.g. impact on innovation, type of investor, size of investment, impact on domestic firms) (qualitative assessment) • Share of staff assigned to prioritised projects • Type of services provided to priority investors (e.g. dedicated staff, tailored support, faster replies to enquiries) (qualitative assessment)	EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages
	Pro-active investor engagement		OECD Survey on Prioritisation and Monitoring & Evaluation of IPAs
	Information services		OECD Mapping of Investment Promotion Agencies OECD Investment Policy Reviews

Source: Authors' elaboration.

Policy options to strengthen the absorptive capacities of local SMEs

The quality of the regulatory environment affects SMEs' capacity and incentives to engage in innovation, gain productivity and scale up

Regulation in product and labour markets, taxation, competition, insolvency regimes, license systems and public governance are critical for business activity and to ensure that firms of all sizes compete on a level playing field. Regulatory processes and administrative procedures disproportionately impact SMEs, however (OECD, 2019[34]) (OECD, 2021[6]). Overly burdensome regulations often perpetuate informality, particularly of smaller and less productive firms, with less capacity to screen the regulatory landscape and allocate the necessary resources to address legal and regulatory requirements. Conditions for regulatory compliance are therefore a critical factor shaping an SME's ability to become more competitive and engage in knowledge-intensive collaborations with foreign MNEs.

To allow SMEs to improve their absorptive capacities, an effective regulatory environment that provides clear rules of the game and incentives to scale up is necessary. Enhanced policy consideration should be given to simplifying administrative procedures, cutting red tape, streamlining information on businesses' regulatory obligations, and facilitating the provision of public services through digital channels (OECD, 2018[35]). Efforts to reduce tax compliance costs through the introduction of electronic filing and payment systems can substantially reduce the administrative burden for smaller firms. Information on licensing and permit systems and business development services could also become easily accessible to SMEs through digital instruments such as government portals and online one-stop-shops (OECD, forthcoming[36]). Such an approach would improve transparency, allow small firms to access higher quality and more customised services, and ease their interaction with the public administration.

Similarly, lengthy and complicated insolvency processes which significantly affect the chance of starting a business again, can be reduced through increased digitalisation of courts and the promotion of alternative dispute settlement mechanisms such as arbitration, mediation and conciliation (OECD, 2019[34]; OECD, 2021[37]). The court system can be made more efficient by strengthening the independence of judges, ensuring the effective execution of judgements and, when significant delays in court decisions are observed, creating specialised commercial courts to handle business disputes. An efficient civil justice system should be coupled with a robust legal framework for contract enforcement to improve the predictability of business relationships and help SMEs engage in new business partnerships more efficiently (Johnson, McMillan and Woodruff, 2001[38]).

Stringent regulations can deter innovation by imposing high compliance costs that limit the capacity of entrepreneurs to experiment with alternative business and production models (Davidson, Kauffmann and de Liedekerke, 2021[32]). Given the increasing digitalisation of many economies, policymakers should ensure that laws and regulations are sufficiently flexible and forward-looking to anticipate and adapt to fast-changing technologies. One option for ensuring that regulatory framework conditions do not stifle the competitiveness and innovation of SMEs is to systematically evaluate their costs and benefits against the intended policy goals. Regulatory impact assessments (RIA) and SME tests have become a widespread practice to improve the quality and outcomes of regulation (OECD, 2019[34]). Enhancing the application of RIAs requires coordination and consistency across tiers of government, strong political commitment, and significant investment to build a culture of evaluation in the public administration.

Competition rules that provide a level playing field for all firms and legal frameworks for the protection of intellectual property rights are also essential to encourage SME growth (OECD, 2019[34]). These aspects of the regulatory framework are examined in the following section on strengthening knowledge spillovers through competition effects.

A comprehensive mix of business support services is necessary to help SMEs access strategic resources such as knowledge, technology, finance and skills

Beyond regulatory framework conditions, strengthening the absorptive capacities of SMEs requires whole-of-government policy approaches that help SMEs access the strategic resources they need to improve their productivity, including skills, finance, knowledge and technology (OECD, 2019[34]) (OECD, 2021[6]). An effective policy mix should reflect that SME growth requires efforts on several fronts by integrating complementary and mutually reinforcing types of instruments into comprehensive SME support packages, involving financing, technical assistance, training, capacity building and infrastructure (OECD, 2022[39]).

Public interventions that facilitate SME access to innovation assets can help them keep pace with the industrial and technological transformations at play. Many innovation promotion and SME support agencies offer technology extension services (TES) to improve the use of "new-to-firm" innovation by SMEs (OECD, 2021[40]; Shapira, Youtie and Kay, 2011[41]). The main objective of these services is to facilitate the adoption of existing technologies through diagnostic assessments of a firm's operations, processes and technological maturity; information services to bring awareness of new business models and practices; benchmarking to identify areas for improvement; consulting, training and technical assistance to implement internal organisational changes.

The integration of SME policy imperatives into innovation policies has been noticeable in the design of financial incentives. In many EU countries, grants and subsidised loans are provided to SMEs to help them invest in R&D and undertake innovation and internationalisation activities. Tax incentives have also become a popular instrument in support of business innovation and are increasingly geared towards subgroups of the SME population such as start-ups and young high-growth firms (Appelt et al., 2022[42]; OECD, 2021[43]) (OECD, 2019[34]). Many of these financial support schemes include additional incentives for the development of products and services through science-to-business (S2B) and business-to-business (B2B) collaboration, including with foreign firms and higher education institutions (HEIs), reflecting the importance of networks in creating, accessing and exploiting knowledge (OECD, forthcoming[44]).

As the digitalisation of economies accelerates, intangible assets have come to make up a significant part of a firm's value resulting in firms, in particular growth-oriented ones, being increasingly data driven or likely to use data to scale up their business. Improved access, use and protection of data – in short, improved data governance – is therefore becoming a strategic issue for an increasing number of SMEs. With data emerging as a key driver of firm performance, and potentially also the broader deployment of more sustainable, energy- and resource-efficient business models, there is a need to accelerate public efforts in this relatively new policy field, with particular attention to the needs and challenges faced by small businesses (OECD, 2022[39]). Emphasis should therefore be placed on improving SMEs' digital readiness and their capacities to engage in e-commerce, leverage data to optimise supply chain operations and improve service delivery, and reinforce their digital security practices (OECD, 2019[34]) (OECD, 2021[37]) (OECD, 2022[39]) (Bianchini and Michalkova, 2019[45]).

Improved use of digital solutions and data enables more automation and greater productive capacity, which in turn can leverage SME performance through greater product differentiation and cost efficiency. Measures to support SMEs move operations online include assistance to set up e-business systems (e.g. technology audits, diagnostic tools), financial incentives for digital uptake (e.g. IT vouchers, grants for acquiring digital accounting, CRM and EPR software) and online platforms providing access to data and other IT-enabled services. Given that SMEs tend to rely on external sources of support for digitalising their operations and compensate for weak internal capacities, governments can serve as facilitators in connecting SMEs with digital solution providers and knowledge networks (OECD, 2021[6]).

Addressing the financing challenges of SMEs across all stages of their cycle is of particular importance to help them invest in technology upgrading and improve the quality of their products and services in line with the needs of foreign investors (OECD, 2022[46]; OECD, 2015[47]; OECD, 2019[34]). Public support to SME

financing takes a variety of forms, from loans and credit guarantees to grants, equity and quasi-equity schemes, which are often geared towards specific types of business activities (e.g. trade finance, R&D funding). The G20/OECD High-Level Principles on SME Financing provide guidance to G20 and OECD governments for the development of cross-cutting policy strategies on SME financing, highlighting in particular the need for a diverse range of bank-based and alternative financing instruments and the importance of safeguarding financial stability, transparency and investor protection (G20/OECD, 2015[48]). However, monetary tightening resulting from recent inflationary pressure in most OECD countries makes bank-based instruments more expensive for SMEs and, ultimately, may reinforce their need to turn to alternative financing instruments.

Diversifying the finance mix of SMEs requires government action to address both supply-side barriers (i.e. insufficient market incentives for investors) and demand-side barriers (i.e. lack of financial knowledge and guarantees among SMEs) (OECD, 2022[39]). Given the challenges that many SMEs face in accessing traditional bank financing and recognising the need to avoid SME over-indebtedness, many governments are increasingly shifting their focus towards alternative financing instruments such as equity, venture capital and fintech solutions. The use of equity instruments has several advantages over debt support since they lower the cost of borrowing of SMEs and enable more funds to be channelled to them through co-investments from the private sector (OECD, 2020[49]) (OECD, 2021[6]). To promote these alternative finance sources, policymakers can provide incentives for collaboration between banks and other private investors; capacity building to improve the way SME managers present their business model to potential funders; public tenders to encourage joint financing between several investors; and establishing platforms with easily accessible information on financing tools for growth-oriented SMEs. As some entrepreneurs may associate equity instruments with a loss of control over their business, policy makers can also use hybrid instruments, i.e. combining debt and equity. This option has the double benefit of further diversifying the funding mix of SMEs while addressing an important demand-side barrier (OECD, 2015[50]).

There is also strong rationale for targeted interventions aimed at upgrading managerial and workforce skills in SMEs. Skills are key assets for technology and innovation absorption and for managing the organisational changes needed to foster knowledge-intensive linkages with foreign MNEs (OECD, 2019[34]; OECD, 2015[51]). Public policy may aim to create incentives for SMEs and entrepreneurs to invest in skills by reducing the cost of training and streamlining information on skill development programmes (training); supporting SMEs in navigating the employment market and identifying and attracting talent (hiring); and connecting SMEs with specialised intermediary organisations (outsourcing) (OECD, forthcoming[44]). Common mechanisms to support human capital development include tax exemptions and training vouchers that encourage on-the-job training; statutory rights for employees for training leave; and local or sectoral training networks (e.g. group training associations, sector skills councils) (Marchese et al., 2019[52]). Linking the development of SME workforce skills to vocational education and training (VET) frameworks can also foster greater collaboration between employers and vocational schools and help SMEs access highly skilled young employees through apprenticeship programmes. By combining school-based education and on-the-job training, apprenticeships stimulate company productivity and profitability. Evidence from countries for which data are available show that more than half of all apprentices work in companies with 50 employees or fewer (OECD, 2021[37]).

Policies that improve the quality of network and knowledge infrastructure can enhance SME scale up and productive capacities

SMEs are in general more dependent on obtaining relevant resources and expertise from outside their own firm boundaries (OECD, 2019[34]). The rise of open and distributed innovation has amplified the importance of integrating knowledge networks and markets (OECD, 2013[53]), thus reinforcing smaller firms' need to operate in connection – sometimes co-operation – with outside institutions, e.g. academic institutions or (local) governments. Connecting to and expanding relevant networks is thus instrumental for

SMEs to access knowledge, technology, data and skills, and benefit from innovation spillovers. Networks can also allow firms to find new business partners, as well as access new markets or finance.

First, the absorptive capacities of SMEs are strongly influenced by the accessibility of knowledge infrastructure, often at local level, which remains the primary scale of operations of smaller businesses. This infrastructure includes technology transfer offices, applied research centres, collaborative laboratories, incubators and accelerators, universities and other public or private facilities that contribute to the creation and diffusion of knowledge (OECD, forthcoming[44]) (OECD, 2021[6]). Through these facilities SMEs gain access to technological premises, equipment, manpower, information and data, and the results of universities' and public research institutes' activities that they could not have conducted independently otherwise.

Over the past decades, there has been a rapid increase of intermediary technology institutes (ITIs) and technology transfer offices (TTOs) in many EU and OECD economies (Rossi et al., 2020[54]) as a means for governments to accelerate the commercialisation of public research results and their materialisation into socio-economic benefits (OECD, 2013[55]). These facilities seek to address the market failure, which exists in taking innovative ideas forward to commercial application by providing resources, competences and expertise that SMEs often lack. Their role is to provide from the earliest possible moment hands-on support in innovation processes and help SMEs undertake foresight exercises, focused technology development, and manage intellectual assets. In many cases, particular emphasis is placed on collaborative projects between companies and between companies and research institutions. Hence, they also play the role of an innovation broker creating "communities of innovators" and allowing foreign and domestic firms to work together on specific topics.

At the same time, digitalisation has become increasingly instrumental for SME network expansion beyond physical interactions and the constraints of space. Digital platforms in particular increase firms' ability to benefit from network effects and access a larger portfolio of innovation assets at reduced cost, as they allow to centralise software, technology or databases (e.g. through cloud computing services), ideas and solutions (e.g. through crowdsourcing and collaborative platforms on specialised software solutions), or user and client data (e.g. through e-commerce platforms) (OECD, 2019[34]) (OECD, 2021[37]). Platforms have also been instrumental to the deployment of open innovation practices by enhancing system integration, interoperability and data sharing and openness (OECD, 2017[56]) (OECD, 2022[39]).

Business incubators and accelerators allow entrepreneurs and start-ups to experiment with new business models, access frontier know-how and technologies that they can use to further develop their innovative ideas (OECD, 1999[57]; OECD/European Commission, 2019[58]). By acting as interfaces between start-ups and foreign MNEs, these business support facilities also contribute to reinforcing FDI-SME ecosystems and boosting collaboration, especially in knowledge-intensive activities.

Efficient network infrastructure is also a key pillar of a conducive business environment (OECD, 2019[34]). Their accessibility, reliability and affordability are particularly critical for SMEs to compete in knowledge-intensive production systems. Policy initiatives that improve the quality of physical and digital infrastructure (e.g. transport, energy, information and communications technology – ICTs) are therefore relevant for improving SME absorptive capacities. A key quality aspect relates to cybersecurity as digitalisation has dramatically increased the interconnectedness of network infrastructure, and hyperconnectivity creates vulnerabilities and breaches in both the physical and digital spaces.

Public action for consolidating the network infrastructure can come in the form of public investments and public-private partnerships (PPPs) for addressing the investment gap, and through a whole-of-government approach to better coordinating efforts across policy domains and levels of government. Securing resources and making infrastructure networks more attractive for private involvement is possible by improving the efficiency of service delivery, facilitating investor access to land, and creating a level playing field between State-owned infrastructure operators and private investors (OECD, 2015[59]). Improving the public procurement regime can also increase value for money of public infrastructure investment (OECD,

2019[34]). Developing national infrastructure plans and setting up supportive institutional arrangements (e.g. dedicated PPP units, policy coordination bodies) are essential to ensure efficient public investment and alignment (OECD, 2021[60]). Subnational governments can play a vital role in the infrastructure landscape since they are responsible for key policy areas such as transport, energy, broadband and spatial planning (OECD, 2019[34]). Strengthening their involvement in the design and implementation of regional infrastructure policies can help address infrastructure constraints that are relevant to SMEs.

Enhanced policy attention should be given to the scope, coherence and delivery of SME policies

In addition to a diverse mix of policy instruments, supporting business development also requires striking a balance between generic approaches and targeted initiatives aiming at specific sectors or segments of the SME population (OECD, 2019[34]; OECD, 2022[61]; OECD, 2022[39]; Meissner and Kergroach, 2019[1]).

Generic policies for all SMEs irrespective of their size, age, sector or location can be effective in setting supportive framework conditions for business growth, or in countries where much of the business population is made of SMEs (e.g. small countries). Public support measures with limited checks and broad eligibility criteria can also facilitate fast delivery and reach a large number of beneficiaries in a short time span, as it has been the case during the COVID-19 crisis, when governments had to urgently address sudden market disruptions and avoid a wave of bankruptcies (OECD, 2021[62]) (OECD, 2021[6]). However, such an approach may raise questions about whether the support reached those segments of the SME population that needed it the most. For instance, micro firms with low productivity may not be able to benefit from broad schemes that are not designed to take the circumstances of the most vulnerable SMEs into account. Depending on the context and timing of public action and the strategic objectives pursued, combining generic policy approaches with more targeted and sector-specific measures may help tailor the policy mix to the diversity of business profiles and SME trajectories and thereby improve the effectiveness of policy interventions.

The tailoring of SME support may take into account the higher potential for FDI-SME linkages and spillovers in specific value chains (or value chain segments), e.g. those that are more knowledge- and innovation-intensive (Chapter 1). Targeted support may be provided to SMEs depending on whether they operate in low-technology (e.g. retail trade) or high-technology (e.g. advanced manufacturing) industries. This may imply targeting measures towards priority industries deemed to hold stronger potential for innovation spillovers, or adjusting support to the different innovation paths of high- and low-tech companies. For example, programmes for upgrading managerial skills in SMEs are found to hold a stronger economic rationale in knowledge-intensive sectors than in low-tech sectors (Marchese et al., 2019[52]). Also, if technology upgrading programmes may help low-tech SMEs scale up their innovation capacity, SMEs that are already innovation-intensive may benefit more from R&D and innovation programmes, or access to high-tech infrastructure and networking facilities with frontier HEIs.

Targeted policies aiming to strengthen SME performance in priority industries and activities can also be aligned with a country's or a region's smart specialisation objectives (Box 2.5). A strong SME base can act as a magnet for attracting productivity-enhancing FDI in industries or activities where the place has (or holds potential to develop) a comparative advantage. It could also contribute to discourage divestment and maintain FDI locally, enhancing resilience in strategic value chains (OECD, forthcoming[44]; Kergroach, 2018[63]) (OECD, 2021[6]). At same time, sector-targeted approaches entail the risk of missing emerging innovation opportunities in other industries, or neglecting the cross-sectoral dimension of clusters, business networks and ecosystems, which also play an important role in supporting SME upgrading (Lilischkis, 2011[64]).

Targeted support can be provided through ad hoc interventions or integrated into national strategies and action plans with a longer time span. Strengthening SME productivity and innovation may indeed require a long-term perspective, especially in situations where policy impact is only likely to become visible in the

mid- to long-run. Ensuring the coherence of SME support policies requires robust monitoring and evaluation mechanisms, with relevant data and methodologies, and results have to inform the design and implementation of new initiatives (OECD, 2022[61]). Policy coherence is also needed across government entities and levels, and across the diverse policy areas that can influence SME&E performance (Section above).

Not all policies reach SMEs in the same way; many programmes have low take-up rates among smaller firms (OECD, 2019[34]). One of the greatest challenges for the public administration is to raise awareness and create demand for existing support services. In a recent pilot survey on the online sales and hybrid retail practices of SMEs, only 15% of the respondents declared being aware of existing public support programmes for selling online and only 60% of the informed businesses made use of them (OECD, forthcoming[65]). In addition, some policy instruments are more suitable to SMEs' uptake. For instance, tax-based measures are more likely to be used by large firms due to their relative complexity and the higher level of expertise needed to track changes in the tax system and optimise tax strategies. On the other hand, direct subsidies and technical assistance programmes are more likely to reach and involve SMEs. Adjusting the design of existing programmes with preferential provisions for SMEs, organizing information campaigns and providing support for the application process may help address barriers to uptake. In principle, programme rules and activities could be kept simple to cater to smaller firms, which do not have sufficient resources to go through lengthy application procedures.

However, the delivery of tailor-made SME support often requires robust administrative capacities, technical expertise, skills and evidence that governments often do not have. To address these challenges, governments can cooperate with intermediary organisations, such as training institutes, consulting firms, chambers of commerce and business associations, in light of their own expertise and proximity to business. Local or sectoral cooperation between public and private sector actors can facilitate the pooling of resources for implementing targeted actions, with benefits arising from economies of scale, increased involvement of SMEs, and reduced transactions costs in administration (Marchese et al., 2019[52]). Conversely, too many layers of intermediation up to final beneficiaries would require effective monitoring and evaluation of the quality of services provided and impact assessment.

Assessment tool

Box 2.3 includes a checklist of questions allowing policymakers to assess the policy environment for SMEs and identify policy options to strengthen SME performance.

Box 2.3. Checklist of questions to assess the policy framework for SME absorptive capacities

- How does the government ensure that laws and regulations do not impose an unnecessary burden on SME growth and upgrading? Are there built-in mechanisms or processes such as SME tests and regulatory impact assessments (RIAs) to periodically review these burdens?
- How does the government streamline administrative procedures to improve SMEs' capacity to do business with foreign investors? What are the available means for informing and assisting SMEs in obtaining the necessary licenses, permits, registration and other administrative formalities?
- Is the system of dispute settlement effective and widely accessible to SMEs? What alternative systems of dispute settlement are available to manage commercial disputes?
- Do government institutions provide financial support (e.g. training or innovation vouchers, R&D grants, tax relief) and technical assistance (e.g. technology extension services, business diagnostics, advisory services) to strengthen the productivity and innovation of SMEs? Are there specific programmes to help SMEs digitalise and facilitate their access to finance?
- What measures are in place to improve SMEs' access to innovation-related skills in the domestic labour market and address potential skill shortages in FDI-intensive value chains (e.g. digital skills, managerial skills, workforce skills)?
- Does the country have a well-developed knowledge transfer infrastructure (e.g. technology transfer offices, business incubators, applied research centres, networking facilities and platforms)? Does the available infrastructure have sufficient financial and human resources to provide SME support services?
- Has the government put forward policy initiatives for the development of the country's network infrastructure (e.g. transport, energy, information and communications technology) with the aim to support business growth, in particular for SMEs? What policies are in place to mobilise public and private investments in infrastructure?
- Do business support policies take into account the heterogeneity of the SME population in terms of size, age, capacities, sector/value chain and growth trajectory? Are policies sufficiently tailored to the specific needs and circumstances of different types of SMEs?
- What is the sectoral targeting of SME policies and how is this aligned with the country's or the region's economic specialisation and the activities of foreign investors?
- What is the take-up rate of SME support policies, i.e. the share of eligible SMEs that actually benefit from available support? How does the government ensure that SMEs are aware of, and can easily apply to, business support services?

The policy framework for SMEs can be measured and monitored through a range of internationally comparable indicators as well as OECD policy surveys that allow for a qualitative assessment of key policy dimensions, as described in Table 2.3.

Table 2.3. Examples of policy instruments for increasing SME absorptive capacities and key assessment tools

	Policy instruments	Key assessment tools and indicators	Source
Regulatory framework	Tax, licensing and permit systems	Administrative burden on start-ups (index)	OECD Product Market Regulation Index
		Simplification and evaluation of regulations (index)	OECD Product Market Regulation Index
		Complexity of regulatory procedures (index)	OECD Product Market Regulation Index
		Statutory corporate income tax rate (CIT), small businesses (%)	OECD Tax database
		Share of SMEs using e-government services (%)	OECD ICT use by Businesses Database
		Share of firms identifying licensing, permits, tax administration, customs and trade regulations as a major constraint (%)	World Bank Enterprise Surveys
		Number of days needed to obtain an operating license, construction permit, and import license	World Bank Enterprise Surveys
	Judicial system and contract enforcement	Share of firms identifying the court system as a major constraint (%)	World Bank Enterprise Surveys
		Share of firms believing the court system is fair, impartial and uncorrupted (%)	World Bank Enterprise Surveys
	SME tests and regulatory impact assessments	Frequency, quality and transparency of regulatory impact assessments (index)	OECD Regulatory Policy & Governance Indicators
		Adoption of "stock-flow linkage" rules	OECD Regulatory Policy & Governance Indicators
Access to innovation assets	Technology extension services	Balance and density of the policy mix: • Number and share of policies aiming to strengthen SME absorptive capacities • Availability of public consultation ad stakeholder engagement mechanisms for policy design and customisation • Availability of the knowledge transfer infrastructure (universities, research centres, technology transfer offices) Policy design: • Type of policy instruments used • Share of policies targeting SMEs or offering preferential treatment to them • Sectoral and value chain targeting of SME support services (e.g. FDI-intensive sectors, sectors where SMEs have a comparative advantage, knowledge-intensive activities) • Eligibility criteria and performance conditions Policy implementation: • Uptake of public support schemes and number of SME beneficiaries • Financial resources dedicated for the implementation of SME support measures • Duration and continuity of SME support measures	EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages
	Business diagnostic / advisory services		
	Regulations on SMEs access to innovation assets (e.g. data)		EC/OECD Survey of institutions and policies for growth financing and data governance to support SME scale up
	Innovation vouchers		
	Public grants for innovation and internationalisation activities		
	Public grants for technology acquisition and digital transformation		OECD SME&E Data lake
Access to finance	Public loans and guarantees for innovation and internationalisation activities		
	Public loans and guarantees for technology acquisition and digital transformation		OECD R&D Tax Incentives Database
	Public risk-sharing schemes (e.g. government-backed equity financing)		
	Bank loans		EU SME Performance Review Indicators and SBA Fact Sheets
	Alternative debt (corporate bonds, securitized debt, covered bonds, private placements, crowdfunding)		
	Hybrid instruments (subordinated loans/bonds, silent participation, profit participation rights, convertible bonds, bonds with warrants)		
	Equity instruments (private equity, venture capital, business angels, specialized platforms for public listing of SMEs, equity crowdfunding)		EC-OECD Science, Technology and Innovation Policy Compass Database
	Trade finance		

	Asset-based finance (asset-based lending, factoring, purchase order finance, leasing)		
	Tax incentives for R&D and innovation activities		OECD Skills Studies
Access to skills	Skill development programmes		
	Tax relief on training expenses		
	Direct training subsidies schemes and training vouchers		
	Statutory training leave		OECD Studies on SME and Entrepreneurship Policy
	Apprenticeship programmes		
Network and knowledge infrastructure	Business support centres		
	Technology transfer offices		OECD Reviews of Innovation Policy
	Business incubators and accelerators		
	Science and technology parks		
	Infrastructure development policies		

Source: Authors' elaboration, based on the OECD Data Lake on SMEs and Entrepreneurship (OECD, 2023[66]).

Policy options to strengthen the economic and geographical conditions that enable FDI-SME spillovers

New industrial policies can help strengthen domestic SME performance, attract quality FDI and reinforce FDI-SME linkages

Although there is no clear consensus about the approach to follow, industrial policies have raised increasing interest of OECD governments in search for a response to slowing productivity, rising global competition and pressing environmental challenges (Box 2.4). New industrial policy has increasingly been seen as a means for achieving sustainable development goals (OECD, 2021[67]), a new way for governments and industry to work together, and a new approach to reconciliate industrial policy and competition policy (OECD, 2016[68]). Selective industrial policies have traditionally raised concerns about their anticompetitive effects ("picking winners" possibly feeding vested interests) and the risks of suboptimal use of public funds. In fact, while industrial policy has arguably worked in some countries and during certain periods, it has also led to costly failures in other cases (Warwick, 2013[69]). Yet, although high uncertainty remains about the effectiveness of individual industry policy instruments, there is also a new understanding of the relevance of its broad principles and that associated risks could be minimised (OECD, 2016[68]) (Wilkes, 2020[70])) (Criscuolo et al., 2022[71]) (Sunley et al., 2022[72]).

Box 2.4. The rise of new industrial policies

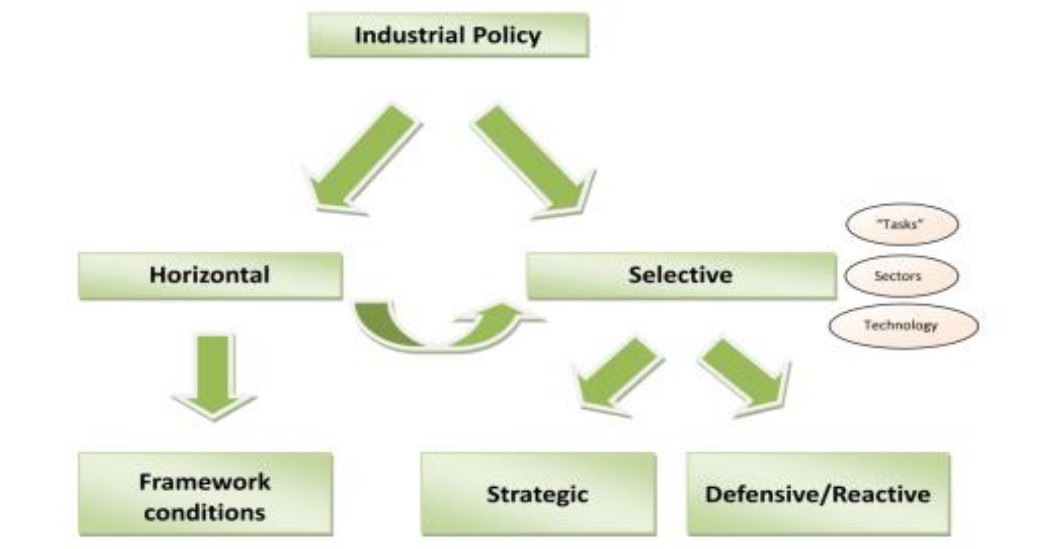
There is no consensus on the industrial policy paradigm and no widely acknowledged definition of it, "industrial policy" being commonly used for competitiveness, productivity or industrialisation policy. There are overall two main meanings of the term (OECD, 2016[68]). One refers to a declared intention of governments to alter the structure of the economy and the structure of production, toward sectors, technologies or activities that are expected to offer better prospects for economic growth and societal welfare (Criscuolo et al., 2022[71]) (Warwick, 2013[69]). The second refers to more horizontal (and not sector-specific) approach for enabling a supportive environment for industry and the business.

The regain of interest in industrial and manufacturing policies has followed the 2008-09 crisis, as policy makers aimed to find new sources of growth, address the structural productivity slowdown and growing competition in GVC segments of higher value added, and seize the potential of emerging technologies to drive the next production revolution (OECD, 2016[68]) (OECD, 2017[73]). Environmental pressure has also led governments to reconsider the merits of industrial policy in order to curve path-dependency and redirect change towards cleaner technologies (Aghion, Boulanger and Cohen, 2011[74]).

Beyond the sectoral orientation, new industrial policy embeds strong technology- or mission-oriented-focus with a view to contributing to the transformative industrial change (Warwick, 2013[69]) (Criscuolo et al., 2022[71]). Sectoral strategies (e.g. focusing on the information and communication technologies -ICT- or automotive sectors), increasingly co-exist with mission-oriented (e.g. green action plans), and technology-focused (e.g. digital transformation and artificial intelligence -AI- strategies) frameworks. There may be catch-up or frontier industrial policies; comparative advantage-following or comparative advantage-defying policy orientation; and strategic or defensive/reactive policy orientation. A strategic industrial policy for a country or a region that is far from the technology frontier is for instance likely to be different from what it might be for a country or a region that is at or close to it (Warwick, 2013[69]).

Yet, one key feature of new industrial policy is its greater emphasis on improving systems, by building networks, improving co-ordination and securing strategic alignment (Warwick, 2013[69]). There is therefore a move away from support for single firms, and away from state aids, tariff protection, market-failure correcting subsidies and product market-focused interventions, towards minimising the risks of government failure, e.g. building adequate business framework conditions (e.g. sound competition, trade openness, well-functioning capital markets), and enhancing entrepreneurial ecosystems, with the use of complementary policy instruments and policy packages (OECD, 2016[68]).

Figure 2.2. Typology of industrial policies by policy orientation



Source: (Warwick, 2013[69]) (OECD, 2016[68]) (OECD, 2017[73]) (Aghion, Boulanger and Cohen, 2011[74]) (Criscuolo et al., 2022[71]) (OECD, 2021[6]).

New industrial policies that "*aim to improve structurally the performance of the domestic business sector*" (Criscuolo et al., 2022[71]) give a central role to SMEs, for promoting their upgrading and strengthening their business linkages within regional and global value chains (Box 2.4). More recently, COVID-19 and Russia's aggression against Ukraine, as they stressed the need for achieving greater resilience in supply chains, have re-ignited the debate about industrial sovereignty (OECD, 2021[6]) (OECD, forthcoming[44]). Many OECD governments are rethinking industrial policies with resilience in mind, reshoring strategic activities, looking to protect strategic SMEs and industries, e.g. from predatory practices, takeovers, or distortions in competition etc., and reinforcing the positioning of their SMEs in GVCs, all in all making start-ups and SMEs an important target of industrial policy interventions across the area (OECD, 2021[6]) (Criscuolo et al., 2022[71]).

New industrial policies also place strong emphasis on attracting FDI as a source of capital and knowledge spillovers in strategic activities and areas. The shift towards industrial policies has indeed become a response to the growing recognition that the liberalisation of trade and investment as from the 1980s has alone been insufficient in promoting economic growth, especially in developing countries, and further interventions by governments were needed to promote production upgrading and diversification (Harrison and Rodríguez-Clare, 2010[75]). In fact, governments have resorted to industrial policies to compensate for a potential loss of competitiveness resulting from foreign policies, including tax, trade and FDI policies, that were perceived as unfair (Criscuolo et al., 2022[71]).

New industrial policy holds a strong place-based component, that is reflected in smart specialisation approaches

New industrial policies are articulated around the following policy objectives (OECD, 2021[6]) and share commonalities with smart specialisation approaches:

- Reinforcing business linkages, though **cluster policies** and place-based approaches, e.g. **smart specialisation,** involving local SMEs;
- **Attracting foreign MNEs, and strengthening the role of domestic SMEs in GVCs**, through a range of investment promotion policies, SME policies, innovation policies and regional development policies, aiming to enable FDI spillovers to domestic SMEs and to attract and retain MNEs;
- **Encouraging technology development** at upstream stage, as opposed to downstream stage, focusing on generic technologies, with the view to not impeding competition and infringing State aid rules (World Trade Organisation, EU);
- **Encouraging entrepreneurship**, through access to appropriate sources of finance and the development of supportive local entrepreneurial ecosystems;
- **Improving framework conditions**, through the enforcement of competition rules, trade openness, the protection of data and intellectual property rights (IPRs), or the training and re-training of workers;
- Optimising the policy mix for innovation by better **combining supply-side** (innovation creation) **and demand-side** (innovation diffusion) measures. Demand-side initiatives, such as public procurement, standards or lead market initiatives, are considered as effective mechanisms to create a market in areas where it is needed to meet environmental and societal challenges. Innovation diffusion requires strengthening SME absorptive capacities.

Many governments, at national or subnational level, pursue a smart specialisation approach whereby they identify and select a limited number of priority areas for knowledge-based investments, focusing on the strengths and comparative advantages of the country or region (Box 2.5). In this sense, smart specialisation approaches share aspects of industrial, innovation and cohesion policies. In fact, regional development policies are an important complement to the broader framework of sectoral policies as they help provide differentiated and tailored sets of policy measures to address complex, interconnected and diverse challenges faced by different types of regions (whether urban, rural or mixed) (OECD, 2023 forthcoming[76]).

Policies and institutions are critical determinants of industrial specialisation (Johansson and Olaberría, 2014[77]). In countries that spend relatively more on R&D (both public and private), innovation-oriented industries take up a higher share of GDP. Trade policy as well as labour and competition policies also affect specialisation patterns. High tariffs on intermediate inputs have a significant negative effect on the share of GDP of downstream industries since they increase the cost of production and therefore the potential for industry growth. Equally, relatively easier employment protection regulation and entry barriers can increase the share of GDP of industries facing high job turnover or high volatility of sales. Countries with higher labour taxes tend to specialise in industries that are less labour intensive. This empirical evidence suggests that a comprehensive approach to designing economic policies is necessary to translate specialization strategies into innovation-driven growth.

Box 2.5. Smart specialisation in a nutshell

The smart specialisation is a regional policy framework for innovation-driven growth (OECD, 2013[78]). It combines industrial, educational and innovation policies to help regions – and countries – identify a few number of priority areas and focus their knowledge investments in activities – not in sectors – that reflect their comparative advantage (*specialisation*) or emerging areas where entrepreneurs could develop new activities (*diversification*) (Foray, David and Hall, 2009[79]). It is a continuation in the

process of implementing more general innovation strategies, taking into account regional specificities and inter-regional aspects, in order to restart economic growth in regions.

The smart specialisation approach has three main policy implications: i) it underlies the role of scientific, technological and economic specialisation in developing comparative advantage and, more broadly, in driving economic growth; ii) it requires policy intelligence for identifying domains of present or future comparative advantage and; iii) it gives a pivotal role to regions, private stakeholders and entrepreneurs in public governance to translate specialisation strategies into economic and social outcomes.

What distinguishes smart specialisation from traditional industrial and innovation policies is mainly the bottom-up process of "entrepreneurial discovery" in which market forces and the private sector provide information about new activities and the government assesses outcomes and empowers them for realising the potential ((Foray et al., 2012[80]; Hausmann and Rodrik, 2003[81]). This implies for policy makers to listen to market signals using a range of assessment tools (e.g. SWOT analysis, surveys) and mechanisms such as public-private partnerships, technology foresight and road-mapping, etc. (OECD, 2013[78]).

Key aspects of smart specialisation strategies include therefore:

- *Concentration of public investments* in R&D and knowledge on particular activities - business functions- that increasingly cut across established sectors and industries.
- *An entrepreneurial process of discovery* that empowers entrepreneurs for combining the necessary knowledge about S&T and engineering, with knowledge of market growth and potential in order to identify the most promising activities. This also requires policy tools to collect the "entrepreneurial knowledge" embedded in the region and transform it into policy priorities.
- *Combining General Purpose Technologies* (GPTs) that can extend the frontier of invention possibilities and help upgrade the value chain upstream and downstream, *with the "co-invention of applications*" that can change the production function of a particular sector. Regions can lead in the invention of a GPT or the combination of different GPTs (e.g. bioinformatics), or, for those that may be less advanced, they can invest in the "co-invention of applications" around a GPTs. This also requires alignment with education and training policies in order to build capacity.
- *Setting a multi-governance structure and inter-regional policy co-ordination mechanisms* around common goals to allocate public funding accordingly. This implies aligning entrepreneurial activity, partnering in clusters, and synchronising national strategies with regional strategies and different regional strategies (e.g. innovation, research, industrial strategies), to support regional priorities.

Source: (OECD, 2013[78]); (Foray, David and Hall, 2009[79]); (OECD, 2020[82]).

Cluster programmes aligned with regional capabilities can facilitate business linkages and cross-sectoral or cross-cluster interactions

Clusters are a geographic concentration of firms, HEIs, research institutions, and other public and private entities that facilitate collaboration on complementary economic activities (OECD, 2016[83]). While some of the world's leading clusters specialised in high-tech industries (e.g. Silicon Valley), others are found in sectors ranging from wine making to automotive.

Clusters are diverse. Some may be rich -or weak- of knowledge generating institutions and linkages among actors. Some are mature clusters in metropolitan areas (e.g. built around large, export-oriented firms). Others are science and technology-centred clusters (e.g. built around R&D institutions seeking technology transfer collaborations), or smaller agglomerations in niche fields (e.g. aimed at leveraging economies of

scale for GVC upgrading), and even networks across small-scale clusters in less mature ecosystems. The diversity of these ecosystems means that public support should be sufficiently flexible (e.g. in terms of policy instruments used and sectors targeted) to reflect the capabilities and accommodate the needs of different regional economies (OECD, 2007[84]).

A main rationale for governments to support clusters is to increase knowledge spillovers thanks to the colocation and networking of actors, and the generation of a collective pool of knowledge. Public support can take many forms depending on the stage of development of a country (or region) and the level of maturity of the cluster itself. For nascent market-led cluster initiatives, governments may provide incentives for the development of regional or sectoral innovation networks; offer financial and technical support to bottom-up agglomeration initiatives; establish programmes for industry-science linkages; and set up the necessary infrastructure to enhance interactions within local entrepreneurial ecosystems. Measures to support industrial clusters are also part of a broader range of policy interventions aimed at promoting FDI and helping SMEs upgrading through GVCs (Kergroach, 2018[63]).

Many governments seek to create agglomeration economies through the establishment of industrial, science and technology parks or special economic zones (SEZs). These agglomeration infrastructures are location-specific and target both foreign firms and local SMEs, providing them with land or office space to set up their business activities. Evidence on the effectiveness of science and technology parks (STPs) in attracting FDI and promoting intra-firm linkages among park tenants is overall positive, although this appears to be more the case for informal linkages, i.e. tacit learning, demonstration effects and networking (Vásquez-Urriago, Barge-Gil and Modrego Rico, 2016[85]; Cantù, 2010[86]; Vaidyanathan, 2007[87]). The lack of formal linkages (i.e. inter-firm collaborations) among park tenants is often attributed to the heterogeneity of firms residing in parks (Dettwiler, Lindelöf and Löfsten, 2006[88]). In contrast, specialised parks for sector-specific firms that apply rigorous selection criteria have been found to be better positioned to facilitate knowledge spillovers, promote on-park relationships and spur innovation (Kocak and Can, 2013[89]; Lamperti, Mavilia and Castellini, 2015[90]). Recent evidence from France also shows that cluster policies are more effective in promoting knowledge diffusion when they are implemented in regions with a minimum degree of specialisation (N'Ghauran and Autant-Bernard, 2020[91]). These findings confirm that more targeted policy, tailored to sectoral and place capabilities, is needed to leverage the potential of clusters for knowledge diffusion.

Cluster policies increasingly entail a cross-sectoral network-based approach that promote linkages and partnerships among clusters located in different areas, and active in different industrial sectors. The establishment of cross-cluster linkages, domestically and internationally, implies however the strengthening of the research component of the cluster and interdisciplinary and cross-sectoral efforts (OECD, 2016[83]). Successful cluster policies typically exhibit certain characteristics, such as flexibility in policy goals, alignment with place-based capabilities, a whole-of-government approach to their implementation, and engagement with local actors, which are all critical to make clusters serve as engines for technology upgrading and knowledge diffusion (OECD, 2007[84]). Intra-regional effects should be also taken into consideration. Knowledge spillovers arising from cluster policies in one region may negatively affect innovation diffusion in other locations, e.g. neighbouring regions (due to "beggar-thy-neighbour" effects).

Assessment tool

Box 2.6 includes a checklist of questions allowing policymakers to identify policy options to leverage the potential of FDI-SME spillovers in regional development policy.

Box 2.6. Checklist of questions to assess the policy framework for the economic and geographical conditions that enable FDI-SME spillovers

- Are the countries/regions' strategic priorities in terms of smart specialisation and industrial growth defined in a national strategy or action plan?
- How are regional disparities in terms of productivity and innovation reflected in investment promotion, innovation and SME development strategies? Do these strategies set specific goals, identify priority actions and clarify responsibilities of institutions in order to leverage the potential of FDI-SME linkages and spillovers for regional development?
- How does the government ensure that cluster policies are aligned with place-based capabilities and the needs of regional economies?
- Is there a policy framework to support the competitiveness and internationalisation of industrial clusters involving foreign investors, local SMEs and other actors of the national/regional innovation ecosystem (e.g. industrial parks, science and technology parks, financial and technical support)?
- How do cluster policies support the domestic and international networking of clusters?

The policy framework for can be measured and monitored through a range of internationally comparable indicators and other sources of policy information as well as OECD policy surveys that allow for a qualitative assessment of key policy dimensions, as described in Table 2.4.

Table 2.4. A typology of policy instruments to create the economic and geographical conditions for FDI-SME spillovers and key assessment tools

	Policy instruments	Indicators and key assessment dimensions	Source
Industrial policy	Targeted industrial strategies	Balance of the policy mix: • Number and share of place- or sector-targeted policies (including industrial and regional development strategies) and policies supporting agglomeration economies. Policy design: • Prevalent sectoral targeting (e.g. high-tech, knowledge intensive, FDI- intensive, etc.) • Policy instruments used • Eligibility criteria and performance conditions • Alignment with foreign investors requirements Policy implementation: • Financial resources devoted to implementation • Duration and continuity of support • Uptake of support schemes and number of beneficiaries • Levels of government involved in design and implementation	EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages
	Smart specialization policies		OECD SME&E Data Lake
	Complementarity of industrial policy instruments		
Agglomeration economies	Cluster policies		EC/OECD STIP Compass
	Industrial, science and technology parks		OECD Reviews of Innovation Policy
Economic geography	Place-based policies		OECD Territorial Reviews
	Subnational IPAs and business support institutions		OECD Survey on Investment Promotion and Regional Development

Source: Authors' elaboration.

Policy options to strengthen the diffusion channels for FDI-SME spillovers

Value chain linkages and partnerships between foreign MNEs and domestic SMEs can be strengthened through incentives and technical assistance

Supplier development programmes can play a crucial role in enhancing SME chances to partner with and supply foreign firms. These programmes usually assess the need for upgrading SME capabilities in various aspects – management, production, sales and commercialisation, innovation, human resources and overall productivity – and provide coaching and training in quality control, product certification and foreign market standards. The design and mode of implementation of supplier development programmes can vary (OECD, forthcoming[92]) (OECD, 2022[4]) (OECD, 2022[3]). They can target specific value chain networks – for instance, by being structured around a specific MNE with business presence in the host country and a group of SMEs that have been selected to receive technical assistance so that they can upgrade their capacities and collaborate with the MNE. Or they can be generic and address the needs of the broader SME supplier base to help them successfully join domestic and global value chains.

To maximise the effectiveness of supplier development programmes, it is critical that their scope (e.g. in terms sectors, regions and types of activities targeted) is aligned with the needs of foreign investors (OECD, 2022[93]). For instance, tailor-made programmes may be needed in FDI-intensive sectors, which present greater opportunities for FDI-SME linkages given the high concentration of foreign MNEs. One way to ensure that supplier development programmes reflect FDI considerations is to implement them jointly with government bodies responsible for investment promotion, SME development and innovation. Such an approach would also allow for greater policy alignment with the scope and priorities of investment facilitation and aftercare services offered by IPAs (see below). Due consideration should be given to monitoring the impact of these programmes in the longer term to assess whether SMEs continue to benefit from supply chain linkages after public support is phased out.

Financial and regulatory incentives may be also used to encourage foreign investors to either source from local suppliers or partner with them (OECD, 2022[93]). Many EU Member States offer incentives for investment projects involving science-to-business (S2B) and business-to-business (B2B) collaboration. In Portugal, for instance, the government has introduced several special regulatory regimes allowing investors to benefit from simplified licensing procedures, conditional on introducing technology-based production processes in cooperation with domestic R&D performers and demonstrating the potential for spillover effects on Portuguese SMEs (OECD, 2022[4]). As outlined in the section above, incentive schemes should be transparent, with clearly-defined rules and criteria for their granting to avoid potential market distortions.

Local content requirements (LCRs) are often used by governments to induce foreign firms to use domestically manufactured goods or domestically supplied services in exchange for market access in certain strategic sectors. Trade-distorting discriminatory measures such as LCRs can however hinder international investment across the value chains by raising the cost of inputs for downstream activities (OECD, 2015[23]). Recent OECD work shows that LCRs undermine long-term competitiveness and may prove to be detrimental for the attraction of sustainable FDI in the long run (Stone, Messent and Flaig, 2015[94]). Restrictions on foreign ownership as a means to achieve knowledge spillovers should be generally avoided as they have been found to deter FDI, especially when intellectual property rights are not protected (OECD, 2021[40]).

In addition to supplier development programmes and incentive schemes, investment facilitation and aftercare services can be instrumental in encouraging greater embedding of foreign affiliates in local economies and building relationships that contribute to greater use of local SME suppliers (OECD, 2018[10]). These services are usually offered by IPAs and involve accompanying investors in their project definition and during their establishment phase, ensuring that they identify local suppliers and clients, providing additional assistance once the project is implemented and encouraging expansions and

reinvestments through aftercare. The main aim of these services is to maximise the socio-economic benefits from investment, including its impact on the productive capacities of SMEs.

Practically, IPAs have several options to bring down information barriers and help foreign firms identify local SME suppliers (OECD, 2022[93]). Matchmaking services and B2B meetings allow representatives of foreign and domestic firms to meet and discuss potential local sourcing and business partnership opportunities. Many IPAs also use local supplier databases to help foreign firms find information on domestically manufactured goods and domestically supplied services. Online matchmaking platforms can also serve as a single access point for B2B technology offers and requests, allowing companies to receive information on collaborative R&D projects.

Measures to improve the quality of facilitation and aftercare services should, therefore, be at the centre of policy efforts to foster knowledge spillovers from FDI (OECD, 2018[10]). IPAs need sufficient resources for their investment facilitation activities, and dedicated staff that is trained to identify the sourcing needs of foreign investors and steer FDI projects towards locations with the greatest potential for supplier linkages. The development of clear objectives, a strategy and an action programme for embedding foreign investors in the local economy can help mobilise public resources and relevant government actors.

Investment facilitation and aftercare services can be also combined with other types of support such as capacity building for local firms, training programmes for local staff, and cluster building initiatives (see sections Policy options to strengthen the absorptive capacities of local SMEs and Policy options to strengthen the economic and geographical conditions that enable FDI-SME spillovers). Evidence from EU Member States shows that MNE-SME linkage programmes and other matchmaking services are often combined with policy initiatives aimed at promoting supply chain development and strengthening SME absorptive capacities (OECD, 2022[4]). This mix of policy instruments allows for a more comprehensive approach to aligning domestic supplier capabilities with the needs of foreign investors. MNE-SME linkage programmes and matchmaking services should be also integrated into wider regional development initiatives. Linkages between foreign and domestic firms are often location-specific and therefore depend on the local business conditions and the availability of facilitation services at the local level.

Facilitating the mobility of highly skilled workers from foreign multinationals to the domestic entrepreneurial ecosystem can create opportunities for FDI-SME spillovers

Labour market laws and regulations determine the potential for knowledge spillovers through staff mobility by affecting how the wider labour market adjusts in response to FDI entry. For instance, stricter employment protection legislation in sectors with low SME absorptive capacities can deter labour mobility from foreign to domestic firms. This is because foreign firms seek to attract local talent by offering higher wages that low productivity SMEs are unable to match (Becker et al., 2020[95]). High wage disparities coupled with rigid labour market conditions limit the ability of domestic SMEs to retain and attract skilled workers, thus crowding out skilled employment in domestic firms. This effect is stronger, and lasts longer, in industries and locations facing skills shortages (Lu, Tao and Zhu, 2017[96]). In contrast, when local absorptive capacities are sufficiently high, i.e. when skills in demand by foreign firms are available, more flexible labour markets can host FDI without necessarily reducing employment or increasing wage disparities between foreign and domestic firms.

Linked to the capacity of SMEs to retain and attract highly skilled workers is the complexity of hiring regulations and the disproportionate impact they may have on them. Regulatory burdens related to direct and indirect labour costs as well as compliance issues remain a major obstacle for SMEs as these firms tend to be poorly equipped to deal with the problems arising from regulations (see Chapter 1). For instance, in the case of regulatory simplification for SMEs, efficient firms may choose to remain small to avoid the additional regulatory burden related to crossing a certain threshold (OECD, 2018[97]). Furthermore, there has been evidence that stricter employment protection regulation leads to slower firm growth in sectors which are more labour intensive, more innovative, or characterised by greater business growth volatility

(OECD, 2018[97]). It increases the share of firms that neither grow nor shrink, but it also reduces growth among the best performing firms, and contraction among the under-performing ones (OECD, 2018[97]; Calvino, Criscuolo and Menon, 2016[98]).

These findings highlight the need to examine labour market regulations and their role in FDI-SME spillovers by looking at how they relate to SME performance and the availability (or lack) of skills in the local labour force. Structural challenges related to absorptive capacities, skills shortages and the regulatory burden on small businesses are often behind the challenges that many SMEs face with regard to attracting qualified workers. Policy interventions should focus on simplifying labour market rules for small businesses. Such exemptions could make it easier for SMEs to hire skilled workers, and lift barriers to their growth by easing the administrative burden on their business operations.

By addressing skill mismatches and shortages in FDI-intensive sectors, training and skills development programmes can also help increase the share of skilled workers, following increased demand due to FDI entry, including in domestic SMEs that will be more able to capture potential spillovers. Firms may provide training on their own costs, but skills policies targeted at employers can also be covered by government subsidies. In general, training support provided or subsidised by government agencies, though costly, have shown some success when well-designed and targeting the right beneficiaries (Bown and Freund, 2019[99]). For instance, sectoral training or re-training programmes in transferable certifiable skills can facilitate labour mobility and help workers move to better-paid jobs (Autor et al., 2020[100]). They can reduce skills shortages in high-growth sectors where FDI may crowd out competitors unable to retain their talented staff. Sectoral training could be equally helpful to help mitigate the potential adverse impacts of FDI by retraining displaced or vulnerable workers affected by rapidly changing labour markets due to, inter alia, evolving needs of MNEs.

Encouraging permanent employment can also have a positive impact on SME willingness to invest in job training of their employees. Evidence on the role of employment protection regulations in determining formal training investment shows that enforcing stricter hiring regulations for temporary contracts and less rigid regulations for dismissals of permanent workers is associated with higher investment by firms in the human capital of their employees (Almeida and Aterido, 2011[101]). Similarly, a stricter enforcement of employment protection regulation is found to have a positive impact on firms' willingness to upskill their employees. This is mainly because firms have greater incentive to invest in firm-specific knowledge and skills for employees who stay longer on the job and seek to exploit the career advancement opportunities provided by the firm (OECD, 2020[102]).

Linked to the need for a skilled labour force is the increasing use of regulatory incentives to encourage workforce skills development and facilitate the immigration of business talent as a way to address domestic labour shortages. In recent years, there has been an increase of entrepreneur visa programmes (e.g. Startup Visa, Tech Visa), which seek to attract innovative entrepreneurs and highly skilled workers by allowing them to obtain residence and employment rights after setting up or transferring their business (OECD, 2021[103]). For the visa to be granted, entrepreneurs usually have to demonstrate solid business and financial plans and undertake innovative activities in knowledge-intensive sectors. The impact of these schemes on reducing skill shortages is not clear yet, but other factors such as labour market conditions, the presence of a thriving start-up ecosystem, and the quality of the business environment are thought to be key determinants.

Information and facilitation services are another type of policy measures that can be implemented to stimulate labour mobility. Job information and matching programmes could lower search costs in labour and product markets and help job seekers or workers in communities near foreign firms' operations to identify jobs in their vicinity. Employee exchange programmes between foreign and domestic firms and financial incentives (e.g. wage subsidies, payroll tax relief) for hiring highly skilled workers can also help SMEs acquire access to high quality human capital. For instance, the Portuguese IPA, AICEP, manages the INOV Contacto programme, which gives the opportunity to highly skilled graduates to conduct a short-

term internship in a Portuguese company, followed by a long-term internship in a multinational company abroad (OECD, 2022[4]). Such targeted programmes play a crucial role in fostering labour mobility and facilitating the transfer of knowledge and skills to domestic firms.

FDI-SME spillovers require fair conditions for competition and knowledge exchange

Competition rules that ensure a level playing field are essential so that SMEs can effectively do business and compete with other domestic or foreign MNEs (Lembcke and Wildnerova, 2020[104]). When firms are subject to overly restrictive entry restrictions and onerous rules for conducting their business, a lack of competitive pressure may induce them to charge above-market prices, provide sub-optimal services and fail to adapt to market changes and innovation. Anti-competitive practices such as market power abuse by incumbents – often large firms with significant market shares – and predatory pricing behaviours, can disproportionately affect SMEs and hamper their capacity to take risks, invest and expand to new markets domestically or abroad (OECD, 2019[34]).

At the same time, they provide a platform for assessing the potential of target start-ups for acquisitions by foreign MNEs (Kohler, 2016[105]). Start-up acquisition is indeed a common practice among MNEs to maintain market position, especially in high-tech sectors. In Israel, the number and value of mergers and acquisitions (M&As) and buyouts involving innovative start-ups has continuously grown over the past decade, as local players and multinationals engaged in open innovation in a wide variety of sectors (OECD, 2020[106]). Due policy attention is therefore increasingly paid to the threats killer acquisitions and predatory behaviours could have on entrepreneurial ecosystems and avoid possible detrimental effects of these acquisitions on market competition and innovation. In 2022, the European Commission (EC) has introduced new notification requirements on M&A with the Digital Markets Act regulation to monitor potential “killer acquisitions” by online platforms operating as “gatekeepers” and prevent abuse of dominant position. In contrast, when SMEs are exposed to stronger competition, they are more inclined to invest in the upgrading of their production capacities and improve the quality of their products and services, often by imitating good practices from foreign firms.

Creating a competitive environment requires a sound competition law, an effective competition authority for enforcement, and more widely, economic policies that respect the principles of competition and avoid unnecessary restrictions. Competition laws should focus on lowering legal barriers to entry, limiting antitrust exemptions and strengthening market monitoring mechanisms and the enforcement of potential sanctions. Given the complexity of the legal framework, competition authorities could also organise advocacy activities and streamline information, for example through the publication of guidelines, to help SMEs understand and comply with new rules and regulations (Alemani et al., 2013[107]).

A well-developed legal framework for the protection of intellectual property rights (IPRs) is also an important means for SMEs to protect the value of their innovations and position themselves competitively vis-à-vis large firms in domestic and global markets (OECD, 2019[34]). Strong IPR protection rules may also increase foreign MNEs’ willingness to share their technology and know-how with domestic firms, through joint ventures and licensing agreements (see section on the potential for FDI spillovers). Hence, good intellectual property registration systems are crucial. The legal framework should strike the right balance between fostering innovation and competitive markets and ensuring that new products are priced affordably (OECD, 2015[23]).

Governments should also ensure that the IPR protection system is accessible to SMEs. Even when active in innovation, SMEs tend to under-utilise the IPR system due to their lack of awareness and expertise as well as resources for applying and managing their patents. Many EU Member States promote IPR use among SMEs through information, financial support and technical assistance. These support services can take the form of seminars and training programmes to help SMEs familiarise themselves with IPR protection tools and processes; grants and subsidies covering patent application fees; and regional

centres, online platforms and databases that provide applicants with information on IPRs and their prosecution.

Beyond policies that foster knowledge spillovers through competition, governments can also promote tacit learning and imitation of foreign MNEs' practices by local SMEs. The organisation of networking and knowledge exchange events is a common practice among government agencies responsible for investment promotion, SME and innovation policies. The demonstration effect resulting from the improved visibility of foreign firm practices and technologies and the informal sharing of views and ideas during conferences, seminars and site visits involve significant learning opportunities for local SMEs.

For instance, Enterprise Ireland, the Irish SME agency, organises Best Practice Study Visits that allow Irish firms to visit the manufacturing plants of foreign firms and get first-hand experience on their business practices and processes. Similarly in Portugal, the national SME agency, IAPMEI, implements the Open Days i4.0 initiative, which aims to present the technological capabilities of innovative companies during stakeholder events and promote the sharing of experiences between market actors operating in the same value chain (OECD, 2022[4]). These public events include, in addition to moments of networking and information sharing, visits to the most advanced industrial plants in Portugal, presentations of innovative technologies, exhibitions of technological products and hands-on discussions between business representatives and other market stakeholders.

Assessment Tool

Box 2.7 includes a checklist of questions allowing policymakers to assess the policy environment and identify policy options to strengthen the spillover potential of FDI-SME diffusion channels.

Box 2.7. Checklist of questions to assess the policy framework for the FDI-SME spillover channels

- Do government agencies implement supplier development programmes? What is the technical assistance suppliers receive and in which sectors and value chains? What is the scale of these programmes (e.g. number of firms supported, budget, etc)?
- Are supplier development programmes aligned with the sectoral scope and priorities of investment facilitation and aftercare services provided to foreign investors?
- Does the IPA have sufficient resources and dedicated staff that is trained to identify the sourcing needs of foreign investors and promote linkages with local suppliers?
- Do government agencies provide matchmaking services and operate local supplier databases to help foreign investors identify opportunities for collaboration with domestic SMEs?
- Has the government enacted incentive schemes for knowledge-intensive collaborations and partnerships between foreign multinationals, local SMEs and other actors of the national innovation ecosystem (e.g. universities, research centres, R&D organisations)? Are the criteria for the granting of incentives clearly defined, transparent and rules-based?
- Do labour market laws and regulations provide a level of employment stability that encourages learning in the workplace while allowing for enhanced mobility of workers from foreign to domestic firms? How do these regulations take into account other drivers of labour mobility such as the availability (or lack) of skills in the labour market and the absorptive capacities of domestic SMEs?
- Has the government enacted targeted measures, policies and programmes to address skill shortages in the economy, in particular of SMEs in FDI-intensive sectors and regions?

- Do competition rules ensure a level playing field for foreign and domestic firms? Is there a robust legal framework that prohibits anti-competitive conduct by dominant companies, and that provides the necessary tools to uncover and deter such illegal practices?
- Are intellectual property rights (IPR) protected by adequate laws and regulations? Is IPR legislation well implemented? What strategies, policies and programmes have been developed to meet the IP needs of SMEs?
- Do government agencies organise networking and knowledge exchange events involving foreign and domestic firms? If yes, is the participation of SMEs sufficiently encouraged and facilitated?

The policy framework for FDI-SME spillover channels can be measured and monitored through a range of internationally comparable indicators as well as OECD policy surveys that allow for a qualitative assessment of key policy dimensions, as described in Table 2.5.

Table 2.5. A typology of policy instruments for strengthening the FDI-SME spillover channels and key assessment tools

	Policy instruments	Indicators and key assessment dimensions	Source
Value chain linkages and strategic partnerships	Supplier development programmes	Overall balance and scope of the policy mix: • Number and share of policies aiming to promote value chain linkages and strategic partnerships • Alignment of supplier development programmes with the scope and priorities of investment facilitation and aftercare services • Share of IPA resources allocated to investment facilitation and aftercare services Policy design: • Type and diversity of policy instruments used • Sectoral and value chain targeting (e.g. FDI-intensive sectors, sectors where SMEs have a comparative advantage, knowledge-intensive activities) • Eligibility criteria and performance conditions attached to the selection of beneficiaries Policy implementation: • Uptake of public support schemes and number of beneficiaries • Financial resources dedicated for their implementation • Duration and continuity of their implementation	EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages
	Investment facilitation and aftercare services		OECD Studies on SME and Entrepreneurship Policy
	Matchmaking services, events and platforms		OECD Investment Policy Reviews
	Financial and regulatory incentives for FDI-SME partnerships		OECD Mapping of Investment Promotion Agencies OECD R&D Tax Incentives Database
	Trade finance		OECD SME&E Data lake
Labour mobility	Labour market regulation	Restrictions to the dismissal of permanent workers (index)	OECD Indicators of Employment Protection Legislation
		Restrictions to hiring temporary workers (index)	
		Restrictions on key foreign personnel (index)	OECD FDI Regulatory Restrictiveness Index
		Restrictions on the movement of people (index)	OECD Services Trade Restrictiveness Index
		Share of firms identifying labour regulations as a major constraint for doing business (%)	World Bank Enterprise Surveys
	Active labour market programmes and	Quality of start-up legislation	EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages

	incentives	Availability of targeted measures e.g. payroll tax incentives for skilled workers, employee exchange programmes, spin-out incentives for MNE workers to create their own firm.	
Competition & imitation	Competition law and policy	Restrictions in product market regulations (index)	OECD Product Market Regulation Indicators
		Barriers in service and network sectors (index)	OECD Product Market Regulation Indicators
		Involvement in business operations (index)	OECD Product Market Regulation Indicators
		Barriers to competition (index)	OECD Services Trade Restrictiveness Index
	Intellectual property rights protection	IP filing activity (number of IP submissions and ranking)	WIPO Intellectual Property Indicators
		Perception of IP protection (index)	WEF Global Competitiveness Index
		Knowledge creation (number of IP filings)	WIPO Global Innovation Index
	Networking and knowledge exchange events	Availability of targeted policies facilitating the public demonstration of foreign MNE practices	EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages

Source: Authors' elaboration.

References

Aghion, P., J. Boulanger and E. Cohen (2011), "Rethinking industrial policy", *Bruegel Policy Brief*, Vol. Issue 2011/04, June, https://www.bruegel.org/sites/default/files/wp_attachments/pb_2011-04__final.pdf. [74]

Alemani, E. et al. (2013), "New Indicators of Competition Law and Policy in 2013 for OECD and non-OECD Countries", *OECD Economics Department Working Papers*, No. 1104, OECD Publishing, Paris, https://doi.org/10.1787/5k3ttg4r657h-en. [107]

Alfaro, L. (2017), "Gains from foreign direct investment: Macro and micro approaches", *World Bank Economic Review*, https://doi.org/10.1093/wber/lhw007. [22]

Almeida, R. and R. Aterido (2011), "On-the-job training and rigidity of employment protection in the developing world: Evidence from differential enforcement", *Labour Economics*, Vol. 18, pp. S71-S82, https://doi.org/10.1016/j.labeco.2011.05.001. [101]

Appelt, S. et al. (2022), "Micro-data based insights on trends in business R&D performance and funding: Findings from the OECD microBeRD+ project", *OECD Science, Technology and Industry Working Papers*, No. 2022/04, OECD Publishing, Paris, https://doi.org/10.1787/4805d3f5-en. [42]

Autor, D. et al. (2020), "The Fall of the Labor Share and the Rise of Superstar Firms*", *The Quarterly Journal of Economics*, Vol. 135/2, pp. 645-709, https://doi.org/10.1093/qje/qjaa004. [100]

Becker, B. et al. (2020), "FDI in hot labour markets: The implications of the war for talent", *Journal of International Business Policy (2020)*, pp. 107–133. [95]

Bianchini, M. and V. Michalkova (2019), "Data Analytics in SMEs: Trends and Policies", *OECD SME and Entrepreneurship Papers*, No. 15, OECD Publishing, Paris, https://doi.org/10.1787/1de6c6a7-en. [45]

Bown, C. and C. Freund (2019), "Active labor market policies: lessons from other countries for the United States", *Peterson Institute for International Economics Working Paper*, Vol. 19-2, http://www.piie.com/sites/default/files/documents/wp19-2.pdf. [99]

Branstetter, L., R. Fisman and C. Foley (2006), "Do Stronger Intellectual Property Rights Increase International Technology Transfer? Empirical Evidence from U. S. Firm-Level Panel Data", *The Quarterly Journal of Economics*, Vol. 121/1. [24]

Calvino, F., C. Criscuolo and C. Menon (2016), "No Country for Young Firms?: Start-up Dynamics and National Policies", *OECD Science, Technology and Industry Policy Papers*, No. 29, OECD Publishing, Paris, https://doi.org/10.1787/5jm22p40c8mw-en. [98]

Cantù, C. (2010), "Exploring the role of spatial relationships to transform knowledge in a business idea — Beyond a geographic proximity", *Industrial Marketing Management*, Vol. 39/6, pp. 887-897, https://doi.org/10.1016/j.indmarman.2010.06.008. [86]

Celani, A., L. Dressler and M. Wermelinger (2022), "Building an Investment Tax Incentives database: Methodology and initial findings for 36 developing countries", *OECD Working Papers on International Investment*, No. 2022/01, OECD Publishing, Paris, https://doi.org/10.1787/62e075a9-en. [30]

Crescenzi, R., M. Di Cataldo and M. Giua (2019), *FDI inflows in Europe: does investment promotion work?*, http://www.lse.ac.uk/iga/assets/documents/research-and-publications/FDI-inflows-in-Europe-does-investment-promotion-work.pdf. [12]

Criscuolo, C. et al. (2022), "An industrial policy framework for OECD countries: Old debates, new perspectives", *OECD Science, Technology and Industry Policy Papers*, No. 127, OECD Publishing, Paris, https://doi.org/10.1787/0002217c-en. [71]

Davidson, P., C. Kauffmann and M. de Liedekerke (2021), "How do laws and regulations affect competitiveness: The role for regulatory impact assessment", *OECD Regulatory Policy Working Papers*, No. 15, OECD Publishing, Paris, https://doi.org/10.1787/7c11f5d5-en. [32]

Dettwiler, P., P. Lindelöf and H. Löfsten (2006), "Utility of location: A comparative survey between small new technology-based firms located on and off Science Parks—Implications for facilities management", *Technovation*, Vol. 26/4, pp. 506-517, https://doi.org/10.1016/j.technovation.2005.05.008. [88]

Du, L., A. Harrison and G. Jefferson (2011), *Do Institutions Matter for FDI Spillovers? The Implications of China's "Special Characteristics"*, The World Bank, https://doi.org/10.1596/1813-9450-5757. [21]

Foray, D., P. David and B. Hall (2009), *Smart Specialisation – The Concept*, Knowledge Economists Policy Brief No 9, June. [79]

Foray, D. et al. (2012), *Guide to research and innovation strategies for smart specialisations*. [80]

G20/OECD (2015), *G20/OECD High-level Principles on SME Financing*, https://www.oecd.org/finance/G20-OECD-High-Level-Principles-on-SME-Financing.pdf. [48]

González Cabral, A., S. Appelt and T. Hanappi (2021), "Corporate effective tax rates for R&D: The case of expenditure-based R&D tax incentives", *OECD Taxation Working Papers*, No. 54, OECD Publishing, Paris, https://doi.org/10.1787/ff9a104f-en. [26]

Harding, T. and B. Javorcik (2011), "Roll Out the Red Carpet and They Will Come: Investment Promotion and FDI Inflows", *The Economic Journal*, Vol. 121/557, pp. 1445-1476, https://doi.org/10.1111/j.1468-0297.2011.02454.x. [33]

Harrison, A. and A. Rodríguez-Clare (2010), "Trade, Foreign Investment, and Industrial Policy for Developing Countries*", in *Handbook of Development Economics, Handbooks in Economics*, Elsevier, https://doi.org/10.1016/b978-0-444-52944-2.00001-x. [75]

Hausmann, R. and D. Rodrik (2003), "Economic Development as a Self-Discovery", *Journal of Development Economics*, Vol. 72, 2. [81]

Havranek, T. and Z. Irsova (2011), "Estimating vertical spillovers from FDI: Why results vary and what the true effect is", *Journal of International Economics*, Vol. 85/2, pp. 234-244, https://doi.org/10.1016/j.jinteco.2011.07.004. [20]

IMF-OECD-UN-World Bank (2015), *Options for Low Income Countries' Effective and Efficient Use of Tax Incentives for Investment*, A report prepared for the G-20 Development Working Group by the IMF, OECD, UN and World Bank, https://www.oecd.org/ctp/tax-global/background-document-options-for-low-income-countries-effective-and-efficient-use-of-tax-incentives-for-investment.pdf. [29]

Javorcik, B. (2004), "Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In Search of Spillovers Through Backward Linkages", *American Economic Review*, Vol. 94/3, pp. 605-627, https://doi.org/10.1257/0002828041464605. [25]

Johansson, Å. and E. Olaberría (2014), "New Evidence on the Determinants of Industrial Specialisation", *OECD Economics Department Working Papers*, No. 1112, OECD Publishing, Paris, https://doi.org/10.1787/5jz5m893txq2-en. [77]

Johnson, S., J. McMillan and C. Woodruff (2001), *Courts and Relational Contracts*, National Bureau of Economic Research, Cambridge, MA, https://doi.org/10.3386/w8572. [38]

Kergroach, S. (2018), "National innovation policies for technology upgrading through GVCs: A cross-country comparison", *Technological Forecasting and Social Change*, https://doi.org/10.1016/J.TECHFORE.2018.04.033. [63]

Kocak, O. and O. Can (2013), "Determinants of inter-firm networks among tenants of science technology parks", *Industrial and Corporate Change*, Vol. 23/2, pp. 467-492, https://doi.org/10.1093/icc/dtt015. [89]

Kohler, T. (2016), "Corporate accelerators: Building bridges between corporations and startups", *Business Horizons*, Vol. 59/3, pp. 347-357, https://doi.org/10.1016/j.bushor.2016.01.008. [105]

Lamperti, F., R. Mavilia and S. Castellini (2015), "The role of Science Parks: a puzzle of growth, innovation and R&D investments", *The Journal of Technology Transfer*, Vol. 42/1, pp. 158-183, https://doi.org/10.1007/s10961-015-9455-2. [90]

Larrea, M., M. Estensoro and M. Pertoldi (2019), *Multilevel governance for Smart Specialisation: basic pillars for its construction*, Publications Office of the European Union, https://doi.org/10.2760/425579. [11]

Lembcke, A. and L. Wildnerova (2020), "Does FDI benefit incumbent SMEs?: FDI spillovers and competition effects at the local level", *OECD Regional Development Working Papers*, No. 2020/02, OECD Publishing, Paris, https://doi.org/10.1787/47763241-en. [104]

Lilischkis, S. (2011), *Policies in support of high-growth innovative SMEs*, INNO-Grips Policy Brief No. 2, European Commission, http://www.eban.org/wp-content/uploads/2013/08/INNO-Grips_PB2_High-growth_SMEs.pdf. [64]

Lu, Y., Z. Tao and L. Zhu (2017), "Identifying FDI spillovers", *Journal of International Economics*, Vol. 107, pp. 75-90, https://doi.org/10.1016/j.jinteco.2017.01.006. [96]

Marchese, M. et al. (2019), "Enhancing SME productivity: Policy highlights on the role of managerial skills, workforce skills and business linkages", *OECD SME and Entrepreneurship Papers*, No. 16, OECD Publishing, Paris, https://doi.org/10.1787/825bd8a8-en. [52]

Martin, S. and J. Scott (2000), "The nature of innovation market failure and the design of public support for private innovation", *Research Policy*, Vol. 29/4-5, pp. 437-447, https://doi.org/10.1016/s0048-7333(99)00084-0. [27]

Meissner, D. and S. Kergroach (2019), "Innovation policy mix: mapping and measurement", *Journal of Technology Transfer*, https://doi.org/10.1007/s10961-019-09767-4. [1]

Meyer, K. and E. Sinani (2009), "When and where does foreign direct investment generate positive spillovers? A meta-analysis", *Journal of International Business Studies*, Vol. 40/7, pp. 1075-1094, https://doi.org/10.1057/jibs.2008.111. [19]

Mistura, F. and C. Roulet (2019), "The determinants of Foreign Direct Investment: Do statutory restrictions matter?", *OECD Working Papers on International Investment*, No. 2019/01, OECD Publishing, Paris, https://doi.org/10.1787/641507ce-en. [17]

N'Ghauran, K. and C. Autant-Bernard (2020), "Effects of cluster policies on regional innovation networks: Evidence from France", https://halshs.archives-ouvertes.fr/halshs-02482565/document. [91]

OECD (2023), *A new knowledge infrastructure on SMEs and entrepreneurship*, https://www.oecd.org/cfe/datalake.htm (accessed on 24 January 2023). [66]

OECD (2023), *Framework for the Evaluation of SME and Entrepreneurship Policies and Programmes 2023*, OECD Studies on SMEs and Entrepreneurship, OECD Publishing, Paris, https://doi.org/10.1787/a4c818d1-en. [16]

OECD (2022), *FDI Qualities Policy Toolkit*, OECD Publishing, Paris, https://doi.org/10.1787/7ba74100-en. [93]

OECD (2022), *Financing Growth and Turning Data into Business: Helping SMEs Scale Up*, OECD Studies on SMEs and Entrepreneurship, OECD Publishing, Paris, https://doi.org/10.1787/81c738f0-en. [39]

OECD (2022), *Financing SMEs and Entrepreneurs 2022: An OECD Scoreboard*, OECD Publishing, Paris, https://doi.org/10.1787/e9073a0f-en. [46]

OECD (2022), *Recommendation of the Council on SME and Entrepreneurship Policy*, OECD/LEGAL/0473, https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0473. [61]

OECD (2022), *Strengthening FDI and SME Linkages in Portugal*, OECD Publishing, Paris, https://doi.org/10.1787/d718823d-en. [4]

OECD (2022), *Strengthening FDI and SME Linkages in the Slovak Republic*, OECD Publishing, Paris, https://doi.org/10.1787/972046f5-en. [3]

OECD (2021), "Enhancing the impact of Italy's start-up visa: What can be learnt from international practice?", *OECD Local Economic and Employment Development (LEED) Papers*, No. 2021/10, OECD Publishing, Paris, https://doi.org/10.1787/bd898bca-en. [103]

OECD (2021), *Industrial Policy for the Sustainable Development Goals: Increasing the Private Sector's Contribution*, OECD Publishing, Paris, https://doi.org/10.1787/2cad899f-en. [67]

OECD (2021), *OECD Investment Policy Reviews: Thailand*, OECD Investment Policy Reviews, OECD Publishing, Paris, https://doi.org/10.1787/c4eeee1c-en. [40]

OECD (2021), *OECD Science, Technology and Innovation Outlook 2021: Times of Crisis and Opportunity*, OECD Publishing, Paris, https://doi.org/10.1787/75f79015-en. [43]

OECD (2021), *OECD SME and Entrepreneurship Outlook 2021*, OECD Publishing, Paris, https://doi.org/10.1787/97a5bbfe-en. [6]

OECD (2021), *One year of SME and entrepreneurship policy responses to COVID-19: Lessons learned to "build back better", OECD Policy Responses to Coronavirus (COVID-19)*, https://read.oecd-ilibrary.org/view/?ref=1091_1091410-rxwx81cfwj&title=One-year-of-SME-and-entrepreneurship-policy-responses-to-COVID-19-Lessons-learned-to-build-back-better. [62]

OECD (2021), *The Digital Transformation of SMEs*, OECD Studies on SMEs and Entrepreneurship, OECD Publishing, Paris, https://doi.org/10.1787/bdb9256a-en. [37]

OECD (2021), *The SME test: taking SMEs and entrepreneurs into account when regulating*, http://www.oecd.org/gov/regulatory-policy/the-sme-test.pdf. [13]

OECD (2021), *Unlocking infrastructure investment: Innovative funding and financing in regions and cities*, OECD Publishing, Paris, https://doi.org/10.1787/9152902b-en. [60]

OECD (2020), *Financing SMEs and Entrepreneurs 2020: An OECD Scoreboard*, https://doi.org/10.1787/061fe03d-en. [49]

OECD (2020), *OECD Digital Economy Outlook 2020*, OECD Publishing, Paris, https://doi.org/10.1787/bb167041-en. [31]

OECD (2020), *OECD Employment Outlook 2020: Worker Security and the COVID-19 Crisis*, OECD Publishing, Paris, https://doi.org/10.1787/1686c758-en. [102]

OECD (2020), *Rural Well-being: Geography of Opportunities*, OECD Rural Studies, OECD Publishing, Paris, https://doi.org/10.1787/d25cef80-en. [82]

OECD (2020), *Start-ups, killer acquisitions and merger control – Note by Israel, 133rd OECD Competition Committee meeting, Directorate for Financial and Enterprise Affairs*, https://one.oecd.org/document/DAF/COMP/WD(2020)17/en/pdf. [106]

OECD (2019), *Business Development Services for SME Productivity Growth – International Experience and Implications for Local Economic Policy*. [9]

OECD (2019), *Making Decentralisation Work: A Handbook for Policy-Makers*, OECD Multi-level Governance Studies, OECD Publishing, Paris, https://doi.org/10.1787/g2g9faa7-en. [8]

OECD (2019), "Monitoring and evaluation of SME and entrepreneurship programmes", in *Strengthening SMEs and Entrepreneurship for Productivity and Inclusive Growth: OECD 2018 Ministerial Conference on SMEs*, OECD Publishing, Paris, https://doi.org/10.1787/7ac98c87-en. [14]

OECD (2019), *OECD Investment Policy Reviews: Southeast Asia*, https://www.oecd.org/daf/inv/investment-policy/Southeast-Asia-Investment-Policy-Review2019.pdf. [28]

OECD (2019), *OECD SME and Entrepreneurship Outlook 2019*, OECD Publishing, Paris, https://doi.org/10.1787/34907e9c-en. [34]

OECD (2018), *Centre Stage II: The Organisation and Functions of the Centre of Government in OECD countries*, https://www.oecd.org/gov/report-centre-stage-2.pdf. [5]

OECD (2018), *Enabling SMEs to scale up*, SME Ministerial Conference, 22-23 February 2018, https://www.oecd.org/cfe/smes/ministerial/documents/2018-SME-Ministerial-Conference-Plenary-Session-1.pdf. [97]

OECD (2018), *Improving the business environment for SMEs through effective regulation*, https://www.oecd.org/cfe/smes/ministerial/documents/2018-SME-Ministerial-Conference-Parallel-Session-1.pdf. [35]

OECD (2018), *Mapping of Investment Promotion Agencies in OECD Countries*, http://www.oecd.org/investment/Mapping-of-Investment-Promotion-Agencies-in-OECD-Countries.pdf. [10]

OECD (2017), *Multi-level Governance Reforms: Overview of OECD Country Experiences*, OECD Multi-level Governance Studies, OECD Publishing, Paris, https://doi.org/10.1787/9789264272866-en. [7]

OECD (2017), *OECD Digital Economy Outlook 2017*, OECD Publishing, Paris, https://doi.org/10.1787/9789264276284-en. [56]

OECD (2017), *The Next Production Revolution: Implications for Governments and Business*, OECD Publishing, Paris, https://doi.org/10.1787/9789264271036-en. [73]

OECD (2016), "Cluster policy and smart specialisation", in *OECD Science, Technology and Innovation Outlook 2016*, OECD Publishing, Paris, https://doi.org/10.1787/sti_in_outlook-2016-28-en. [83]

OECD (2016), "New industrial policies", in *OECD Science, Technology and Innovation Outlook 2016*, OECD Publishing, Paris, https://doi.org/10.1787/sti_in_outlook-2016-27-en. [68]

OECD (2015), *Fostering investment in infrastructure: Lessons learned from OECD Investment Policy Reviews*, https://www.oecd.org/daf/inv/investment-policy/Fostering-Investment-in-Infrastructure.pdf. [59]

OECD (2015), "Hybrid finance instruments for SMEs", in *New Approaches to SME and Entrepreneurship Financing: Broadening the Range of Instruments*, OECD Publishing, Paris, https://doi.org/10.1787/9789264240957-9-en. [50]

OECD (2015), *New Approaches to SME and Entrepreneurship Financing: Broadening the Range of Instruments*, OECD Publishing, Paris, https://doi.org/10.1787/9789264240957-en. [47]

OECD (2015), *Policy Framework for Investment, 2015 Edition*, OECD Publishing, Paris, https://doi.org/10.1787/9789264208667-en. [23]

OECD (2015), "Skills and Learning Strategies for Innovation in SMEs", Vol. internal document/Working Party on SMEs and Entrepreneurship, https://one.oecd.org/document/CFE/SME(2014)3/REV2/en/pdf (accessed on 31 May 2018). [51]

OECD (2013), *Commercialising Public Research: New Trends and Strategies*, OECD Publishing, Paris, https://doi.org/10.1787/9789264193321-en. [55]

OECD (2013), *Innovation-driven Growth in Regions: The Role of Smart Specialisation*, OECD Publishing, Paris, https://www.oecd.org/fr/sti/inno/smartspecialisation.htm. [78]

OECD (2013), "Knowledge Networks and Markets", *OECD Science, Technology and Industry Policy Papers*, No. 7, OECD Publishing, Paris, https://doi.org/10.1787/5k44wzw9q5zv-en. [53]

OECD (2007), *Competitive Regional Clusters: National Policy Approaches*, OECD Reviews of Regional Innovation, OECD Publishing, Paris, https://doi.org/10.1787/9789264031838-en. [84]

OECD (1999), *Business Incubation: International Case Studies*, OECD Publishing, Paris, https://doi.org/10.1787/9789264173781-en. [57]

OECD (forthcoming), *Improving government to business services through digitalisation: one stop shop platforms and single digital portals for SMEs and entrepreneurship*, OECD Publishing, Paris. [36]

OECD (2023 forthcoming), *OECD Recommendation on Regional Development Policy*. [76]

OECD (forthcoming), *SMEs and Entrepreneurship Outlook 2023*, OECD Publishing, Paris. [44]

OECD (forthcoming), *SMEs in the Era of Hybrid Retail. Evidence from an OECD D4SME survey.*, OECD Publishing, Paris. [65]

OECD (forthcoming), *Strengthening SME participation in supply chains: The Hungarian Supplier Development Programme*. [92]

OECD/European Commission (2019), "Policy brief on incubators and accelerators that support inclusive entrepreneurship", *OECD SME and Entrepreneurship Papers*, No. 13, OECD Publishing, Paris, https://doi.org/10.1787/d7d81c23-en. [58]

OECD-UNIDO (2019), *Integrating Southeast Asian SMEs in Global Value Chains: Enabling Linkages with Foreign Investors*, http://www.oecd.org/investment/Integrating-Southeast-Asian-SMEs-in-global-value-chains.pdf. [18]

Peters, B. (2018), "The challenge of policy coordination", *Policy Design and Practice*, Vol. 1/1, pp. 1-11, https://doi.org/10.1080/25741292.2018.1437946. [2]

Rossi, F. et al. (2020), *Public innovation intermediaries and digital co-creation. Research contribution to the OECD TIP Co-creation project*, https://stip.oecd.org/assets/TKKT/CaseStudies/49.pdf. [54]

Shapira, P., J. Youtie and L. Kay (2011), "Building capabilities for innovation in SMEs: A cross-country comparison of technology extension policies and programmes", Vol. 3, pp. 254-272. [41]

Stone, S., J. Messent and D. Flaig (2015), "Emerging Policy Issues: Localisation Barriers to Trade", *OECD Trade Policy Papers*, No. 180, OECD Publishing, Paris, https://doi.org/10.1787/5js1m6v5qd5j-en. [94]

Sunley, P. et al. (2022), "Industrial policies, strategy and the UK's Levelling Up agenda", *Local Economy: The Journal of the Local Economy Policy Unit*, Vol. 37/5, pp. 403-418, https://doi.org/10.1177/02690942221149007. [72]

Sztajerowska, M. and C. Volpe Martincus (2021), *Together or apart: investment promotion agencies' prioritisation and monitoring and evaluation for sustainable investment promotion*, https://www.oecd.org/daf/inv/investment-policy/Investment-Insights-Investment-Promotion-Prioritisation-OECD.pdf. [15]

Vaidyanathan, G. (2007), "Technology parks in a developing country: the case of India", *The Journal of Technology Transfer*, Vol. 33/3, pp. 285-299, https://doi.org/10.1007/s10961-007-9041-3. [87]

Vásquez-Urriago, Á., A. Barge-Gil and A. Modrego Rico (2016), "Science and Technology Parks and cooperation for innovation: Empirical evidence from Spain", *Research Policy*, Vol. 45/1, pp. 137-147, https://doi.org/10.1016/j.respol.2015.07.006. [85]

Warwick, K. (2013), "Beyond Industrial Policy: Emerging Issues and New Trends", *OECD Science, Technology and Industry Policy Papers*, No. 2, OECD Publishing, Paris, https://doi.org/10.1787/5k4869clw0xp-en. [69]

Wilkes, G. (2020), *How to Design a Successful Industrial Strategy. London, UK: Institute for Government*, https://www.instituteforgovernment.org.uk/publications/industrial-strategy (accessed on 29 April 2021). [70]

Part II EU country approaches to FDI-SME policy: Lessons from a policy mapping

3 Policy mapping methodology

The policy mapping identifies institutional arrangements and policy practices that can strengthen FDI-SME linkages and increase the potential of productivity and innovation spillovers on local economies across the 27 EU Member States. The mapping helped refine the conceptual framework and assessment tools that are presented in Part I of this report. The data collected have helped develop typologies of governance frameworks and policy instruments, with a view to informing national and subnational governments on the policy options available and identifying possible gaps in their own country.

Introduction

Small and medium-sized enterprises (SMEs) and their innovation capacities, the availability and capabilities of local suppliers, and the existence of dynamic entrepreneurial ecosystems are important determinants of foreign direct investment (FDI) location decisions, and the opportunities international investment can bring to local economies. In turn, FDI can serve as a conduit for domestic SMEs to expand on international markets and benefit from the knowledge, technology and innovation spillovers that take place in global value chains (GVCs) (OECD, 2019[1]) (OECD, 2021[2]). However, the opportunities and spillovers are not automatic and depend on a complex mix of economic, market and firm-specific factors that interact and cannot be considered separately.

Governments at national and subnational levels can play a key role in strengthening linkages between FDI and SMEs and improving the scope and quality of productivity and innovation spillovers from FDI to the local economy. Public action towards these objectives – hereinafter referred to as FDI-SME policies (Box 3.1) – can take many forms as it addresses deficiencies in different diffusion channels (i.e. value chain linkages, strategic partnerships, labour mobility, and competition effects), in different enabling conditions (e.g. FDI characteristics, or the absorptive capacity of local SMEs) and different contexts (e.g. structural, economic and geographical characteristics of the country or region) (Chapter 1). In fact, a policy initiative can act upon several channels and/or enabling conditions at the same time, reflecting the multitude and complexity of policy goals pursued, as well as the many possible pathways. FDI-SME policies also cut across four policy domains, i.e. investment policy, SME and entrepreneurship policy, innovation policy and regional development policy (Part 1, Figure 1.1). This diversity also reflects the fact that SME and entrepreneurship performance is driven by a multidimensional range of business conditions (OECD, 2019[3]) (OECD, 2021[2]).

Looking at FDI-SME policies in an adequate and coherent manner requires a policy mix approach, i.e. to refer to the set of policy rationales, arrangements and instruments implemented to deliver one or several policy goals, as well as the interactions that can take place between these elements (Meissner and Kergroach, 2019[4]). The main challenge for governments is to ensure that the components of the FDI-SME policy mix are consistent with the country's economic structure, policy priorities and economic geography. This approach is also aligned with the OECD Recommendation on SME and Entrepreneurship policy for developing frameworks and tools that could improve the effectiveness of SME&E policies, through coherence and synergy across varied policy areas and actors (OECD, 2022[5]).

This chapter presents the methodology used to map the relevant institutions and policies that support FDI-SME linkages and spillovers in the 27 EU Member States. The purpose of the mapping is to provide a comprehensive inventory of government action across the EU area, compare national approaches and institutions in different country contexts, and inform policy making in the field. The mapping complements existing research on FDI-SME policies, present good practices in their design and implementation, and highlight key considerations for national and subnational governments that seek to strengthen the performance of FDI-SME ecosystems. Insights from the mapping are described in Chapters 4 and 5.

Box 3.1. Key terms and definitions

The term **FDI-SME policies** refers to policies that aim to strengthen the linkages between FDI and domestic SMEs and create an enabling environment for the diffusion of knowledge and technology spillovers. By pursuing these goals, FDI-SME policies ultimately aim to maximise the positive impact of FDI on the productivity and innovation of domestic SMEs.

The basic premise underlying the existence of **FDI-SME spillovers** is that foreign firms tend to be more knowledge- and technology-intensive than domestic SMEs. Therefore, intended or unintended benefits can spill over to the local economy. These may arise from the supply chain relationships of foreign firms, their market interactions (e.g. competition, imitation, agglomeration effects) or the mobility of workers towards local firms. FDI-SME spillovers are not always positive. For instance, foreign firms can generate negative spillovers through unsustainable or irresponsible practices of their supply chains.

FDI-SME linkages refer to the multiple types of connections and interactions that may occur between FDI and domestic SMEs, and which provide SMEs with opportunities to get exposed to FDI activities and capture valuable knowledge from them. FDI-SME linkages may also be regarded as "diffusion channels" of knowledge and technology spillovers and mainly consist of the supply chain relationships between FDI and SMEs (e.g. their buyer/supplier linkages); the different types of formal partnerships that they can establish (e.g. joint ventures, R&D&I collaborations); their connections through labour flows (e.g. staff mobility between FDI and domestic SMEs); and their market interactions (e.g. competition, imitation, agglomeration effects).

Besides acting upon diffusion channels themselves, FDI-SME policies may also seek to improve the broader enabling conditions of spillovers, e.g. increasing inflows of knowledge-intensive FDI, improving the absorptive capacity of domestic SMEs, and strengthening clusters and agglomeration economies. FDI-SME policies may thereby affect the quality of the broader **FDI-SME ecosystem**, defined as the set of multiple actors and resources that contribute to and are necessary for maximizing the benefits of FDI to domestic SMEs at national and regional level.

Source: Authors' elaboration.

Sources and methodology

The research work started with a mapping of the institutional environments (e.g. ministries, implementing agencies, subnational entities) and governance frameworks that shape FDI-SME strategic policy objectives, based on keywords, concept search and text analysis. Identifying the relevant national and subnational institutions and collecting information on their characteristics and coordination mechanisms allowed to classify EU Member States on the basis of the complexity of their institutional environment and understand the roles and responsibilities of different institutions. Subsequently, the relevant policy initiatives that these institutions administrate (alone or jointly with other institutions) were identified on the basis of the same concepts and further text analysis.

Policy information on FDI-SME policies and institutions was drawn from official sources (e.g. national strategies, action plans, websites of relevant ministries and implementing agencies), as well as OECD and EU reports and publications. Information was collected at national and institutional levels through desk research. The collected information was validated and complemented by the relevant institutions in the EU Member States through an online survey that was pre-filled with the information gathered (total of 108 national institutions, Annex 4.A.). Blank survey questionnaires were also sent to 67 subnational institutions

to collect information on FDI-SME policies implemented by regional and local authorities. The survey helped to better identify coordination arrangements across policy domains (investment, SME, innovation, regional development) and tiers of government (national and subnational). The survey also provided additional information on policy initiatives that was not available online (e.g., budget, number of beneficiaries, perceived impacts, COVID-19 impact). Pre-filling information allowed to facilitate the data collection that was conducted in 2021-2022, during the COVID-19 crisis.

The research work builds on recent efforts to better understand the institutional and policy landscape of FDI and SME policies through the OECD Surveys of Investment Promotion Agencies (Box 3.2), the OECD SME and Entrepreneurship Outlook (OECD, 2019[3]), and the EC/OECD project on Unleashing SME Potential to Scale up, which proposes a cross-country analysis of national institutions and policies in support of SME scale up and growth, through a policy mapping approach (Box 3.3) (OECD, 2022[6]).

The policy mapping builds on similar exercises undertaken by the OECD since 2011 for the OECD-EU STIP Compass and the international database of Science Technology and Innovation Policies (EC/OECD, 2016[10]; EC/OECD, 2022[11]; OECD, 2018[7]). The analytical framework and methodology for the collection and analysis of policy information follows the approach proposed by Kergroach (2017[12]) and Meissner and Kergroach (Meissner and Kergroach, 2019[4]) to monitor and benchmark the innovation policy mix.

The collected data and policy information contributed to the development of the OECD FDI Qualities Policy Toolkit (OECD, 2022[13]), which reviews policy practices to improve the impacts of FDI on sustainable development; and to the development of the OECD Data Lake on SMEs and Entrepreneurship, which allows to monitor SME&E performance and business conditions by offering a one-stop-shop access to relevant information, data and policy guidance (OECD, 2022[14]). Going forward, the ambition is to build towards a broad-based rollout of policy indicators and a harmonised policy database across OECD countries and regions that increasingly leverage the breadth of information that is collected at country/region levels and throughout thematic projects.

Box 3.2. The OECD Surveys of Investment Promotion Agencies

OECD-IDB Survey on Investment Promotion Agencies

The OECD and Inter-American Development Bank (IDB) jointly designed a comprehensive survey providing a mapping of current investment promotion practices of IPAs. The objective of the survey is to identify key trends across agencies and provide comparisons across regions. It fosters peer learning among IPA practitioners and policymakers, allowing them to better understand what drives differences and similarities across agencies. As of today, the survey of IPAs covers around 70 economies, including 32 from the OECD, 19 from Latin America and the Caribbean (LAC), 8 from the Middle East and North Africa (MENA), 10 from countries of Eastern Europe, the South Caucasus and Central Asia (Eurasia), and 2 from Southeast Asia. The survey is divided into nine parts, including: (1) Basic profile of IPAs; (2) Budget; (3) Personnel; (4) Offices (home and abroad); (5) Activities; (6) Prioritisation strategy; (7) Monitoring and evaluation; (8) Institutional interactions; and (9) IPA perceptions on FDI.

OECD Survey on Prioritisation and Monitoring & Evaluation of Investment Promotion Agencies

IPAs continuously reassess their priorities to maximise their effectiveness in attracting investment and to ensure its positive effects on the local economies. As part of these efforts, the contribution towards achieving the SDGs and attracting "high-quality" investments have been increasingly on the IPAs' agendas, especially in the aftermath of COVID-19. The OECD designed a survey to collect systematic information on current prioritisation and M&E strategies and tools to provide an up-to-date view of these efforts and provide a lens for building on these efforts going forward.

The survey was shared with IPA representatives from OECD countries in the form of an online questionnaire, which was completed between April and June 2021. The dataset includes national IPAs from the following 32 countries: Australia, Austria, Canada, Chile, Colombia, Costa Rica, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Latvia, Lithuania, Luxembourg, Japan, Mexico, the Netherlands, New Zealand, Poland, Portugal, Slovenia, Spain, Sweden, Switzerland, Turkey, and the United Kingdom. The data and information gathered through this survey benefitted from the discussions and comments from IPAs obtained at a dedicated session at the annual OECD IPA Network meeting in October 2021.

OECD Survey on Investment Promotion and Regional Development

The OECD IPA Network – a platform that brings together senior investment promotion practitioners to facilitate peer-learning – is exploring how governments can promote, facilitate and retain FDI in support of regional development and what is the role of IPAs. For this purpose, the OECD designed a survey to collect systematic information on investment promotion and regional development. It focuses on the role of national IPAs, their relationships with subnational bodies and their main objectives and priorities with regards to attracting FDI in support of regional development. The architecture for investment promotion and facilitation varies greatly from one country to the other. It can be multi-layered and involve several types of subnational entities (e.g. subnational IPAs, subnational economic development organisations, subnational authorities, subnational offices of national IPAs). The survey was shared with IPA representatives from OECD countries in the form of an online questionnaire, which was completed between April and June 2022 by 36 OECD countries. The results of the survey were presented at the 7th OECD IPA Network meeting in October 2022.

Source: (OECD, 2018[7]; OECD, 2021[8]; OECD, 2022[9])

Box 3.3. EC/OECD mapping of SME scale up and growth policy mixes

The EC/OECD multi-year project on Unleashing SME Potential to Scale Up analyses in a cross-cutting approach national how the 38 OECD countries create the conditions and incentives for SMEs to scale up. The mapping seeks to explore what shape national scaling up policies take, as well as to identify typologies of institutions involved, while paying attention to synergies and trade-offs across policy measures and coordination and governance mechanisms. The cross-country analysis also aims to identify possible gaps in public intervention. The first phase (2020-22) explored two policy areas where government interventions can be conducive to SME growth, namely financing growth and turning data into business.

Scale up policy is at the intersection of a large number of policy domains that may act upon the drivers of SME performance, i.e. innovation, research and development (R&D), digitalisation, entrepreneurship, skills development, intellectual property rights, trade, investment promotion, procurement or cluster policies etc. The scope of the scale up policy analysis is intentionally broad, so as to capture the "ecosystem of policies" which can alter the diverse conditions of SME transformations and address the diverse needs of diverse populations of scalers. The policy work goes therefore beyond venture capital for financing SME growth, or beyond the use of big data analytics for improving SME data governance. In the context of this exercise, specific attention has been placed on SME-targeted policies, including specific sub-segments of the SME population.

Source: (OECD, 2022[15]) ; (OECD, 2022[15]).

Identifying typologies of governance frameworks

The institutional framework that governs policy formulation and implementation in the FDI-SME policy area differs from country to country. For example, some countries may have a more centralised policy system, while others may give more power and responsibility to subnational levels of government. Similarly, some countries have a single government agency in charge of the implementation of multiple aspects of FDI-SME policies, whereas in others policy responsibilities are distributed across a large number of government actors. The more institutions are involved at the intersection of investment promotion, SME development, innovation and regional development, the more complex their governance systems become. Regardless of the institutional set-up, it is important that different institutions and levels of government have clear responsibilities and that their actions are aligned through appropriate reporting channels and robust coordination mechanisms.

The mapping of institutional arrangements across EU Member States suggests the following typologies of governance frameworks:

- *Highly integrated settings*, which target the entire FDI-SME ecosystem through consolidated "mega-agencies" that report to a single ministry and provide comprehensive and cross-disciplinary business support packages, combining investment promotion and facilitation, innovation funding, skills training, technical assistance and advice for SMEs to grow internationally;
- *Integrated settings*, which involve multiple specialised government agencies that operate at the intersection of investment promotion, SME development, innovation and regional development and report to the same line ministry;
- *Partially integrated settings*, in which the IPA and the SME and entrepreneurship agency report to the same ministry – usually the Ministry of Economy –, while responsibilities for innovation

promotion and regional development are split between other ministries (e.g. Ministries of Science and Education, Ministries of Regional Development).

- *Fragmented settings*, which are characterised by the multiplicity of government actors involved in the design and implementation of FDI-SME policies as well as the presence of several highly specialised agencies with a narrow mandate that report to different line ministries.

The complexity of these institutional environments has implications on how much coordination effort is required and what type of coordination mechanisms should be deployed to ensure policy coherence. It also affects how public institutions interact with each other, the type of strategic relations they form, and ultimately the way FDI-SME policies are designed and implemented. Chapter 4 provides further insights into the characteristics of institutional settings in the EU area.

Identifying typologies of policy instruments

The mapping reveals that FDI-SME policies involve many policy domains that go beyond those that are conducive to investment and SMEs in general and, in turn, that policy responses do not fit neatly within any single governmental department or agency. It provides a compendium of good practices and shows that the majority of the identified policies do not solely target the diffusion channels through which productivity spillovers take place, but also the broader enabling environment. The way policies affect the potential for FDI-SME linkages and spillovers can vary, and it is therefore crucial that policymakers consider these differentiated impacts.

Governments have a diverse set of policy instruments at their disposal to support FDI-SME ecosystems. A policy initiative can make simultaneous use or various policy instruments, using them in complementary and mutually reinforcing ways to achieve the desired strategic objective. Based on the type of instrument used, policies can be classified into:

- Network and collaboration platforms and infrastructure, which refers to platforms, facilities and infrastructures that enable spatial and network-related knowledge diffusion.
- Technical assistance, information and facilitation services, which aim to encourage the uptake of knowledge and facilitate interactions between foreign and domestic firms (e.g. matchmaking services and networking events).
- Financial support schemes, in direct (e.g. grants, loans) or indirect forms (e.g. tax relief) to encourage (or discourage) certain types of business activities (e.g. investment tax incentives, R&D vouchers, wage subsidies for skilled workers).
- Regulatory measures, which define the framework within which foreign and domestic firms operate and often use legal rules to encourage or discourage different types of business activities (e.g. lighter administrative and licensing regimes for certain types of investments, local content requirements for foreign firms and labour mobility incentives).
- Governance frameworks, such as national strategies and action plans that lay out policy priorities and define the framework within which policy action on FDI, SMEs and innovation is organised. Some guiding instruments have co-ordination functions and ensure overarching policy governance (e.g. national strategies or action plans) (OECD, 2022[16]).

Table 3.1 provides an overview of the main FDI-SME policy instruments, illustrated by selected examples. Based on this typology of policy instruments, Chapter 5 presents key findings on the scope, strategic objectives, and design features of the national policy mix across the 27 EU Member States.

Table 3.1. Policy instruments to strengthen the performance of FDI-SME ecosystems

Instrument typology	Instrument examples
Network and collaboration platforms and infrastructure	Special Economic Zones, technology centres and science parks, industrial parks, cluster policies
Technical assistance, information & facilitation services	Local supplier databases, business diagnostic tools, FDI site selection services, work placement or employee exchange programmes, supplier development programmes, business support centres, knowledge exchange and demonstration events, matchmaking services, platforms and events, business consulting and skills upgrading programmes
Financial support schemes	Financial incentives for intellectual property protection, financial incentives for B2B and S2B partnerships, wage subsidies for skilled workers, tax incentives for productivity-enhancing investment, tax incentives for R&D and innovation activities, equity financing, grants/loans for business consulting and training services, grants/loans for technology acquisition and digital transformation, grants/loans for internationalisation activities, grants/loans for R&D and innovation activities, innovation and internationalisation vouchers, other financial support schemes
Regulatory measures	Residence-by-investment schemes, labour mobility regulation and incentives, regulatory and administrative easing for FDI Special investment status, other regulatory standards, and incentives
Governance frameworks	Strategies/action plans on SMEs/entrepreneurship, strategies/action plans on innovation, strategies/action plans on regional development, strategies/action plans on FDI/internationalisation, other strategies with FDI & SME provisions

Note: This typology of policy instruments reflects the framework developed in the OECD FDI Qualities Policy Toolkit (OECD, 2022[13]) and the OECD SME and Entrepreneurship Outlook (OECD, 2019[3]) (OECD, 2021[2]). It was used in the country assessments of FDI-SMEs linkages in Portugal (OECD, 2022[17]) and the Slovak Republic (OECD, 2022[16]). It will also be used in the SME&E data lake knowledge infrastructure. This typology is aligned with converging classifications of policy instruments formerly used in environmental and innovation policy literature (Meissner and Kergroach, 2019[4]) (Rogge and Reichardt, 2016[18]; Edler et al., 2013[19]; Borras and Edquist, 2013[20]; Flanagan, Uyarra and Laranja, 2011[21]; OECD, 2007[22]; OECD, 2010[23]; Howlett, 2005[24]; Smits and Kuhlmann, 2004[25]; Vedung, 1998[26]).
Source: OECD elaboration based on analytical framework and literature review.

References

Bemelmans-Videc, M., R. Rist and E. Vedung (eds.) (1998), *Policy instruments: Typologies and theories.*, Transaction Publishers, New Brunswick. [26]

Borras, S. and C. Edquist (2013), "the choice of innovation policy instruments", *Innovation studies 2013/4. Lund University, Centre for Innovation, Research and Competences in the Learning Economy (CIRCLE)*. [20]

Crescenzi, R., A. Dyevre and F. Neffke (2018), *Regional innovation: How Foreign Firms allow New Places to Joint the Global Innovation Contest*. [28]

EC/OECD (2022), *STIP Compass: International Database on Science Technology and Innovation Policies*, https://stip.oecd.org/stip.html. [11]

EC/OECD (2016), *International Database on STI Policies*, https://www.innovationpolicyplatform.org/ecoecd-stipdatabase. [10]

Edler, J. et al. (2013), "Innovation policy mix and instrument interaction: A review.", *National Endowment for Science, Technology and the Arts (NESTA) working paper, 13-20 November*, http://www.nesta.org.uk/wp13-20. [19]

Eliadis, P., M. Hill and M. Howlett (eds.) (2005), *What is a policy instrument? Policy tools, policy mixes and policy implementation styles*, McGill-Queens University Press, Montreal. [24]

Eurostat (2022), *Statistical regions in the European Union and partner countries, 2022 edition*, Luxembourg: Publications Office of the European Union, https://doi.org/10.2785/321792. [27]

Flanagan, K., E. Uyarra and M. Laranja (2011), "Reconceptualising the 'policy mix' for innovation", *Research Policy*, Vol. 40/5, pp. 702-713. [21]

Kergroach, S. (2017), "Innovation policy mix: Conceptual and operational approach in the OECD STI Outlook 2012–2014–2016", *Eu-SPRI Forum & AIT Austrian Institute of Technology (Eds.), Book of abstracts* Paper presented at the annual conference of the Eu-SPRI Forum: The future of STI—The future of STI policy, Tech Gate Vienna, 7–9 June (pp. 1–578)., http://euspri-vienna2017.org/abstracts/. [12]

Meissner, D. and S. Kergroach (2019), "Innovation policy mix: mapping and measurement", *Journal of Technology Transfer*, Vol. 46/1, pp. 197-222, https://doi.org/10.1007/s10961-019-09767-4. [4]

OECD (2022), *FDI Qualities Policy Toolkit*, OECD Publishing, Paris, https://doi.org/10.1787/7ba74100-en. [13]

OECD (2022), *Financing Growth and Turning Data into Business: Helping SMEs Scale Up*, OECD Studies on SMEs and Entrepreneurship, OECD Publishing, Paris, https://doi.org/10.1787/81c738f0-en. [6]

OECD (2022), *OECD Data Lake on SMEs and Entrepreneurship*, https://www.oecd.org/cfe/datalake.htm. [14]

OECD (2022), *OECD Recommendation on SMEs and Entrepreneurship Policy*, https://www.oecd.org/cfe/smes/oecdrecommendationonsmeandentrepreneurshippolicy/. [5]

OECD (2022), *Strengthening FDI and SME Linkages in Portugal*, OECD Publishing, Paris, https://doi.org/10.1787/d718823d-en. [17]

OECD (2022), *Strengthening FDI and SME Linkages in the Slovak Republic*, OECD Publishing, Paris, https://doi.org/10.1787/972046f5-en. [16]

OECD (2022), "The geography of foreign investment in OECD member countries: How investment promotion agencies support regional development", *OECD Business and Finance Policy Papers*, No. 20, OECD Publishing, Paris, https://doi.org/10.1787/1f293a25-en. [9]

OECD (2022), *Unleashing SME potential to scale up*, https://www.oecd.org/cfe/smes/sme-scale-up.htm. [15]

OECD (2021), *SMEs and Entrepreneurship Outlook 2021*, https://doi.org/10.1787/97a5bbfe-en. [2]

OECD (2021), *Together or apart: investment promotion agencies' prioritisation and monitoring and evaluation for sustainable investment promotion*, http://www.oecd.org/daf/inv/investment-policy/Investment-Insights-Investment-Promotion-Prioritisation-OECD.pdf. [8]

OECD (2019), *FDI Qualities Indicators: Measuring the sustainable development impacts of investment*, http://www.oecd.org/fr/investissement/fdi-qualities-indicators.htm. [1]

OECD (2019), *SMEs and Entrepreneurship Outlook 2019*, https://doi.org/10.1787/34907e9c-en. [3]

OECD (2018), *Mapping of Investment Promotion Agencies in OECD Countries*, http://www.oecd.org/investment/Mapping-of-Investment-Promotion-Agencies-in-OECD-Countries.pdf. [7]

OECD (2010), "The Innovation Policy Mix", in *OECD Science, Technology and Industry Outlook 2010*, OECD Publishing, Paris, https://doi.org/10.1787/sti_outlook-2010-48-en. [23]

OECD (2007), *Instrument Mixes for Environmental Policy*, OECD Publishing, Paris. [22]

Rogge, K. and K. Reichardt (2016), "Polici mixes for sustainability transitions: An extended concept and Framework for analysis", *Research policy*, pp. 1620-1635. [18]

Smits, R. and S. Kuhlmann (2004), "The rise of systemic instruments in innovation policy", *International Journal of Foresight and Innovation Policy*, Vol. 1/1/2, p. 4. [25]

Annex 3.A. Survey questionnaire on FDI-SME institutions and policies

1. *Institutional characteristics*

1.1. Name of institution: _____

1.2. Location of headquarters: _____

1.3. The institution reports to: _____

1.4. Core activities of the institution: (multiple answers possible)

- Policy design
- Policy implementation
- Policy evaluation
- Other [please specify]: _____

1.5. Among the following, what is the institution's core function(s):

- Investment promotion agency
- SME and entrepreneurship agency
- Innovation agency
- Regional development agency
- Other

1.6. Core mandates of the institution in terms of policy domains: (multiple answers possible)

- Investment promotion
- SMEs and entrepreneurship
- Innovation promotion
- Regional development
- Other [please specify]: _____

1.7. Annual budget (in millions of national currency, current prices):

- 2020: _____
- 2019: _____
- 2018: _____

1.8. Legal form of the institution:

- Autonomous government agency (national)
- Public-private agency
- Department in national ministry
- Autonomous subnational agency
- Department in regional / local government
- Public financial institution
- Other [please specify]: _____

1.9. The institution operates at:

- National level only
- Subnational level only
- Both national and subnational level

1.10. The institution operates in the following regions: (multiple answers possible) (Please refer to regions as defined by the latest edition of Eurostat's Nomenclature of Territorial Units for Statistics (NUTS) (Eurostat, 2022[27]))[1]

- Region name A
- Region name B
- Etc.

1.11. The institution has:

- A central national office and no subnational office
- Own subnational offices [please specify how many and where ____]
- Shared subnational offices with other national or subnational institution(s) [please specify how many and where ____]

1.12 [Applies to institutions with shared subnational offices] Please specify the name of the institution(s) with which you share a subnational office: _____

2. *Coordination with other institutions*

2.1. Does the institution coordinate its operations, activities and policies with other government institutions?

- Yes
- No

2.2. [Applies to institutions which reply "Yes" in 2.1] Coordination takes place across which policy domains?

- FDI / investment policy
- SME policy
- Innovation policy
- Regional / local development policy

2.3. [Applies to institutions which reply "Yes" in 2.1] Coordination takes place across which tiers of government?

- With institutions at national level
- With institutions at subnational level
- With institutions at both national and subnational level

2.4. [Applies to institutions which reply "Yes" in 2.1] Please specify the institutions with which you coordinate your operations, activities and policies:

- Centre of Government (e.g. General-Secretariat of the Government, Cabinet Office, Department of the Prime Minister, Chancellery, Office of the President)
- Ministries
- Regional and local administrations
- Agencies in charge of FDI / investment policy
- Agencies in charge of SME policy
- Agencies in charge of innovation policy
- Agencies in charge of regional / local development policy
- Other [please specify___]

2.5. [Applies to institutions which reply "Yes" in 2.1] Coordination with other institutions is formalised and ensured by (multiple answers possible):

- Contracts and MoUs
- Laws/regulations
- Inter-agency joint programming
- Specific programme rules
- Inter-ministerial committees and councils
- Exchange of experts and civil servants
- Informal channels of communication
- Other mechanisms of coordination [please specify ___]

2.6. [Applies to institutions which reply "Yes" in 2.1] Please briefly describe and provide examples of how you coordinate your activities with other institutions in your country.

_____

_____

_____

3. Covid-19 response

3.1. Has the institution adjusted its priorities and activities to respond to the Covid-19 crisis? If yes, please specify the type of changes.

- No, there has been no real change in priorities and activities
- Yes, there have been changes in priorities and activities, including:
  - Changes in the institution's strategic objectives
  - Changes in the institution's budget
  - Changes in the institution's target groups
  - Changes in the institution's main policy workstreams
  - Changes in the geographic area of policy implementation
  - Changes in the timeframe of policy implementation
  - Other [please specify]: _____

3.2. [Applies to institutions which reply "Yes" in 3.1] Please briefly describe and provide examples of the main changes made to respond to the Covid-19 crisis.

_____

_____

_____

4. Policies supporting FDI diffusion channels for SME productivity and innovation

4.1. Does your institution design or implement policies with any of the objectives mentioned below (multiple answers possible)? If yes, please select the relevant objectives.

- No, my institution does not design or implement policies with the objectives mentioned below
- Yes, my institution designs and/or implements policies with the following objectives (multiple answers possible):
  - Promote and facilitate value chain linkages between foreign and domestic firms
  - Promote and facilitate strategic partnerships between foreign and domestic firms
  - Encourage labour mobility from foreign firms to the domestic entrepreneurial ecosystem
  - Create market conditions for fair competition and knowledge exchange between foreign and domestic firms
  - Attract and facilitate productivity-enhancing FDI
  - Strengthen the innovation and technological capabilities of domestic SMEs
  - Promote agglomeration and industrial clustering

[If the institution replies "No" in 4.1, the survey ends]

4.2. [Applies to institutions which reply "Yes" in 4.1] Please list the names of all the policy initiatives administered by your institution that contribute to these objectives:

- Name of policy initiative 1
- Name of policy initiative 2
- ….

4.3. [Applies to institutions which reply "Yes" in 4.1] If your institution has recently produced studies or reports on country-level and regional statistics regarding FDI trends, SME performance and innovation, please list them below and provide a weblink.

_____

_____

_____

[The remaining questions appear separately for each of the policy initiatives listed in Question 4.2]

5. Description of policy initiatives

5.1. Which of the objectives mentioned below can be associated with Policy X? (please select no more than 3 objectives)

- Promote and facilitate value chain linkages between foreign and domestic firms
- Promote and facilitate strategic partnerships between foreign and domestic firms
- Encourage labour mobility from foreign firms to the domestic entrepreneurial ecosystem
- Create market conditions for fair competition and knowledge exchange between foreign and domestic firms
- Attract and facilitate productivity-enhancing FDI
- Strengthen the innovation and technological capabilities of domestic SMEs
- Promote agglomeration and industrial clustering

5.2. Please briefly describe Policy X and provide a weblink if available:

_____

_____

_____

5.3. Does Policy X specifically target SMEs or large firms? (multiple answers possible)

- SMEs only
- Large firms only
- All firms equally
- All firms, but SMEs receive preferential treatment [please specify_____]
- Other non-corporate entities [please specify _____]

5.4. Does Policy X specifically target domestic or foreign firms?

- Domestic firms
- Foreign firms
- All firms (both domestic and foreign)

5.5. Does Policy X target specific geographic areas in your country?

- Yes, it targets specific geographic areas only [please specify_____]
- No, but certain geographic areas receive preferential treatment [please specify_____]
- No, it applies equally to all geographic areas

5.6. What sectors does Policy X target?

- All sectors
- All sectors except of certain activities [please specify____]
- Certain sectors only [please specify____]

5.7. Does Policy X target specific value chain activities? (multiple answers possible)

- Pre-production services (e.g. R&D, concept development, design, patents)
- Low- and medium-technology manufacturing (e.g. production of simple, relatively unsophisticated goods)
- High-technology manufacturing (e.g. production of highly specialised, technologically sophisticated goods)
- Post-production services (e.g. marketing, sales, logistics, brand management, distribution and customer services)
- No particular value chain activity

5.8. How would you best describe Policy X using the categories below?

Governance frameworks

- Strategies/action plans on SMEs/entrepreneurship
- Strategies/action plans on innovation
- Strategies/action plans on regional development
- Strategies/action plans on FDI/internationalisation
- Other strategies with FDI & SME provisions

Regulatory measures

- Residence-by-investment schemes
- Labour mobility regulation and incentives
- Regulatory and administrative easing for FDI
- Special investment status

Financial support schemes

- Financial incentives for intellectual property protection
- Grants/loans for business consulting and training services
- Wage subsidies for skilled workers
- Tax incentives for productivity-enhancing investment
- Equity financing
- Tax incentives for R&D and innovation activities
- Grants/loans for technology acquisition and digital

Technical assistance, information and facilitation services

- Local supplier databases
- Business diagnostic tools
- FDI site selection services
- Work placement / employee exchange programmes
- Supplier development programmes
- Business support centers
- Knowledge exchange and demonstration events

- Matchmaking services, platforms and events
- Business consulting and skills upgrading programmes

Network and collaboration platforms and infrastructure

- Special Economic Zones
- Technology centres and science parks
- Industrial parks
- Cluster policies

5.9. Policy X is being/has been implemented:
- For a limited period of time: from _____ to _____
- Unlimited duration (since when: _____)

5.10. How many firms or individuals have benefited from Policy X?
- 2020: _____
- 2019: _____
- 2018: _____

5.11. Annual budget allocated for the implementation of Policy X (in millions of national currency):
- 2020: _____
- 2019: _____
- 2018: _____

5.12. Is policy X implemented in partnership with other institution(s)?
- Yes [please specify the partner institution(s): _____]
- No

5.13. Has Policy X ever been evaluated by your or other institutions?
- Yes [please provide web link to evaluation ____ or send it to the OECD as attachment]
- No

5.14. From your own perspective, what is the level of success of Policy X?
- Low
- Medium
- High

5.15. What could be improved in the design and/or implementation of Policy X?

_____

_____

_____

5.16. How has the Covid-19 crisis impacted Policy X?
- Introduced as a response to the Covid-19 crisis
- Cancelled due to the Covid-19 crisis
- Adjusted due to the Covid-19 crisis
- No impact

5.17. [Applies to institutions which reply "Adjusted" in 5.19] Which of the following aspects changed? (multiple answers possible)

- Objectives
- Sectoral or value chain focus
- Target group
- Budget
- Geographic area of implementation
- Timeframe of implementation
- Other [please specify _____]

5.18. [Applies to institutions which reply "Objectives" in 5.20] What are the new objectives of Policy X in response to the Covid-19 crisis?

_____

_____

_____

5.19. [Applies to institutions which reply "Sectoral or value chain focus" in 5.20] What are the new sectors or value chains targeted by Policy X in response to the Covid-19 crisis?

_____

_____

_____

5.20. [Applies to institutions which reply "Target group" in 5.20] What are the new target groups of Policy X in response to the Covid-19 crisis?

_____

_____

_____

5.21. [Applies to institutions which reply "Budget" in 5.20] What changes were made to the budget of Policy X in response to the Covid-19 crisis?

_____

_____

_____

5.22. [Applies to institutions which reply "Geographic area of implementation" in 5.20] What changes were made to the geographic areas targeted by Policy X in response to the Covid-19 crisis?

_____

_____

_____

5.23. [Applies to institutions which reply "Timeframe of implementation" in 5.20] What changes were made to the implementation timeframe of Policy X in response to the Covid-19 crisis?

_____

_____

_____

5.24. [Applies to institutions which reply "Other" in 5.20] What other changes were made to the design and/or implementation of Policy X in response to the Covid-19 crisis?

_____

_____

_____

Note

[1] For the regional decomposition, the approach adopted by Crescenzi, Dyevre and Neffke (2018[28]) is used.

4 The institutional environment and governance of FDI-SME policies

This chapter provides an overview of the institutional environment that governs FDI-SME policies across the 27 EU Member States, including the organisational structure, role and responsibilities of the various public institutions. It presents a typology of governance frameworks and sheds light on policy implementation, inter-institutional coordination and policy evaluation, which are essential elements of a conducive institutional environment.

Introduction

Strengthening FDI-SME linkages and spillovers requires policy action to be taken across different institutions operating at the intersection of investment, SME and entrepreneurship, innovation and regional development policy. Governance arrangements across these four policy domains vary greatly across EU Member States, and with them the type of government actors involved in policy design and implementation.

This chapter presents the findings of the EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages, which was addressed to relevant government agencies operating in the 27 EU Member States (see Chapter 3 for methodological details and Annex 4.A for the list of institutions). The survey allowed to map 110 implementing agencies and 24 line ministries across the EU area, and to examine the role, responsibilities and mandates assigned to them as well as their policy coordination mechanisms and monitoring and evaluation practices. Based on the information collected, the chapter offers an overview of the institutional frameworks in place in EU countries and proposes four stylised models of governance of FDI-SME policies taking into account the institutional complexity, ease of policy coordination and mode of governance of specific policy areas.

The institutional framework for FDI-SME policies in the EU area

The EU policy framework complements and supports national initiatives for investment promotion and SME development

In the EU area, competences over SME and entrepreneurship policy are shared between the EU and Member States. The Treaty of Lisbon, signed in 2007, stresses the importance of SMEs for creating a competitive and knowledge-based EU economy, and the Small Business Act (SBA), adopted in 2008, stipulates the EU policy framework for entrepreneurship development (CoR, 2019[1]). The SBA includes ten principles and related actions for Member States to address challenges faced by SMEs such as proposing smarter regulation to cut administrative burden, improving access to finance, making the Single Market more accessible and improving competition policy to make it more SME friendly (EC, 2016[2]). Several strategic policy documents have been adopted by the European Commission since the adoption of the SBA to create an enabling environment for European SMEs to scale up, innovate, access new markets and benefit from knowledge and technology transfers.

In EU Member States, policy priorities and strategic objectives set at the EU level are translated into concrete SME support schemes (e.g. financial instruments, technical assistance programmes) financed by the EU Structural and Investment Funds (ESIF) and designed and implemented by national and subnational governments. Many government agencies responsible for SME and entrepreneurship development also host programmes that are directly managed by the EU such as the Enterprise Europe Network[1], the Horizon 2020 initiative and the programme for the Competitiveness of Enterprises and SMEs (COSME) (CoR, 2019[1]). By fostering synergies with EU programmes and institutions, governments of Member States can complement national and regional instruments and tailor them to the needs and specificities of local entrepreneurial ecosystems.

International investment policy is an area where the EU holds specific competences as part of its Common Commercial Policy (CCP). This includes negotiating and concluding international investment agreements (IIAs) on behalf of Member States, proposing reforms that create a more transparent and predictable business climate for investors, encouraging investment that supports sustainable development, and fostering cooperation and the exchange of information among national authorities on the screening of investments from non-EU countries (FDI Screening Regulation) (EC, 2023[3]). Over the past decade, the EU has negotiated and implemented investment rules in trade agreements or in self-standing investment

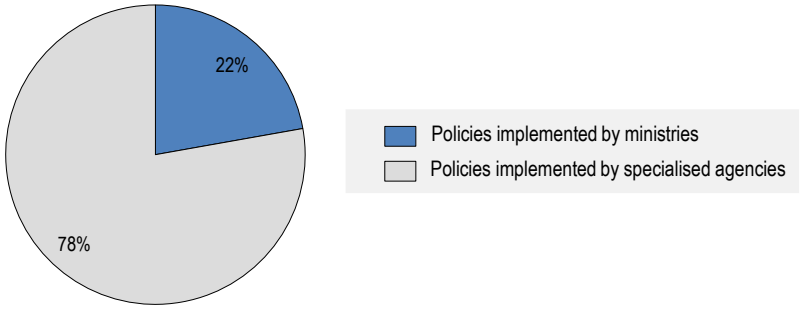
agreements concluded with non-EU countries, and promoted a reformed investment dispute settlement approach with clearer and more precise rules on investment protection.

Policy efforts to attract and facilitate FDI in line with national development objectives and priorities remain, however, under the remit of national governments. EU Member States can set up dedicated investment promotion agencies (IPAs) to promote their country as an attractive investment destination, provide support services to potential foreign investors, and design and implement their national investment promotion strategies. Depending on the policy instruments used to promote investment, national governments, however, must comply with EU rules. This is the case of investment incentives and other financial support provided to domestic or foreign firms. The EU State Aid rules set comprehensive requirements on how governments can grant incentives, the value of benefits, to which sectors, as well as reporting requirements (EC, 2023[4]). The rules aim to ensure that incentives do not distort competition and are regularly monitored to ensure their cost-effectiveness. As is the case with SME and entrepreneurship policy, many investor support schemes implemented in EU Member States are linked to policy priorities set at the EU level (e.g. green and digital transition) and financed by the EU Structural and Investment Funds.

FDI-SME policies are often implemented by specialised agencies, with a wide range of cross-country differences

The formulation and implementation of FDI-SME policies does not fit neatly within a single governmental department or agency. In most EU Member States, responsibilities over these areas are scattered across various government bodies. The policy mapping undertaken for this report reveals that FDI-SME policies are implemented primarily by specialised implementing agencies (78% of all initiatives, compared to 22% by sectoral ministries), reflecting longstanding trends towards a decentralisation and agencification of public governance (Figure 4.1). Depending on the core function that these government bodies exercise, they can be distinguished as investment promotion, SME and entrepreneurship, innovation and regional development agencies.

Figure 4.1. Share of FDI-SME policies implemented by ministries and specialised government agencies



Source: EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

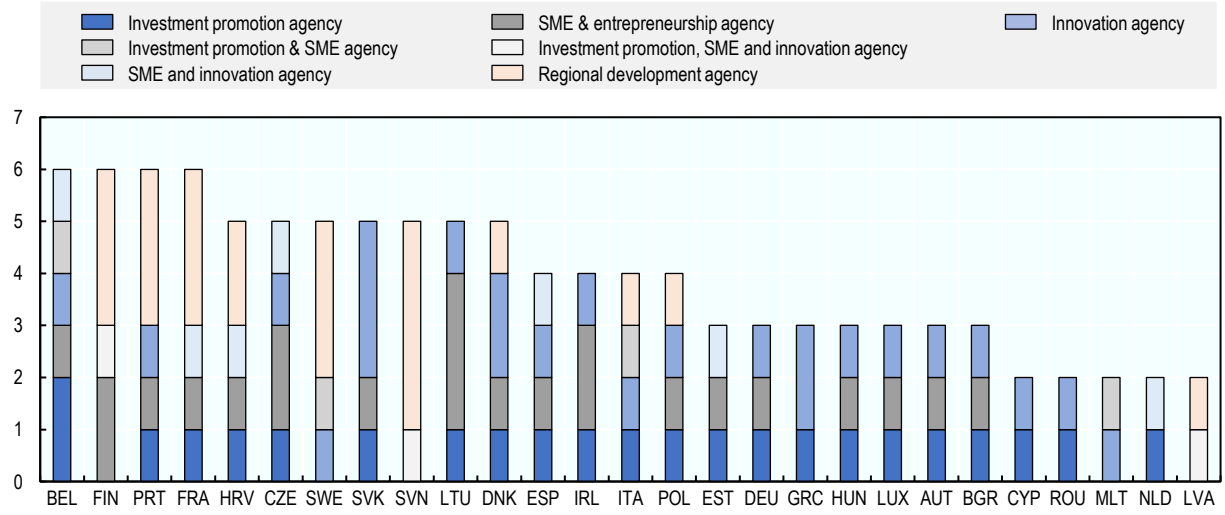
Implementing agencies responsible for FDI-SME policies may have one or multiple core functions depending on the number of formal mandates that have been assigned to them by their sponsor ministry. For instance, almost one third of SME and entrepreneurship agencies also operate as their country's innovation agency and support both business research and development (R&D) and applied research by the public sector (e.g. Croatia, Czech Republic, Estonia). Other agencies may have a single core function (e.g. investment promotion) but be given complementary mandates in relation to their core activities. Among EU Investment Promotion Agencies (IPAs), 77% of them have been tasked to promote investments

that contribute to other policy goals such as fostering innovation, improving the competitiveness of regions or supporting the internationalisation of the economy (e.g. Lithuania, Ireland, Hungary, Estonia, Bulgaria).

Large variations exist across EU Member States in terms of the number and functions of implementing agencies, reflecting the disparities in their governance models, but also potentially varying policy priorities given by their respective governments (Figure 4.2). All EU Member States have a national IPA, with the exception of Belgium which has three subnational IPAs (one for each federal state) and Italy, where two IPAs (i.e. ICE and INVITALIA) operate in a complementary way. SME and entrepreneurship development is entrusted to specialised agencies in 25 EU Member States. Cyprus[2] and Romania are notable exceptions since SME support programmes are administered only at the Ministerial level.

Figure 4.2. Implementing agencies responsible for FDI-SME policies that have been mapped in the 27 EU Member States, by core function

Number of implementing agencies



Note: This figure illustrates the number of specialised implementing agencies that have been mapped across the investment promotion, SME, innovation and regional development policy areas in each EU Member State. Regional development agencies operating at the subnational level have been mapped only for 12 EU Member States (Finland, Slovenia, France, Croatia, Sweden, Slovak Republic, Portugal, Lithuania, Denmark, Italy, Poland, Latvia). In Belgium, the 3 IPAs operating at the subnational level (one for each federal state) have been mapped.
Source: EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

Regarding innovation agencies, certain countries have established multiple specialised bodies to promote innovation, with some focusing on business adoption and diffusion (e.g. of new technologies) and others on knowledge (co-)creation (e.g. funding of scientific research and the commercialisation of R&D, e.g. Slovak Republic, Spain, Czech Republic). For instance, the Slovak Innovation and Energy Agency (under the supervision of the Slovak Ministry of Economy) offers technical support to enhance the innovation performance of domestic business enterprises, while the Slovak R&D Agency and the Research Agency work under the supervision of the Ministry of Education to offer financial support for collaborative research activities (OECD, 2022[5]).

Evidence from 12 EU Member States shows that the role of regional development agencies also varies. In some countries, regional agencies have been established by subnational governments to pursue region-specific priorities and implement business promotion policies (including investment and SME development programmes) that are tailored to local needs (e.g. Croatia, Denmark, France). In other EU countries, regional development agencies report to ministries and serve as an extension of the central government

services to the subnational level (e.g. the Regional Coordination and Development Commissions, CCDRs, in Portugal and Regional Development Centres, ELY, in Finland) (Box 4.1).

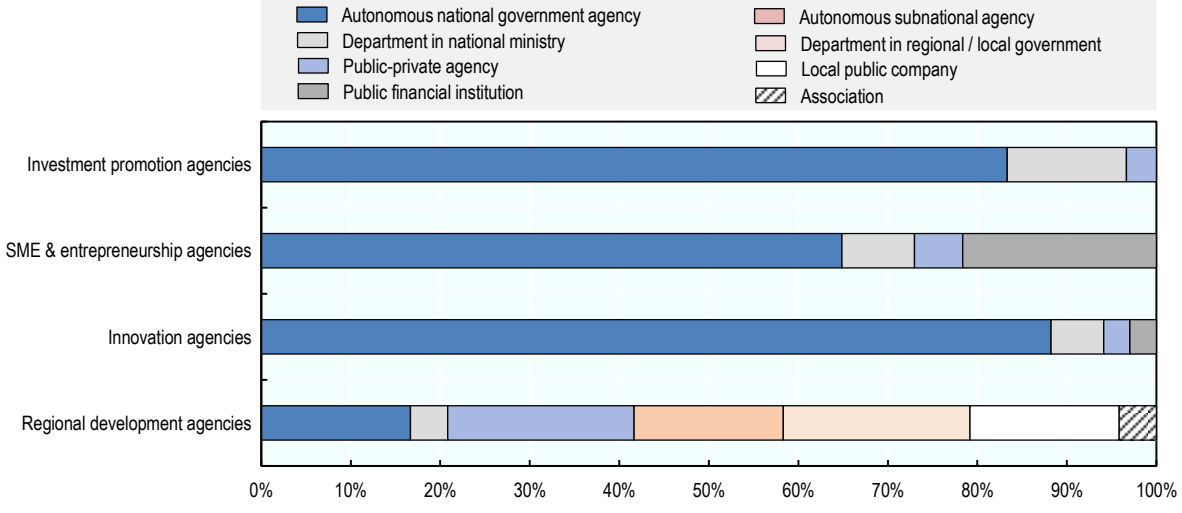
The structure and legal form of implementing agencies can determine their degree of autonomy in the design, coordination and implementation of FDI-SME policies (Figure 4.3). Depending on the way they are supervised, managed and controlled, it can also have a particular incidence on how they interact with other government actors and the type of strategic relations they form with them.

Government agencies responsible for FDI-SME policies are more often established as autonomous legal entities (66%), resulting in a high degree of autonomy in planning and managerial decisions vis-à-vis their political principals, i.e. reporting ministry. The delegation of roles and competences to autonomous or semi-autonomous executive bodies has been a common trend among EU governments that seek to achieve efficiency gains in the administration of public policies. As part of their policy implementation role, autonomous agencies can decide on the tools and methods to be used to achieve the outcomes prescribed at the ministerial level. They can also serve as intermediary organisations between the central government and the final beneficiaries of public support (e.g. foreign investors, SMEs, start-ups) with various benefits relating to economies of scale, proximity to business and reduced transaction costs in handling administration.

Close to 15% of public agencies responsible for FDI-SME policies operate as a department in ministries or subnational governments. This is the case of the Netherlands Foreign Investment Agency (NFIA) and the Danish Business Authority (DBA), which are part of their respective Ministry of Economy. Due to their proximity to central government, these agencies may benefit from greater access to resources and more opportunities to influence the design of policy interventions. Importantly, they can play a policy advocacy role by transmitting business insights and feedback from the private sector directly to higher levels of government, and contribute to the creation and enhancement of an enabling policy framework for FDI promotion and SME development. Previous OECD evidence on IPA practices has found that 90% of IPAs operating within a ministry dedicate staff to policy advocacy, while 63% of autonomous public agencies do (OECD, 2018[6]).

Figure 4.3. Legal status of implementing agencies responsible for FDI-SME policies

Share of implementing agencies



Source: EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

Although only 8% of the total number of agencies operate as state-owned financial institutions, they make up a relatively large share of the SME and entrepreneurship agencies (22%) (Figure 4.3). These usually include national promotional banks, public investment funds and export credit agencies which are established with the mission to expand credit supply for SMEs' innovation and export-related activity by providing loans, equity finance, guarantees and other hybrid funding instruments. As to public-private entities (7%), they are often governed by a board of public and private sector representatives (e.g. Slovak Business Agency, Business Sweden), which allows for the integration of industry priorities and insights into their policymaking processes.

It is important to note that regional development agencies, which often operate closer to local FDI-SME ecosystems, exhibit a more diverse legal structure than other agencies. Only four EU Member States have regional development agencies operating at national level (e.g. Portugal, Sweden, Latvia, Italy, France) either as autonomous agencies or as part of a Ministry (Box 4.1). At the subnational level, local public companies (LPCs) have been established by subnational governments to deliver local public services, including in areas related to local economic development, spatial planning and infrastructure. Standing at the crossroads of the private and public sectors, LPCs are particularly common in Europe and can be 100% publicly funded or a combination of public and private capital (OECD, 2017[8]). Finally, cooperative associations involving several municipalities are also common. In Portugal, for instance, 21 Inter-municipal Communities (CIMs), corresponding to the NUTS 3 level, have been established to reinforce inter-municipal cooperation and fulfil tasks beyond the borders of single municipalities, including on investment attraction and local business development (OECD, 2022[7]).

Box 4.1. Governance arrangements for regional development policy in Portugal

In Portugal, important prerogatives in the area of regional policy are in the hands of the Ministry of Planning, which is responsible for the management of the EU Structural and Investment Funds, and the Ministry of Territorial Cohesion, which formulates and implements regional development policies. To ensure better coordination with regions in the use of EU funds for the implementation of regional initiatives, the Portuguese Government has also established the Agency for Development and Cohesion (Agência para o Desenvolvimento e Coesão, AD&C), which operates as a Department within the Ministry of Planning. AD&C ensures coordination by issuing technical guidance notes on the implementation of the EU funds, by participating in working groups dealing with policy design and implementation, and by leading or participating in functional networks in areas such as investment incentive schemes, regional dynamics, smart specialisation and science, technology and innovation support.

Portugal has not established a regional government level, unlike many other EU countries. Instead, there are five Regional Coordination and Development Commissions (CCDRs) (one for each of the five NUTS 2 regions of mainland Portugal), which serve as decentralised branches of the government and carry out tasks in the areas of the environment, land and town planning, and regional development. They also play a significant role in formulating and implementing regional smart specialisation strategies together with the Ministry of Planning, the Ministry of Economy and Digital Transition, and the Ministry of Science, Technology and Higher Education.

Source: OECD (2022[7])

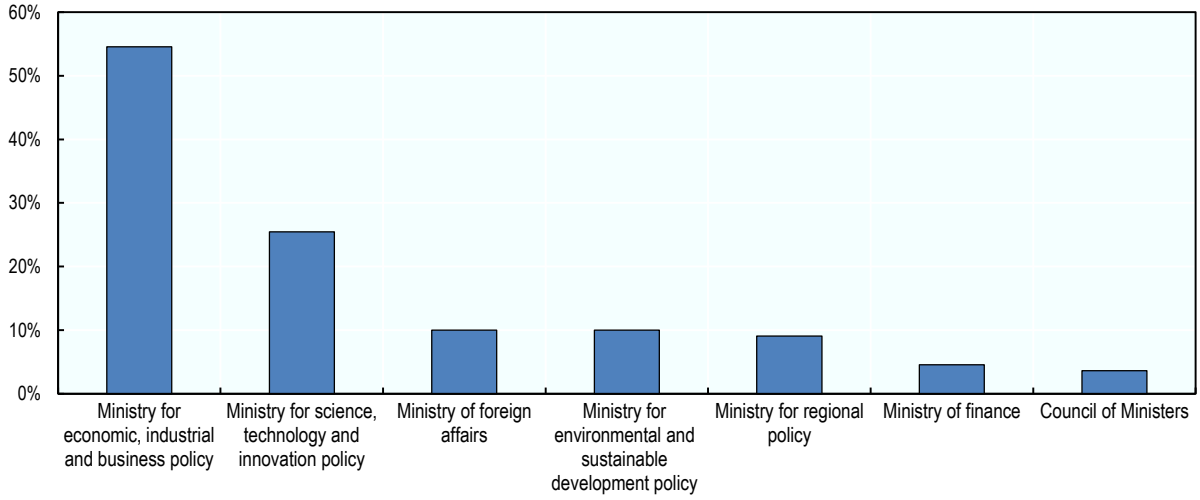
Ministries of Economy are most often responsible for the strategic oversight of FDI-SME policies

Agencies responsible for FDI-SME policies can have different reporting lines depending on their legal status, the policy domain within which they operate and the broader institutional environment. Some of them may also report to multiple ministries, reflecting the diversity of their mandates and inter-institutional coordination approaches.

The most common ministries to which agencies report to are those bearing responsibility for economic growth policies (55%), including investment and entrepreneurship policies, and those promoting innovation, scientific research and technology transfers (25%) (Figure 4.4). These ministries often focus on the design and coordination of national competitiveness and industrial development programmes and are responsible for devising national strategies and action plans that provide overarching directions and set national priorities, goals and policy objectives (e.g. Smart Specialisation Strategies). With the ministry of economy being responsible for SMEs and investment policy in most EU member States, it is likely easier to foster synergies between these two policy areas and ensure the necessary coordination to strengthen FDI-SME linkages and spillovers.

Figure 4.4. Reporting lines of implementing agencies responsible for FDI-SME policies

Share of implementing agencies (110 institutions mapped)



Source: EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

Other ministries have a less prominent role in the formulation of FDI-SME policies, and often complement the efforts undertaken by key actors described above. Ministries of Foreign Affairs, for instance, participate in investment promotion activities in collaboration with IPAs through their diplomatic missions abroad. Many IPAs report directly to the Ministry of Foreign Affairs – rather than to the Ministry of Economy, which is usually the one with overall responsibility for investment policy – to exploit potential synergies arising from the government's economic diplomacy portfolio (e.g. Denmark, Greece, Hungary, Portugal, Sweden). Similarly, in some EU countries, the Ministry of Foreign Affairs oversees specialised business support centres that focus on trade promotion and strengthening the export capacity of domestic SMEs. This is the case of Slovakia's POCE Business Centre, which helps Slovak SMEs find new business partners and expand their operations abroad through an online portal (OECD, 2022[5]).

Ministries in charge of regional development coordinate the work of regional development agencies, subnational IPAs and local entrepreneurial support institutions (e.g. business incubators) and implement

targeted policies and programmes to ensure that the benefits from economic development are shared more evenly among regions. Beyond the supervision of subnational entities, these ministries also play a strategic role in the implementation of territorial development and smart specialisation initiatives that have a strong focus on improving the quality of the business environment in less developed regions (Box 4.1). They are, therefore, often at the epicentre of place-based policy approaches that target local FDI-SME ecosystems.

Institutions enabling FDI-SME linkages combine different roles and responsibilities

Institutional environments differ from one country to another, and with them the scope and diversity of roles and responsibilities assigned to different government bodies. Agencies responsible for FDI-SME policies can be either fully dedicated to a core function (e.g. investment promotion, SME support, innovation promotion, regional development) or integrate several complementary mandates under the same roof. When looking more closely at the scope of activities that these institutions fulfil, it becomes clear that large variations exist across policy areas (Figure 4.5).

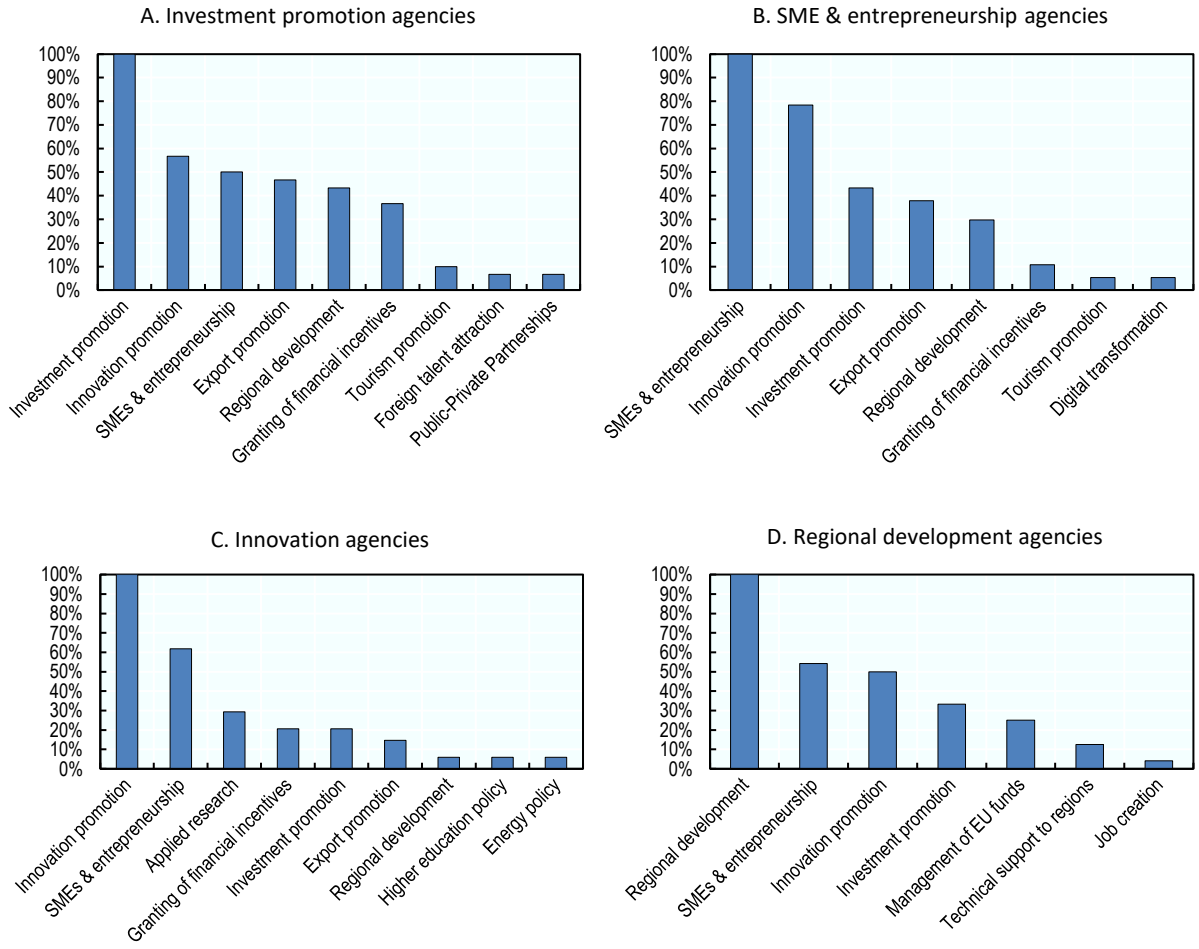
IPAs and SME and entrepreneurship agencies are most often tasked with promoting innovation (57% and 78% respectively), strengthening the domestic entrepreneurial ecosystem (50% and 100%), and supporting exports (47% and 38%). The combination of these mandates can be motivated by the need to maximise synergies and foster economies of scale by grouping together policy areas that target different aspects of investment and business growth (e.g. internationalisation, innovation, productivity). This is particularly true for governments that seek to strengthen the domestic business environment, in particular SMEs, by attracting innovation-oriented, export- and R&D-intensive investors, as similar industries and markets can be targeted.

The complementary responsibilities assigned to innovation agencies follow a rather different rationale. Although most of them (64%) seek to support the innovation capacities and technological upgrading of domestic SMEs, they are also increasingly focusing on the commercialisation of applied research and the development of research infrastructure networks (30%) that can be used by different types of market and non-market stakeholders (e.g. R&D organisations, startups, non-profit entities). These mandates are linked to the broader role of innovation agencies as intermediary institutions that seek to foster knowledge-intensive linkages between the business and R&D sectors. In certain EU Member States (e.g. Portugal, Croatia, Slovak Republic), they are also responsible for administering R&D incentive schemes (21%), including direct funding (e.g. grants, loans) and tax relief, for the implementation of knowledge-intensive investments.

Regarding regional development agencies, their mandates focus on aspects that directly affect the local economic environment in which they operate, including entrepreneurship development (54%), innovation promotion (50%), and investment promotion (33%). In many EU Member States, regional development policies are driven by policy priorities identified in smart specialisation strategies, and financed by the EU Structural and Investment Funds, which remain a significant source of financing for many subnational governments. This is reflected in the responsibilities of regional development agencies who are legally mandated to manage EU funding instruments (25%), often in collaboration with ministries for regional development, and to provide technical support (13%) to subnational entities operating in their areas (e.g. industrial parks, business incubators, special economic zones, technology centres).

Figure 4.5. Complementary mandates of implementing agencies responsible for FDI-SME policies

Share of implementing agencies



Source: EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

The combination of these mandates reflects the interlinkages between different policy domains that act upon FDI-SME linkages. It also reveals that knowledge and technology diffusion is an issue requiring policy responses that do not fit neatly within any single government department or agency. Tailored policy considerations and increased focus on complementary policies within a single institution are, to a certain extent, necessary to support FDI-SME ecosystems. Yet, overlapping mandates across institutions also calls for policy coordination to avoid disjoined actions and separate strategies across different ministries and implementing agencies (Section below).

If not combined with the necessary resources, such wide mandates can weigh on agencies' ability to properly achieve their mission. Some governments choose to establish separate agencies with a narrow mandate to ensure that their skillsets are sufficiently specialised and activities targeted to respond to the needs of their respective clients. In 2014, the Hungarian Investment and Trade Agency (HITA) was divided into two institutions, the Hungarian Investment Promotion Agency and the Hungarian Export Promotion Agency. The split aimed at establishing a sector-focused organisational structure to improve the targeting of their respective policy initiatives.

As addressed in the following sections, the success of such organisational reforms depends on the characteristics of the institutional environment, including the type of governance framework, the capacities of the public administration and the quality of policy coordination mechanisms.

The governance framework for FDI-SME policies varies from one country to another

Governance systems within the EU vary, ranging from highly integrated settings where FDI-SME policies are the responsibility of a single line Ministry and, in certain cases, a single implementing agency; to fragmented governance systems where several ministries and agencies are responsible for investment promotion, entrepreneurship development, innovation and regional development policies (Table 4.1; Figure 4.7).

A key characteristic of fragmented institutional frameworks is the multiplicity of government actors involved in policy design and implementation as well as the presence of several highly specialised agencies with a narrow mandate that report to different line ministries. In Portugal, for instance, the primary responsibility for SME and business innovation policy lies with the Ministry of Economy and Digital Transition and its two implementing agencies, the SME Competitiveness Agency (*IAPMEI*) and the National Innovation Agency (*ANI*) (OECD, 2022[7]). The Ministry of Foreign Affairs coordinates national investment promotion and trade policies and supervises the work of the national IPA (*AICEP Portugal Global*). Important prerogatives are also in the hands of the Ministry of Planning, which is responsible for the management of the EU Structural and Investment Funds, and the Ministry of Territorial Cohesion, which formulates and implements economic growth policies in regions.

Similarly in Denmark, the Danish Business Authority, which is responsible for promoting business growth, reports to the Ministry of Industry, Business and Financial Affairs, while the Danish IPA, *Invest in Denmark*, operates as a department within the Ministry of Foreign Affairs. *Innovation Fund Denmark*, a public financial institution supervised by the Ministry for Higher Education and Science, also plays an important role in supporting R&D collaborations between business and research institutions.

In contrast, other EU Member States with an integrated institutional framework such as Finland, Lithuania, Latvia and Estonia target the entire FDI-SME ecosystem through consolidated “mega-agencies” that report to a single Ministry. Such institutional frameworks are usually the result of government reforms aimed at improving public sector efficiency. In Slovenia, a single implementing agency, *SPIRIT Slovenia*, has been entrusted to promote investment and entrepreneurship as well as support the internationalisation and innovation of the domestic economy. *Enterprise Estonia* is also the largest institution within the Estonian business support system that provides financial assistance, counselling and training for domestic and foreign firms, individual entrepreneurs, research institutions as well as the public and non-profit sectors.

These “mega-agencies” often operate as umbrella organisations bringing together a wide range of government initiatives and actors targeting foreign investors and domestic SMEs. *Business Finland* was established in 2018 as an association of two entities, offering internationalisation, investment and tourism promotion services. Similarly, the *Netherlands Foreign Investment Agency (NFIA)* operates as an administrative unit within a larger public organisation responsible for promoting innovation and entrepreneurship, the *Netherlands Enterprise Agency (RVO)*. Such institutional set-ups usually aim to facilitate access of firms to public support by making the delivery of business services smoother and by implementing comprehensive policy packages that support FDI-SME ecosystems at every step of their growth trajectory (e.g. investment facilitation, innovation funding, advise in growing internationally, skills training).

Overall, the majority of EU Member States has partially integrated governance frameworks. In this group of countries, a common trend is for the IPA and the SME and entrepreneurship agency to report to the same ministry – usually the Ministry of Economy – (e.g. Ireland), which could facilitate inter-institutional planning and decision-making across the investment and SME policy agendas. Responsibilities for

innovation promotion, on the other hand, are often split between the ministries responsible for economic policy, science and education. In the Slovak Republic, both the Slovak R&D Agency (under the supervision of the Ministry of Science and Education), and the Slovak Innovation and Energy Agency (under the supervision of the Ministry of Economy), offer technical and financial support to promote knowledge and technology transfers and enhance the innovation performance of the domestic economy (OECD, 2022[5]).

Although investment promotion, SME and innovation policies can be more or less integrated into the same ministry, regional development policy usually stands apart. Most EU Member States, have a dedicated ministry for regional development, which implements territorial development programmes, manages the allocation of EU Structural Funds to regions and coordinates the implementation of tailored initiatives with subnational governments.

There are however a few exceptions. In Finland and Slovenia, responsibility for regional policy sits within the Ministry of Economy, allowing for the diffusion of regional priorities into economic and business promotion policies. Hungary and the Netherlands do not have an explicit regional development policy, but apply a regional focus to several policy domains managed by different ministries (OECD, 2019[9]; OECD, 2019[10]). Finally, in highly decentralised countries like Spain and Germany, regional development is mainly a responsibility of subnational governments (i.e. the Autonomous Communities in Spain and the Länder in Germany), with central government having a coordinating and financing role (OECD, 2019[11]; BMWK, 2022[12]).

Table 4.1. Stylised institutional models for FDI-SME policies

	Highly integrated	Integrated	Partially integrated	Fragmented
Description	A single government agency designs and implements policies that target the entire FDI-SME ecosystem	Multiple government agencies overseen by the same ministry implement FDI-SME policies	Several government agencies implement FDI-SME policies with only a few reporting to the same ministry.	Multiple ministries and government agencies are involved in the implementation of FDI-SME policies
Governance trends	• "Mega-agencies" are usually the result of administrative mergers aimed at improving policy efficiency. • "Mega-agencies" target both domestic and foreign firms together with other public and private sector actors (e.g. universities, clusters, municipalities).	• Inter-agency coordination usually takes place through the supervising ministry. • The Ministry of Economy is the lead policy-making actor in most countries.	• In most EU Member States, the IPA and SME and entrepreneurship agency report to the same ministry. • The ministries in charge of education policy and territorial cohesion are often responsible for innovation promotion and regional development respectively.	• Narrow mandate of implementing agencies results in a high degree of specialisation. • Top-down approaches are often used to make joint strategic and operational decisions given the multiplicity of actors involved.
Implications for policy coordination	• Low transaction costs and/or information exchange barriers when implementing cross-cutting policy agendas. • Likely to facilitate informal types of coordination due to proximity (e.g. ad hoc meetings among senior officials). • Risk of weak specialisation due to the broad mandate of the agency.		• Explicit need for a whole-of-government coordination strategy due to the high degree of fragmentation. • Formal communication channels and information exchange mechanisms are more likely to be used to break up policy silos (e.g. inter-agency councils, task forces).	
Countries	Estonia, Finland, Latvia, Slovenia	Germany, Croatia, Italy, Lithuania, Luxembourg, Netherlands, Austria	Bulgaria, Czech Republic, Spain, France, Greece, Hungary, Malta, Poland, Romania, Sweden, Cyprus, Slovak Republic, Ireland	Belgium, Denmark, Portugal

Source: EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

Policy coordination across institutions and tiers of governments

Institutional complexity is a key determinant of policy coordination strategies

Institutions responsible for FDI-SME policies operate in a dense and complex network of stakeholders – both public and non-public – which requires strong cooperation and coordination skills and processes. Although there is no standard inter-institutional coordination approach to the successful implementation of FDI-SME policies, much of the success or failure of attempts to coordinate appear to depend upon country contexts. The complexity of the institutional setting has implications on how much coordination effort is required and what type of coordination mechanisms should be deployed to ensure policy coherence. The links between institutional settings and coordination approaches are described in Table 4.1.

Fragmented institutional settings may induce more complex governance systems – i.e. higher risks of information asymmetry, transaction costs and trade-offs – and require robust coordination mechanisms to overcome policy silos. Given the number of institutions involved, top-down approaches relying on the authority of a lead government body (e.g. the President or Prime Minister's Office, high-level government council) are often used to make joint strategic and operational decisions. In Latvia, for instance, a collegial advisory authority chaired by the Prime Minister was established in 2014 to facilitate planning and evaluation of the country's long-term development objectives, initiate structural reforms and ensure coherence of national and local government policy (OECD, 2019[13]). This was complemented by a Cross-sectoral Coordination Centre that reports directly to the Prime Minister and aims to foster collaboration and joint actions between ministries.

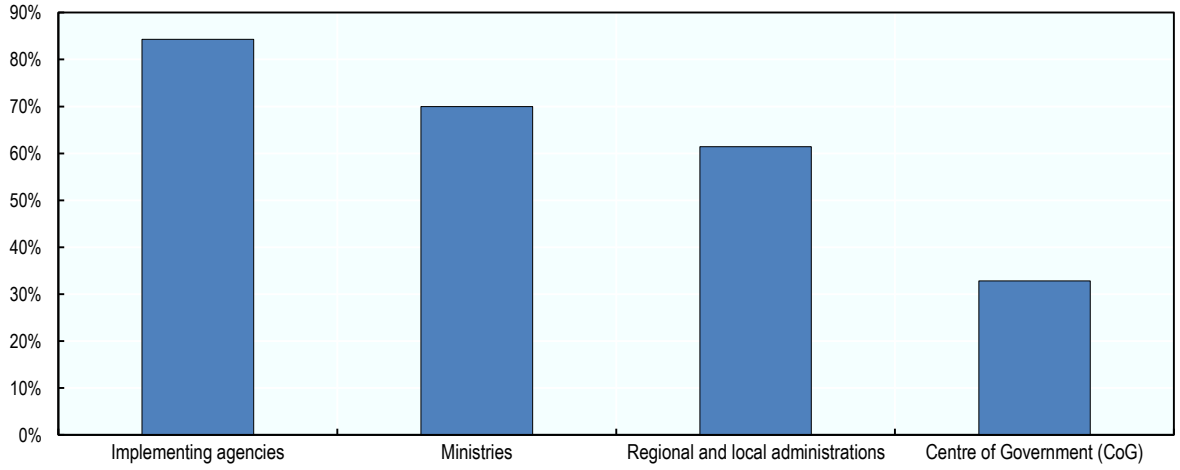
On the other hand, integrated institutional settings could rely on informal types of coordination such as ad hoc meetings among civil servants and informal networks of high-ranking officials responsible for investment and economic growth policies. The concentration of mandates in mega-agencies implies low transaction costs and limited information exchange barriers, and could therefore facilitate the implementation of cross-cutting policies such as those required to strengthen FDI-SME linkages and their impact on productivity and innovation.

The survey finds that, in the EU, inter-institutional relationships in the area of FDI-SME policies involve coordination primarily with implementing agencies (84%) that offer investment promotion, innovation and business support services and are therefore in direct contact with foreign investors and domestic SMEs; ministries (69%) responsible for the design of these policy interventions; and regional and local authorities (60%), which are often essential in promoting local SME ecosystems, accompanying the national IPA in conversations with investors and providing investment facilitation and aftercare services in regions and cities (Figure 4.6).

Although to a lesser extent, one third of surveyed public institutions also cooperate with the Centre of Government (CoG) (31%), i.e. the body or group of bodies that provide direct support to Heads of Government and the Council of Ministers (e.g. President's Office, General Secretariat of the Government). The role of the CoG has expanded in recent years from purely monitoring and strategic planning functions to playing a more strategic leadership role of facilitating coordination across government siloes. This trend has been further accentuated by the COVID-19 crisis (OECD, 2020[14]), during which governments had to swiftly and efficiently implement large support packages for businesses affected by the containment measures, and therefore leadership and coordination from the highest government ranks was necessary to manage the immediate economic fallout.

Figure 4.6. Most commonly reported institutions with which coordination takes place

Share of surveyed institutions



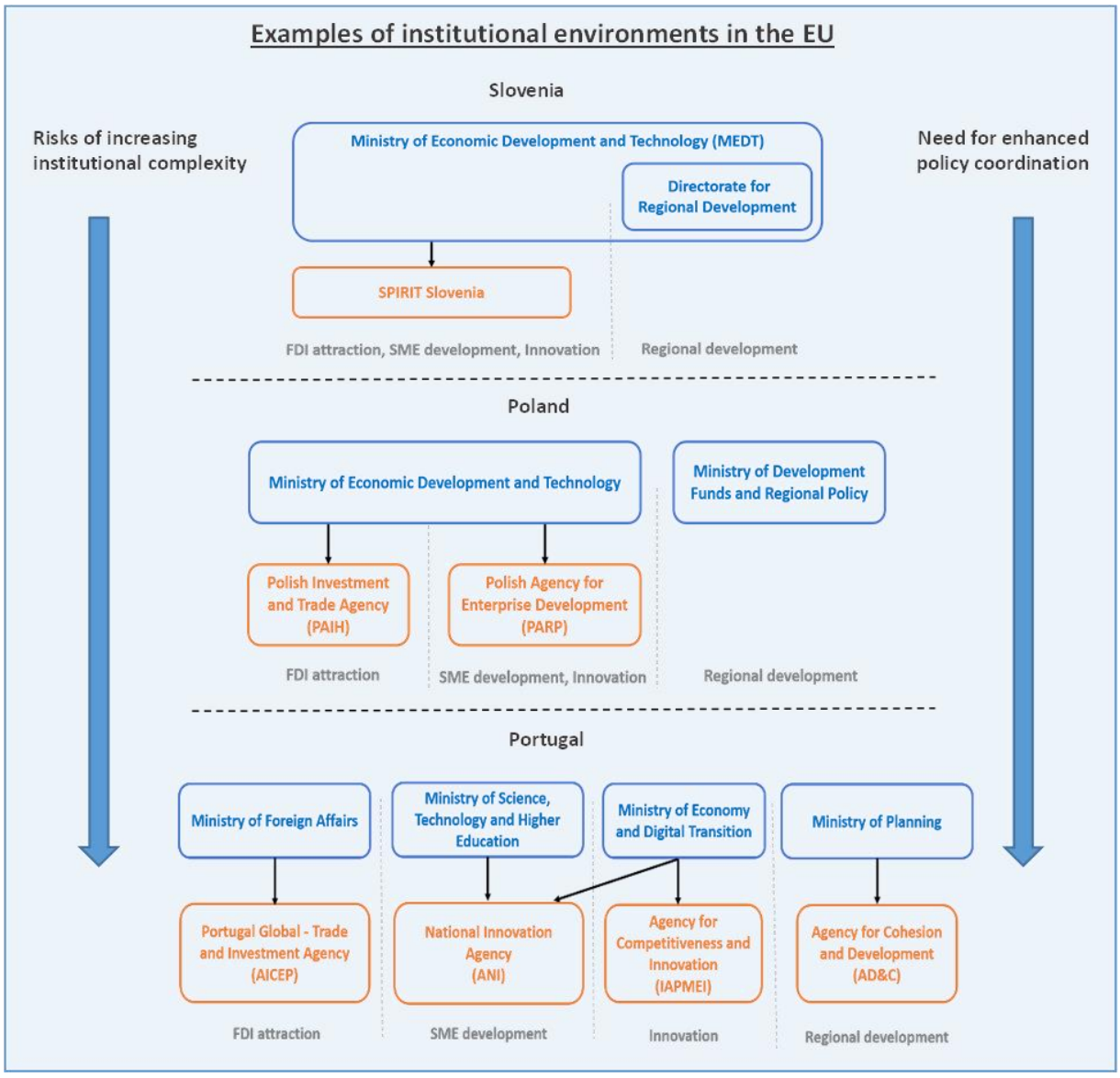
Source: EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

Instruments of horizontal coordination can be complementary and used interdependently by different government bodies

When looking at the main horizontal coordination mechanisms (i.e. among institutions operating at the same level but across different policy areas) for the implementation of FDI-SME policies (Figure 4.8), entrenching coordination requirements in laws and regulations remains the main approach to aligning action across government portfolios. Half of the EU institutions involved in FDI-SME policies formalise coordination across-the-board through legally binding provisions (49%). Such laws describe the role and responsibilities of each institution, their internal management processes, and the policy areas where interaction with other public actors is required. They also stipulate governance frameworks to ensure inter-agency collaboration. In Ireland, there is a requirement for ministerial representation in the management board of Enterprise Ireland, while in Portugal the SME and entrepreneurship agency (IAPMEI) sits in the board of the national innovation agency (ANI) (OECD, 2022[7]).

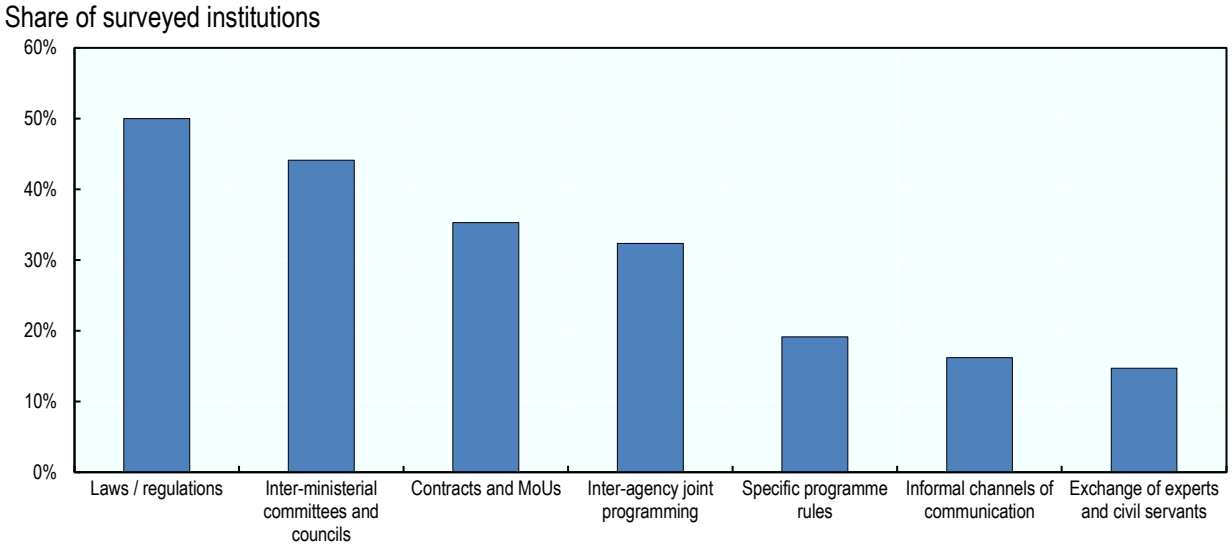
High-level government councils, inter-agency committees and working groups dealing with investment, entrepreneurship and broader competitiveness issues have been also established to ensure policy coherence (43%). For instance, the Portuguese Government has set up Startup Portugal, a public-private task force to coordinate the implementation of the National Strategy for Entrepreneurship (OECD, 2022[7]). Coordination on investment matters takes place through the Permanent Commission for Investor Support (Comissão Permanente de Apoio ao Investidor, CPAI), which is managed by the IPA (AICEP) and gathers representatives from the SME agency (IAPMEI), the Portuguese Environment Agency, the Tax and Customs Authority, the Ministry of Economy and Digital Transition and regional authorities.

Figure 4.7. Governance frameworks in the EU based on institutional complexity



Source: EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

Figure 4.8. Inter-institutional coordination instruments



Source: EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

In certain EU Member States, these inter-institutional structures take the form of public or semi-public collaborative networks, whose role goes beyond horizontal coordination to also include vertical coordination (e.g. across tiers of government) and the exchange of information and streamlining of business support services. The *Netherlands Foreign Investment Agency* operates the Invest in Holland Network, which comprises regional development agencies, several large cities and other non-profit entities (NFIA, 2022[15]). The network aims to provide a continuum of support services to foreign investors and connect them with the right government partners depending on the type and location of their investments. Similarly in Finland, the Team Finland Network has been established to coordinate all the internationalisation services offered by different public entities and streamline them into client-oriented packages which are easily accessible to foreign investors and domestic entrepreneurs.

Contracts and other forms of written agreements are the third most common instrument used to establish organisational links and formalise relationships between institutions involved in FDI-SME policymaking (35%). In Poland, the working relationship between the Ministry of Economic Development and the Polish Investment and Trade Agency is defined in a contract, while in Italy, the national IPA, *INVITALIA*, has signed a Memorandum of Understanding (MoU) with the Agency for Territorial Cohesion (ACT) to promote investments in economically weaker regions. In recent years, cooperation protocols have been also signed between the Slovak Business Agency and subnational authorities in the Eastern parts of the Slovak Republic to provide tailored SME support services in regions and cities (OECD, 2022[5]).

Inter-agency joint programming (32%) and specific programme rules (19%) are relatively frequent. Business France, BPI France, and the French Tech Mission administrate joint programmes at the intersection of FDI, SME, and innovation policy, with Business France focusing on projects supporting the internationalisation of French companies, and BPI France and the French Tech Mission strengthening their technological capabilities and facilitating access to finance. The Scale Up Tour programme is an example of collaboration among the three agencies. Organised annually, the programme involves a series of events promoting the French tech ecosystem to some of the world's leading foreign investors abroad, leading to the exchange of know-how and best practices and forging links with foreign markets.

Only a few institutions report coordinating operations through civil servant staff exchange programmes and informal channels of communication (15%). In OECD countries, staff exchanges and secondments vertically across levels of government and horizontally at the same government level have proven to be an

effective tool to address resource and skill-related gaps in public administration (OECD, 2017[16]). However, in most countries they are implemented on a voluntary basis and require the mutual agreement of sending and receiving institutions.

Multi-level governance arrangements vary by country, region and policy area

Engaging with subnational actors and operating in proximity to foreign investors and local SMEs can be strong enabling factors for the effective implementation of FDI-SME policies. Coordination with subnational agencies can, however, bring a number of challenges. Disparities in the socio-economic development, investment attractiveness and skills intensity of regions means that central government agencies have to increasingly tailor their policies to a range of different local needs. The capacities and competencies of subnational actors also vary; networks of regional development agencies are usually heterogeneous, which means that different collaboration strategies may be needed depending on the region. For this reason, multi-level governance systems matter. In highly decentralised countries (e.g. Spain, Germany, Belgium), robust coordination mechanisms involving subnational authorities are de facto warranted to ensure the effective implementation of FDI-SME policies.

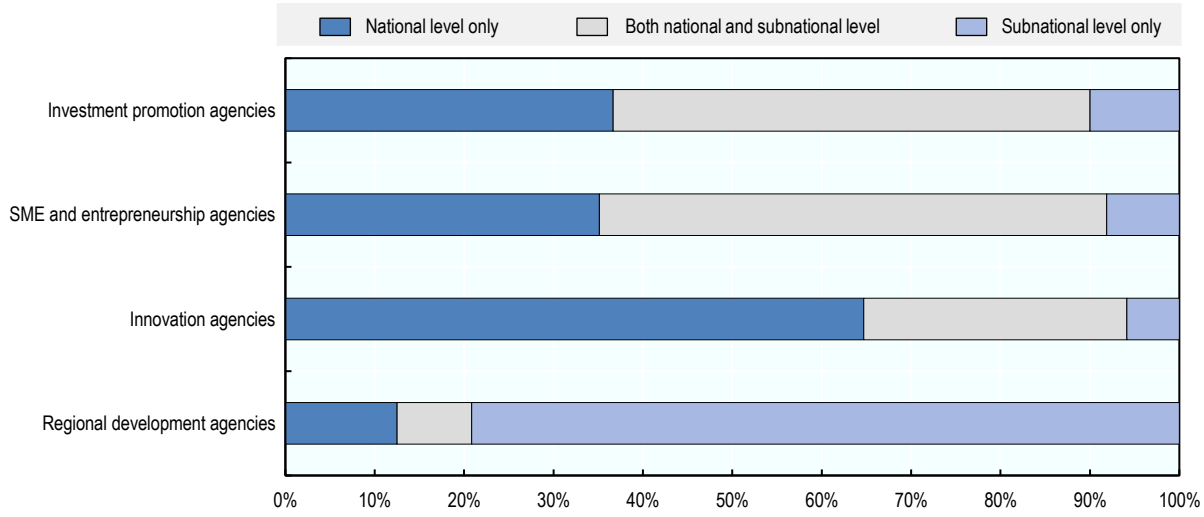
Because of the diversity of their mandates and organisational characteristics, institutions involved in FDI-SME policies need to take into consideration a multitude of factors when deciding how to distribute roles and responsibilities across levels of government, including the number and extent of their mandates, available resources, the ease of coordinating with subnational actors, and the policy priorities ascribed to them by their sponsor ministry. Depending on the institution's internal organisation as well as its strategic orientations, different options are available as regards how to strike the right balance between headquarter vs. local presence.

The survey reveals that more than half of investment promotion (63%) and SME and entrepreneurship agencies (62%) within the EU have established and operate subnational offices to ensure that foreign and domestic firms have access to business support services (e.g. information provision, technical assistance, training) close to where they operate (Figure 4.9). In contrast, only one third of innovation agencies (33%) operate regional offices. This potentially reflects the different type of support that many of them provide, often focused on the administration of innovation/R&D funding, which does not necessarily require proximity to business.

Regional development agencies, on the other hand, operate primarily at the subnational level (80%). They are established and managed by regional and local authorities with a mandate to implement local economic development action plans and promote local entrepreneurial ecosystems. Only a few EU Member States have established national agencies to administer regional policies (20%). As described in the previous sections, these national bodies are responsible for the implementation of territorial development programmes, managing and coordinating EU funds for less developed areas and providing technical assistance to regional and local administrations.

Figure 4.9. Share of implementing agencies with offices at the subnational level

Share of implementing agencies



Source: EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

As one would expect and as reflected on Figure 4.10, the establishment of regional offices appears to be positively correlated to the size of the country and the type of governance model. Territorially large EU countries (e.g. France, Sweden, Italy, Poland) tend to have on average more government agencies with subnational offices than small EU countries. This is likely motivated by the increased distance that separates their headquarters from remote regions, which may need a local presence to ensure the effective delivery of FDI-SME policies. Similarly, the average number of agencies with subnational offices tends to be higher in partially integrated and fragmented institutional frameworks (e.g. Portugal, Belgium, Denmark), reflecting the complexity of these institutional settings and the multiplicity of government entities that operate at both national and subnational levels.

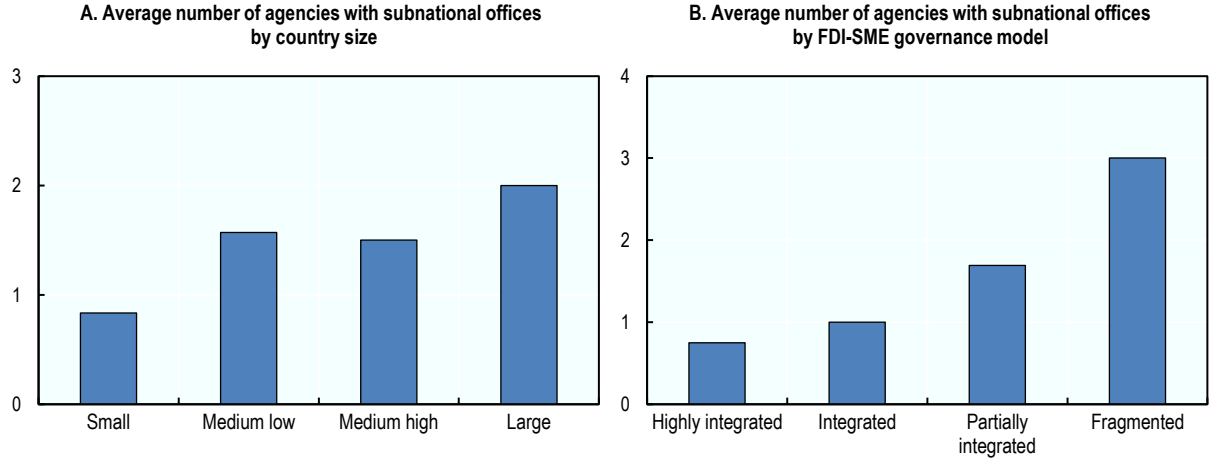
Effective coordination with subnational actors depends, first and foremost, on the different types of regional office settings. As illustrated in Figure 4.11, the majority of institutions involved in FDI-SME policies have subnational offices that are fully affiliated to their headquarters, while less than one third of them are administratively located in the premises of other national or local actors (e.g. regional development agencies, municipalities, regional offices of other national agencies). Sharing premises can be an effective way to bring down siloes and improve communication across policy areas and tiers of government (see Box 4.2). Business Finland, for instance, has an extensive network of regional offices which are managed in collaboration with regional development centres (“ELY Centres”).

The role and responsibilities of subnational offices vary; not all institutions operate at the local level in the same way. As many specialised agencies cover multiple mandates, their subnational offices can respond to different needs and perform different functions (e.g. trade, investment and tourism promotion). For instance, the Latvian Investment and Development Agency (LIIA) has established regional offices in the form of business incubators to support the growth of domestic firms, while investment promotion and facilitation are undertaken at central level at the agency’s headquarters. When it is deemed necessary, investment facilitation is provided in direct collaboration with regional and local authorities rather than the agency’s subnational offices.

The scope of activities undertaken at the subnational level also affects their organisational structure. Certain IPAs and SME agencies operate fully fledged subnational offices with sufficient resources to engage in investment promotion and provide business support locally. Others choose to establish a small

number of regional representatives in premises shared with local organisations, focusing on promotional activities and partnership building. The Croatian Agency for SMEs, Innovation and Investments (HAMAG-BICRO) has recently established a small number of agency representatives within business incubators and technology centres operating across the 20 counties of Croatia to promote its SME support programmes and facilitate communication between regional actors and HAMAG-BICRO's headquarters in Zagreb.

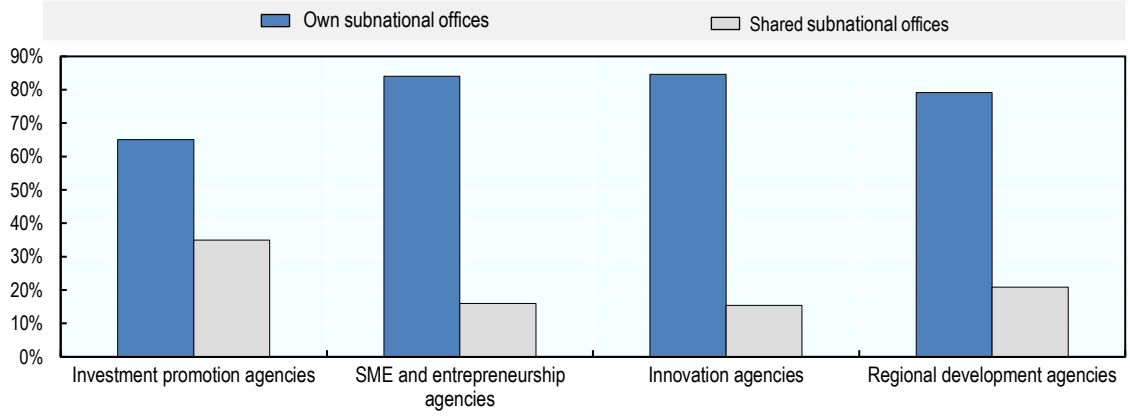
Figure 4.10. Agencies with subnational offices by country size and governance model



Note: The categorisation of EU Member States by governance model is based on the typology presented in Table 4.1. The categorisation of EU Member States by size is done on the basis of land area and includes the following countries: i) Small: Malta, Luxembourg, Cyprus, Slovenia, Belgium, Netherlands; ii) Medium low: Denmark, Estonia, Slovak Republic, Croatia, Latvia, Lithuania, Ireland; iii) Medium high: Czech Republic, Austria, Portugal, Hungary, Bulgaria, Greece; iv) Large: Romania, Italy, Poland, Finland, Germany, Sweden, Spain, France.
Source: EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

Figure 4.11. Types of subnational offices

Share of implementing agencies



Source: EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

Box 4.2. Policy coordination through joint premises: the case of Business Finland

Business Finland has adopted a comprehensive approach to coordinating with national and subnational actors involved in investment promotion, innovation and entrepreneurship development. The head office of the agency is located in Helsinki in premises shared with Finnvera, the official export credit agency of Finland, and the Finnish Industry Investment Ltd (Tesi), a state-owned investment company that promotes the growth and internationalisation of domestic companies. Outside Helsinki, the agency has established offices in 16 other locations, in shared premises with Finnvera and the local Centres for Economic Development, Transport and the Environment ("ELY Centres"). Finland has a total of 15 ELY Centres, which are tasked with promoting local sustainable development. The services offered by ELY Centres cover internationalisation of business operations, improvement of management skills in small businesses, funding for investment and development projects, and innovation promotion.

Business Finland's extensive network of subnational offices has improved the availability of investment promotion and SME support services in regions and allowed the agency to tailor its programmes to the priorities and needs of local FDI-SME ecosystems. Sharing premises with national and regional development institutions has also facilitated coordination at the subnational level and made it easier for client companies to access services that suit them. Collaboration among these government bodies is supported by the Team Finland Network, which gathers all public actors offering internationalisation services to companies. The network is managed by the Ministry of Economic Affairs and Employment and the Ministry of Foreign Affairs, with Business Finland coordinating the network's operations at the national level and the ELY Centres coordinating the operations at the regional level. This coordination framework has helped improve the efficiency and quality of services. During the COVID-19 pandemic, network members collaborated and served together more than 10,000 clients including by providing joint counselling sessions, responding to enquiries, funding and organising joint events.

Source: OECD based on Business Finland (2021[17])

Institutions that do not have any secondary offices use a variety of channels to extend their services in regions in which they do not operate. Bilateral collaboration agreements (e.g. contracts, MoUs) are mentioned by several government agencies as key instruments to nurture strategic links with regional and local entities (e.g. in Croatia, Austria, Netherlands, Sweden). The Portuguese IPA (AICEP) has formalised their partnership with the Azores Business Development Society through a MoU to implement joint initiatives in the Azores autonomous region, while the Spanish Centre for the Development of Industrial Technology has signed collaboration agreements with the Autonomous Communities (NUTS2 regions) for the implementation of multi-year innovation programmes.

Inter-institutional networks and specialised task forces are frequently used to coordinate policies across tiers of government. In Croatia, the BOND Network of Entrepreneurial Support Institutions has helped foster synergies among more than 100 subnational entities involved in local initiatives related to entrepreneurship, innovation and skills development (Box 4.3). In other countries (e.g. Spain, Netherlands, Romania, Germany) associations of regional development agencies have been established to facilitate the exchange of experiences and strengthen the capacities of regional administrations. Such policy networks often help address challenges arising from the fragmentation of subnational business support systems which is a longstanding issue in many EU Member States. By fostering policy dialogue, they can also help attenuate inter-regional competition in attracting investments and standardise the quality of SME and entrepreneurship services across regions.

Box 4.3. Croatia's network of subnational entrepreneurial support institutions

The fragmentation of the institutional framework for entrepreneurship support has been a longstanding issue in Croatia. The Croatian Agency for SMEs, Innovation and Investments (HAMAG-BICRO) is the main government entity supporting the development of Croatian SMEs, improving the innovation process and encouraging investments in Croatia. Created in 2014 through the merger of several government entities, the agency's activities include promotional activities for small businesses, financing SME operations by making available grants, loans and guarantees, and providing technical assistance to support innovation and R&D.

Although the set-up of a single implementing agency at the national level has helped streamline the provision of business support services, a rather complex and multi-layered network of subnational entrepreneurial support institutions is still in place, creating a cumbersome environment for businesses who have to navigate through it. The Entrepreneurial Infrastructure Improvement Act, in force since 2013, allows regional and local authorities to set up seven different types of institutions, including development agencies, entrepreneurship centres, business incubators, entrepreneurship accelerators, business parks, science and technological parks and competence centres. This has resulted in the establishment of more than 200 support institutions which are currently operating across Croatian regions.

In 2017, HAMAG-BICRO established a Network of Entrepreneurial Support Institutions ("BOND Network") with the aim to connect with subnational actors and ensure that the same quality of SME support services is provided across Croatia's regions. The Network members established an online educational platform, which allows them to communicate, exchange experiences, and undertake virtual trainings to improve the quality of their services. Up until 2022, more than 22 thematic workshops and seminars had been organised throughout Croatia, with the participation of more than 1100 representatives of entrepreneurial support institutions, who had the opportunity to learn about good practices in the delivery of SME support services. The network's activities will expand further in 2023 to include the standardisation of other areas of business support, such as internationalisation services, mentoring, and student entrepreneurship.

Source: OECD based on HAMAG-BICRO (2022[18])

Monitoring and evaluation of policy impacts

Policy evaluation practices are limited among government agencies responsible for FDI-SME policies

Evaluating the impact of public policy interventions on the domestic economy can help governments identify potential policy gaps and take corrective action to enhance their effectiveness. The adoption and use of monitoring and evaluation (M&E) frameworks by government institutions is particularly important for policy initiatives targeting FDI-SME ecosystems, which often require public action from across different policy areas and therefore enhanced scrutiny to ensure that policy action achieves the expected results.

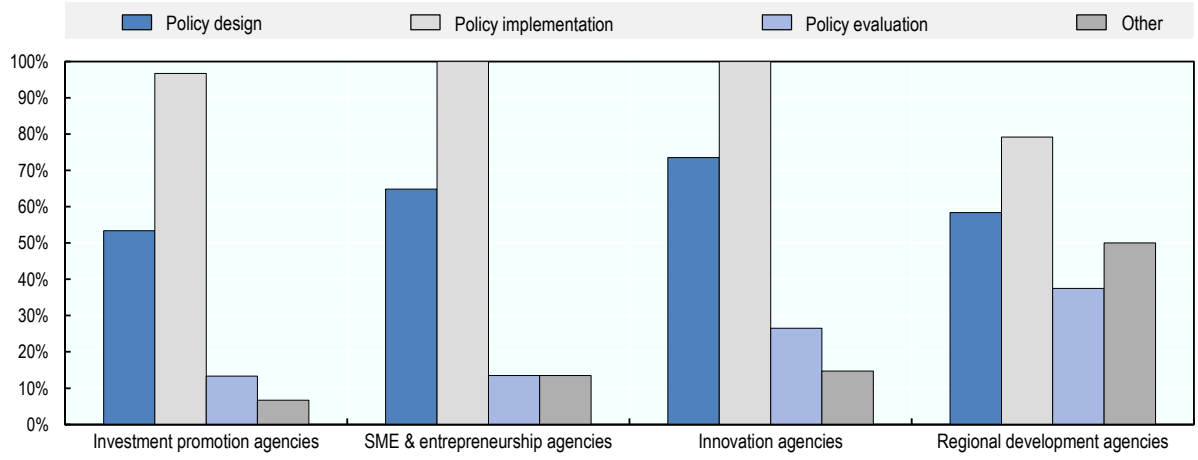
The survey reveals that government agencies responsible for FDI-SME policies identify policy implementation as being their primary activity (94%), followed by policy design (65%) and, to a much lesser extent, policy evaluation (20%). A few agencies (22%) respond that they undertake other types of activities such as administering financing instruments, providing technical assistance to public bodies and coordinating EU funds. These trends appear to be the same when looking at the core activities undertaken

across policy areas (Figure 4.12). Investment promotion, SME and innovation agencies regard themselves primarily as policy implementers rather than policy evaluators.

In contrast, regional development agencies undertake a more diverse set of activities, with 38% of them conducting policy monitoring and evaluations and 50% undertaking other activities such as offering financing solutions for local development projects or providing technical assistance to municipalities and regional authorities. These findings may be linked to the inter-linkages between regional policy and the administration of EU Structural and Investment Funds. In many EU Member States, government actors involved in the management of EU funds have to adopt comprehensive M&E frameworks to allow for the collection of data and the implementation of ex-ante and ex-post policy evaluations. In Portugal, for instance, the Agency for Development and Cohesion (AD&C), which is responsible for supporting the competitiveness of regions through territorial development programmes, is also responsible for coordinating the evaluation of policy initiatives financed by the EU funds. The agency has established a Monitoring and Evaluation Network (Rede M&A) to promote M&E activities and the exchange of good practices among public sector entities.

Figure 4.12. Core activities of implementing agencies responsible for FDI-SME policies, by core function

Share of implementing agencies



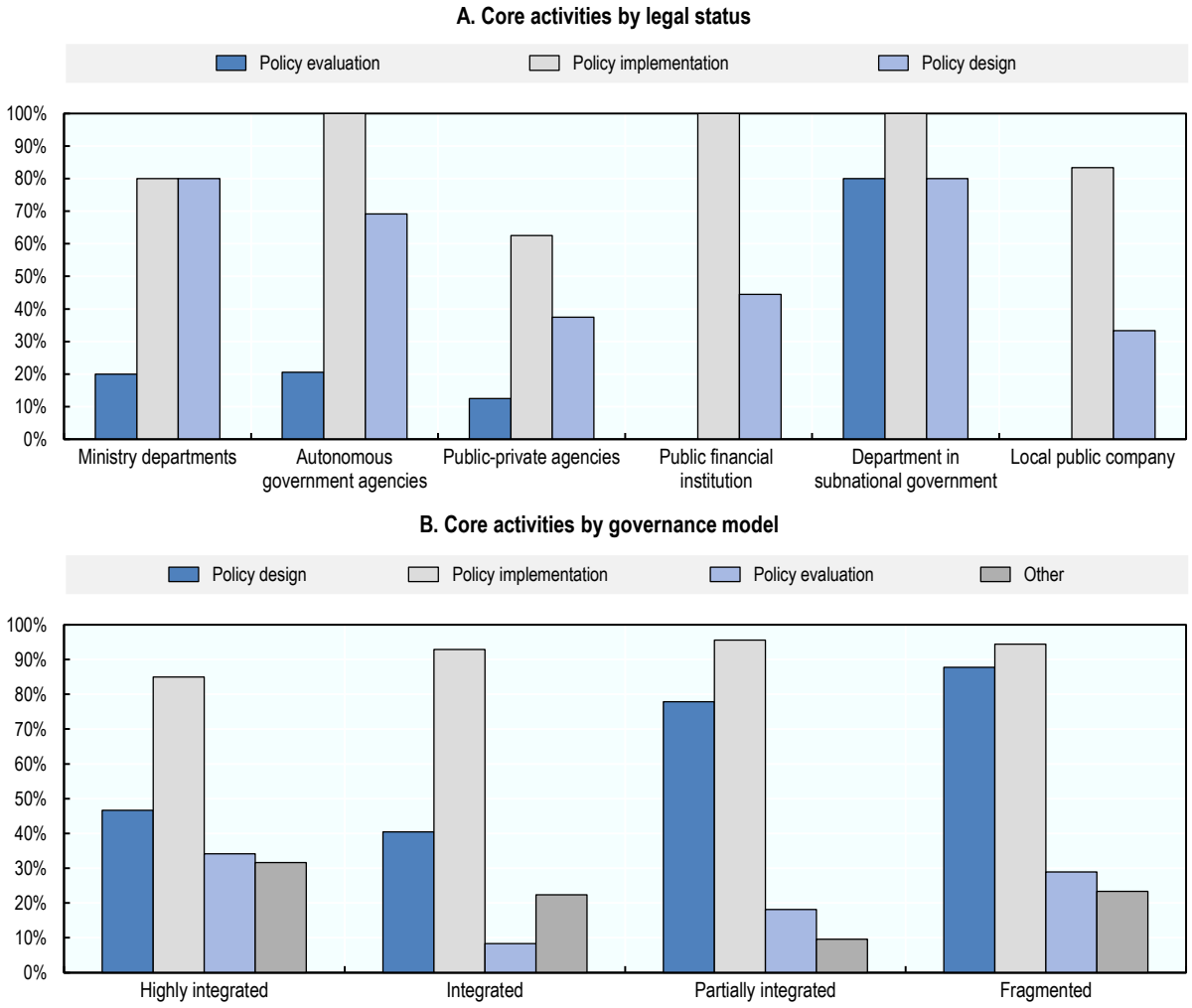
Source: EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

Undertaking policy evaluations does not appear to depend on the type of governance framework adopted by a country (Figure 4.13). However, there seems to be some variation when looking at the core activities of different legal entities. 80% of agencies that operate as part a subnational government undertake policy evaluations, while that share is 21% for autonomous agencies and 20% for agencies operating as part of a ministry.

Overall, the limited evaluation practices of agencies involved in FDI-SME policies are in line with evidence from other government institutions in EU Member States that implement policies linked to the EU's smart specialisation strategy. In a 2020 survey conducted by the EU's Joint Research Centre (JRC), half of the national and regional implementing authorities considered their capacity to collect and analyse data inadequate, with potential negative consequences on the process of policy learning and adaptation (Hegyi et al., 2021[19]). Previous OECD findings from OECD IPAs also show that OECD IPAs favour qualitative evaluation methodologies – such as benchmark comparisons (78% of IPAs), client surveys (75%), and stakeholder consultations (69%) – over quantitative ones (e.g. quality control assessments, cost benefit

analyses, and econometric assessments) (OECD, 2018[6]). The main challenge that most agencies have to overcome is the partial information and incomplete or ambiguous results that qualitative evaluations often provide. Qualitative tools should ideally be complemented by more quantitative and systematic approaches, whenever possible.

Figure 4.13. Core activities of implementing agencies by legal status and governance model



Note: Figure B presents the averages of agencies that perform a given activity within each governance model.
Source: EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

Box 4.4. IPAs' monitoring and evaluation practices: Evidence from the OECD IPAs Survey

The 2021 OECD Survey on Prioritisation and Monitoring & Evaluation of Investment Promotion Agencies provides a few interesting findings on the M&E practices of IPAs in the OECD area. Nearly three quarters of surveyed IPAs view M&E as a key factor that shapes their investment prioritisation strategies, which can influence the kind of investment that is attracted into the local economy.

Most IPAs prioritise certain types of investments over others. To select priority firms and guide their decision on whether to assist a particular investment project, IPAs rely on Key Performance Indicators (KPIs) related to outcomes. In particular, some KPIs aim to assess the contribution of a project to local development and sustainable growth. The most used KPIs in this respect are those relating to productivity and innovation (92%), 32% of which refer specifically to indicators on research and development (R&D), followed by those on quantity and quality of jobs (87%). Export (or trade balance) related metrics and KPIs related to low carbon transition are also used by about half of IPAs. Other sustainability- and inclusiveness KPIs are less frequently mentioned: KPIs related to digital transformation are reported to be used by 35% of IPAs and those on gender equality by 16% (albeit rarely concrete metrics are indicated).

Several IPAs have also developed internal sustainability scoring systems (e.g., Denmark, Finland, Germany, Sweden) that encompass several relevant factors. For example, the investment assessment model of Business Sweden considers factors relating to investment size (jobs and capital); innovation, skills, and technology content, including R&D; export opportunities for Swedish companies; and other factors (e.g., brand recognition).

Agencies differ strongly in the type of KPIs used for M&E. While some agencies put more attention on sustainability-related KPIs – such as Germany, Ireland, Finland, Denmark (located to the left on the graph), other IPAs – such as Greece, Japan, Slovenia, or Colombia (located to the right) – tend to rely predominantly, or exclusively, on metrics relating to the number and value of investment projects. Some IPAs – such as Latvia, the United Kingdom, or Italy – in turn, use output indicators to a larger extent, relating primarily to IPAs' activities, including the number of meetings, participants, inquiries, and visits, rather than outcome KPIs. On average, 39% of KPIs used for monitoring and evaluation by OECD IPAs relate to the number of projects; 25% to sustainability and inclusiveness; 16% to activities and processes, and 8% to investment value

Most OECD IPAs have not undergone econometric impact evaluations. Only 28% of OECD IPAs report to have undertaken econometric impact evaluations of their services, another 25% are currently in the process of preparing it or would like to undertake it in the future. This highlights the general interest in the subject as well as potential challenges. For example, lacking resources are an oft-quoted reason for not having undertaken the analysis thus-far. Several IPAs that either have undertaken, or are planning to undertake, such evaluations have done so by forging critical partnerships, including with the administrative bodies providing additional rich data, academia or international organisations.

Source: (Sztajerowska and Volpe Martincus, 2021[20])

Annex 4.A. List of mapped institutions in EU Member States

Country	Acronym	Official name
Austria	BMDW	Federal Ministry for Digital and Economic Affairs
	AWS	Austria Wirtschaftsservice Gesellschaft mbH
	BMK	Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology
	ABA	Austrian Business Agency - Invest in Austria
	FFG	Austrian Research Promotion Agency
Belgium	FPS Eco	Federal Public Service Economy
	FPS Fin	Federal Public Service Finance
	INNOVIRIS	INNOVIRIS
	Hub B	HUB.BRUSSELS
	VLAIO	Agency for Innovation and Entrepreneurship
	FIT	Flanders Investment and Trade
	AWEX	Wallonia Foreign Trade and Investment Agency
	SPW	Service Public de Wallonie Économie, Emploi, Recherche
Bulgaria	IBA	Invest Bulgaria Agency
	BSMEPA	Bulgarian Small and Medium Enterprises Promotion Agency
	SARI	State Agency for Research and Innovation
	MoE Bulgaria	Ministry of Economy and Industry
	MRDPW	Ministry of Regional Development and Public Works
Croatia	HAMAG-BICRO	Croatian Agency for SMEs, Innovations and Investments
	HBOR	Croatian Bank for Reconstruction and Development
	MINGOR	Ministry of Economy and Sustainable Development
	LIRA	Regional Development Agency of Lika-Senj County
	REDEA	Regional Development Agency of Međimurje
Cyprus	MECI	Ministry of Energy, Commerce, Industry and Tourism
	IC	Invest Cyprus
	RIF	Research and Innovation Foundation
Czech Republic	Czechinvest	Czechinvest
	CzechTrade	CzechTrade
	MRD	Ministry of Regional Development
	API	Business and Innovation Agency
	CMGDB	Czech-Moravian Guarantee and Development Bank
	TACR	Technology Agency of Czech Republic
Denmark	EM	Ministry of Industry, Business and Financial Affairs
	IDK	Invest in Denmark
	DBA	Danish Business Authority
	IFD	Innovation Fund Denmark
	UFM	Danish Agency for Higher Education and Science
	BRN	Business Region North Denmark
Estonia	EAS	Enterprise Estonia (Estonian Business and Innovation Agency)
	EIA	Estonian Investment Agency
	KredEx	KredEx Estonia
	MoI Estonia	Ministry of Interior
Finland	Business Finland	Business Finland
	MEAE	Ministry of Economic Affairs and Employment

	Finnvera	Finnvera
	Tesi	Tesi
	JOE	Business Joensuu Oy
	BusinessOulu	Business Oulu
	CursorOy	Cursor Oy
France	B France	Business France
	MESRI	Ministère de l'enseignement supérieur de la recherché et d'innovation
	BPI	BPI France
	FT	Mission French Tech
	ANCT	Agence Nationale de la Cohésion des Territoires
	AER-BFC	Regional Economic Agency of Bourgogne-Franche-Comté
	Team Côte d'Azur	Team Côte d'Azur
Germany	GTAI	Germany Trade and Invest
	SPRIND	Federal Agency for Disruptive Innovation
	BAFA	Federal Office for Economic Affairs and Export Control
	BMBF	Federal Ministry of Education and Research
	BMWi	Federal Ministry for Economic Affairs and Energy
Greece	EG	Enterprise Greece
	GSRT	Ministry of Development and Investments, General Secretariat for Research and Technology
	ELIDEK	Hellenic Foundation for Research and Innovation
	Eyde-Etak	Special Management and Implementation Authority for Research, Technological Development and Innovation Actions
	GGB	Ministry of Development and Investments, General Secretariat for Industry
Hungary	HIPA	Hungarian Investment Promotion Agency
	NKFIH	National Research, Development and Innovation Office
	HEPA	Hungary Export Promotion Agency
Ireland	EI	Enterprise Ireland
	SFI	Science Foundation Ireland
	IDA	IDA Ireland
	InterTrade	InterTrade Ireland
Italy	INVITALIA	INVITALIA
	ACT	Agency for Territorial Cohesion
	ICE	Italian Trade Agency
	ENEA	National Agency for New Technologies, Energy and Sustainable Economic Development
	MISE	Ministry of Economic Development
Latvia	VRAA	State Regional Development Agency
	LIAA	Investment and Development Agency
Lithuania	EL	Enterprise Lithuania
	LVPA	Lithuanian Business Support Agency
	IL	Invest Lithuania
	MITA	Agency for Science, Innovation and Technology
	INVEGA	INVEGA Lithuania
	MoI Lithuania	Ministry of the Interior (Department of Regional Development)
	Panevėžys City	Panevėžys City Municipality (Department of Investment)
Luxembourg	Luxinnovation	Luxinnovation
	LTI	Luxembourg Trade and Invest
	SNCI	Société Nationale de Crédit et d'Investissement
Malta	MCST	Malta Council for Science and Technology
	ME	Malta Enterprise
	GRDA	Gozo Regional Development Authority
Netherlands	MINEZK	Ministry of Economic Affairs and Climate Policy
	RVO	Netherlands Enterprise Agency
	NFIA	Netherlands Foreign Investment Agency
Poland	PAIH	Polish Investment and Trade Agency

	PARP	Polish Agency for Enterprise Development
	MDFRP	Ministry of Development Funds and Regional Policy
	NCBR	National Centre for Research and Development
	TARR	Torun Regional Development Agency
Portugal	AICEP	AICEP Portugal Global - Trade and Investment Agency
	ANI	National Innovation Agency
	IAPMEI	Agency for Competitiveness and Innovation
	AD&C	Agency for Cohesion and Development
	CCDR Alentejo	Regional Coordination and Development Commission of the Alentejo Region
	CCDR Norte	Regional Coordination and Development Commission of the Norte Region
Romania	IR	Invest Romania
	MEEMA	Ministry of Economy, Business Environment and Tourism
	UEFISCDI	Executive Agency for Higher Education, Research, Development and Innovation Funding
	MDLPA	Ministry of Regional Development and Public Administration
Slovakia	MoFA	POCE Business Centre, Ministry of Foreign Affairs
	MoE Slovakia	Ministry of Economy
	SBA	Slovak Business Agency
	MoIRDI	Ministry of Investment, Regional Development and Informatisation
	SRDA	Slovak Research and Development Agency
	RA	Research Agency
	SARIO	Slovak Investment and Trade Development Agency
	SIEA	Slovak Innovation and Energy Agency
	BBSK	Development Agency of the Banska Bystrica Region
Slovenia	SPIRIT	SPIRIT Slovenia
	MEDT	Ministry of Economic Development and Technology
	RC-NM	Development Centre Novo Mesto ltd
	RRA-Podravje	Maribor Development Agency
	RRA-Posavje	Regional Development Agency of Posavje
	RRC-KP	Regional Development Centre of Koper
Spain	CDTI	Centre for Industrial Technological Development
	ENISA	Empresa Nacional de Innovación
	ICEX	ICEX – Spain Trade and Investment
	RED	RED Spain
Sweden	SAFEARG	Swedish Agency for Economic and Regional Growth
	VINNOVA	Sweden Innovation Agency
	BS	Business Sweden
	BRG	Business Region Göteborg
	RV	Region Västerbotten

Source: EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

References

BMWK (2022), *Regional policy in Germany*, http://www.bmwk.de/Redaktion/EN/Dossier/regional-policy.html. [12]

Business Finland (2021), *Social Responsibility Report 2021*, https://www.businessfinland.fi/498c2c/globalassets/julkaisut/business-finland-yhteiskuntavastuuraportti-eng-2021.pdf. [17]

Commission, E. (ed.) (2023), *The EU's investment policy*, https://policy.trade.ec.europa.eu/help-exporters-and-importers/accessing-markets/investment_en (accessed on 15 January 2023). [3]

CoR (2019), *EU policy framework on SMEs: state of play and challenges*, European Union, https://cor.europa.eu/en/engage/studies/Documents/EU-SMEs/EU-policy-SMEs.pdf. [1]

EC (2023), *State Aid Overview*, https://competition-policy.ec.europa.eu/state-aid/state-aid-overview_en (accessed on 16 January 2023). [4]

EC (2016), *Think Small First - A Small Business Act for Europe*, https://eur-lex.europa.eu/EN/legal-content/summary/a-small-business-act-for-european-smes.html. [2]

HAMAG-BICRO (2022), *BOND (Business Organisations Network Development)*, https://en.hamagbicro.hr/supporting-business-development/bond/ (accessed on 2 October 2022). [18]

Hegyi, F. et al. (2021), *The Smart Specialisation Policy Experience: Perspective of National and Regional Authorities*, Publications Office of the European Union. [19]

NFIA (2022), *Invest in Holland Network*, https://investinholland.com/how-we-help/invest-in-holland-network/. [15]

OECD (2022), *Strengthening FDI and SME Linkages in Portugal*, OECD Publishing, Paris, https://doi.org/10.1787/d718823d-en. [7]

OECD (2022), *Strengthening FDI and SME Linkages in the Slovak Republic*, OECD Publishing, Paris, https://doi.org/10.1787/972046f5-en. [5]

OECD (2020), "Building resilience to the Covid-19 pandemic: the role of centres of government", *OECD Policy Responses to Coronavirus (COVID-19)*, OECD Publishing, Paris, https://doi.org/10.1787/883d2961-en. [14]

OECD (2019), *Latvia - Good institutional practices in promoting policy coherence for sustainable development*, https://www.oecd.org/governance/pcsd/toolkit/goodpractices/. [13]

OECD (2019), *Regional Development Policy in Hungary*, http://www.oecd.org/cfe/_Hungary.pdf. [10]

OECD (2019), *Regional Development Policy in Spain*, http://www.oecd.org/cfe/_Spain.pdf. [11]

OECD (2019), *Regional Development Policy in the Netherlands*, http://www.oecd.org/cfe/_The%20Netherlands.pdf. [9]

OECD (2018), *Mapping of Investment Promotion Agencies in OECD Countries*, http://www.oecd.org/investment/Mapping-of-Investment-Promotion-Agencies-in-OECD-Countries.pdf. [6]

OECD (2017), *Making Decentralisation Work in Chile: Towards Stronger Municipalities*, OECD Multi-level Governance Studies, OECD Publishing, Paris, https://doi.org/10.1787/9789264279049-en. [8]

OECD (2017), *Skills for a High Performing Civil Service*, OECD Public Governance Reviews, OECD Publishing, Paris, https://doi.org/10.1787/9789264280724-en. [16]

Sztajerowska, M. and C. Volpe Martincus (2021), *Together or apart: investment promotion agencies' prioritisation and monitoring and evaluation for sustainable investment promotion*, http://www.oecd.org/daf/inv/investment-policy/Investment-Insights-Investment-Promotion-Prioritisation-OECD.pdf. [20]

Notes

[1] The Enterprise Europe Network is a one-stop-shop for SMEs providing access to market information, legal advice and potential business partners across Europe.

[2] Note by Türkiye: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Türkiye recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Türkiye shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Türkiye. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

5 The policy mix for strengthening FDI-SME linkages and spillovers

This chapter reviews the mix of policies that is in place to foster FDI-SME linkages across the 27 EU Member States. It presents the national policy frameworks that support FDI-SME diffusion channels and enabling conditions, and the policy instruments used to strengthen productivity spillovers from foreign investors to domestic SMEs. It also examines various aspects of policy making, such as targeting towards different types of firms, sectors, value chains or regions, and coordination and monitoring.

Introduction

Policies for strengthening linkages between foreign direct investment (FDI) and small and medium-sized enterprises (SMEs), and for improving the scope and quality of productivity and innovation spillovers to local economy, herein referred to as FDI-SME policies, cover public action for attracting and retaining international investment, fostering SME performance and entrepreneurship, promoting innovation and supporting regional development. Public intervention can span across multiple policy domains and take many forms as it addresses deficiencies in different diffusion channels (i.e. value chain linkages, strategic partnerships, labour mobility, and competition effects), different enabling conditions (e.g. FDI characteristics, or the absorptive capacity of local SMEs) and different contexts (e.g. structural, economic and geographical characteristics of the place/region/country) (see Policy mapping methodology for a brief overview on the methodology and Chapter 1 for more detailed elaboration).

This chapter aims to better understand how the FDI-SME policy mix is shaped in the EU area, the intensity of public efforts in different policy areas, what priority is given to different strategic policy objectives and policy instruments, and how targeted or generic country approaches could be. The analysis relies on a pilot mapping of 626 national policies implemented across the 27 EU countries to promote quality FDI, improve SME absorptive capacity and reinforce the linkages and opportunities of spillovers between both (Policy mapping methodology). The mapping was conducted between January and September 2021 through desk research, and information was consolidated through the EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages, an online consultation of the implementing institutions. The pilot mapping will be further developed and consolidated during the second phase of the project (2022-24), with similar consultation of the national implementing institutions. Box 5.1 recalls the main methodological limitations of the exercise and how they can affect interpretation and results.

Box 5.1. Mapping the FDI-SME policy mix across the EU: methodological limitations

A first challenge in policy mapping is to define the scope under analysis and identify the relevant initiatives and components in the policy mix. How the exercise is designed can determine the strategic orientations of the mix, its instrumentalisation, its governance, and shifts over time (Meissner and Kergroach, 2019[1]). Potential distortions are higher when the number of measures identified are small. In addition, the number of initiatives in place can be highly variable across countries, depending on the size of the country and the capacity of its public administration, the intensity of the policy interest given, or the maturity of the policy field and the likelihood of initiatives having piled up over time (OECD, 2022[2]). In practical terms, EU totals, as the sum of all EU countries' initiatives, could give a disproportionate weight to the countries with the more "prolix" (Guy et al., 2009[3]) or dense (Meissner and Kergroach, 2019[1]) policy mixes. In other words, countries with a larger number of initiatives (observations) tend to get more weight in aggregate measures. To mitigate this effect, the EU aggregates presented throughout this Chapter are calculated as "average of national averages".

A second challenge for policy mapping and impact assessment arises from the question of quantifying policy initiatives (Meissner and Kergroach, 2019[1]). A simple counting presents the advantage to be easy to understand – albeit not necessarily easy to implement or to interpret – and the counting could be discriminated by policy area, instrument, target population, sectors etc. Policy initiatives could also be accounted in terms of input (e.g. public budget allocated), output (e.g. new strategic partnerships between foreign affiliates and local SMEs) and outcome (e.g. net job creation). The lack of data at disaggregated level, i.e. at the level of the policy initiative, is a clear limitation in this statistical approach. The number of FDI-SME policy initiatives in place is therefore a partial measure of the intensity of a country's effort in a given area, and other parameters matter.

Overall orientation of the FDI-SME policy mix in EU countries

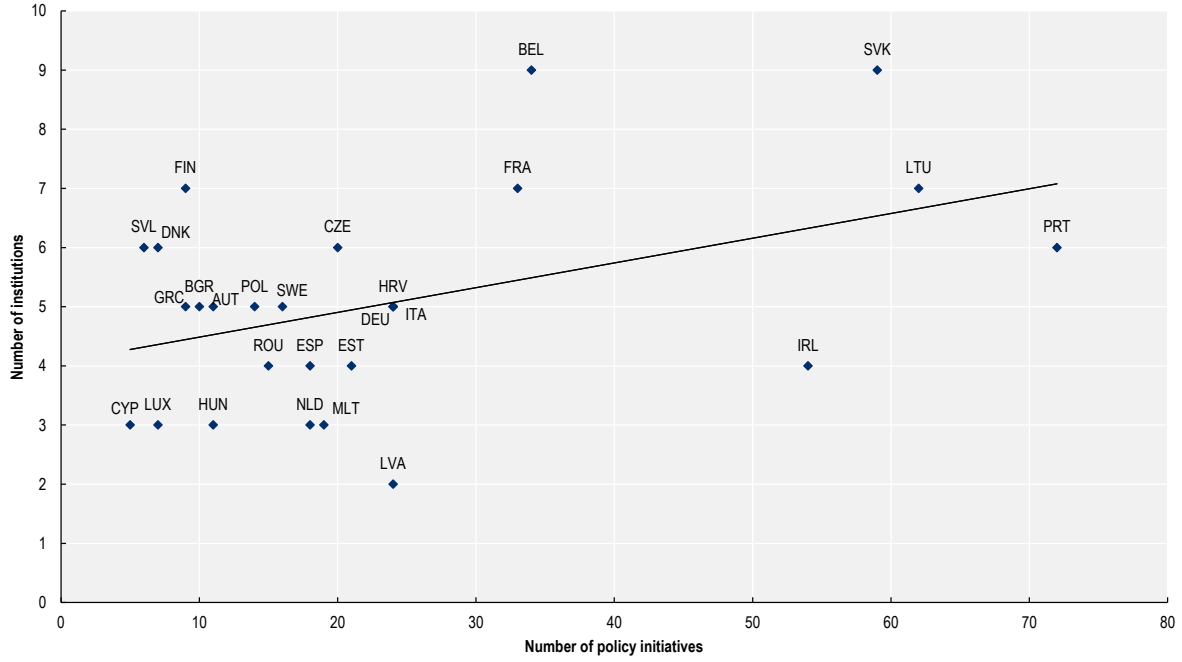
The overall orientation of the FDI-SME policy mix in EU countries refers to the broad direction(s) policy action can take and reflect the policy intentions and strategic objectives pursued in the field. They are derived from the rationales for policy intervention (e.g. market, system or governance failures) that emerge in the policy areas under study (i.e. investment, SME and entrepreneurship, innovation and regional development), some diagnostics of the state of the FDI-SME ecosystem and a vision of its future (Meissner and Kergroach, 2019[1]).

All countries have FDI-SME initiatives in place

All governments have policy initiatives in place that aim to contribute – directly or indirectly – to enhancing FDI-SME linkages and spillovers. However, there is considerable cross-country variation in the number of these initiatives. This spreads from less than ten measures in Finland or Greece, to more than six times as many in Lithuania (62) and Portugal (72). Such variation does not seem to be related to the size of the countries (e.g. larger or smaller population, or larger or smaller GDP), while the number of measures appears to increase with the number of institutions involved (Figure 5.1). This finding is in line with those of the EC/OECD project on "Unleashing SME Potential to Scale up", that was carried out in 2021 with a mapping of the policies for SME access to growth finance (OECD, 2022[2]). By the way, the number of policy initiatives in place is only a partial measure of the intensity of a country's efforts in a given area – other parameters related to the size, breadth and scope of policies could be considered (e.g. the budget allocated or the number of beneficiaries) (Policy mapping methodology; Box 5.1).

Figure 5.1. The number of FDI-SME policy initiatives in place increases with the number of institutions involved

Number of FDI-SME policy initiatives in place and number of institutions involved



Note: For countries with few initiatives (observations), interpretation of indicators should be done with caution.
Source: EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

Countries often focus on enabling conditions, especially improving SME absorptive capacity…

Across EU countries, as per the number of measures in place, efforts often focus on enabling conditions for FDI spillovers to domestic SMEs and less on strengthening the diffusion channels themselves (Figure 5.2). More specifically, the FDI-SME policy mix of EU Member States is mainly oriented towards increasing the absorptive capacity of SMEs. On average across the area, 63% of the measures are aimed at improving SME performance, and 17% at attracting productivity-enhancing FDI or 11% at creating agglomeration economies (Table 5.1).

Policies for enhancing SME performance essentially aim to improve their access to and use of strategic resources, such as finance, skills and innovation assets (OECD, 2019[4]; OECD, 2021[5]). Policies for enhancing the potential impact of international investment on local productivity and innovation aim to attract or retain with potential to create linkages with and spillovers to the host economy, such as greenfield and tech- or innovation-intensive investment. Other enabling conditions are related to economy geography. Regional inequalities may affect FDI-SME linkages and the performance of FDI-SME ecosystems, with reduced attractiveness of less developed places to foreign investors and more constrained capacity of the local businesses to capture innovation spillovers. Policies addressing economic geography factors aim to promote agglomeration and industrial clustering (Chapter 1).

… and less often on strengthening FDI-SME linkages and diffusion channels themselves

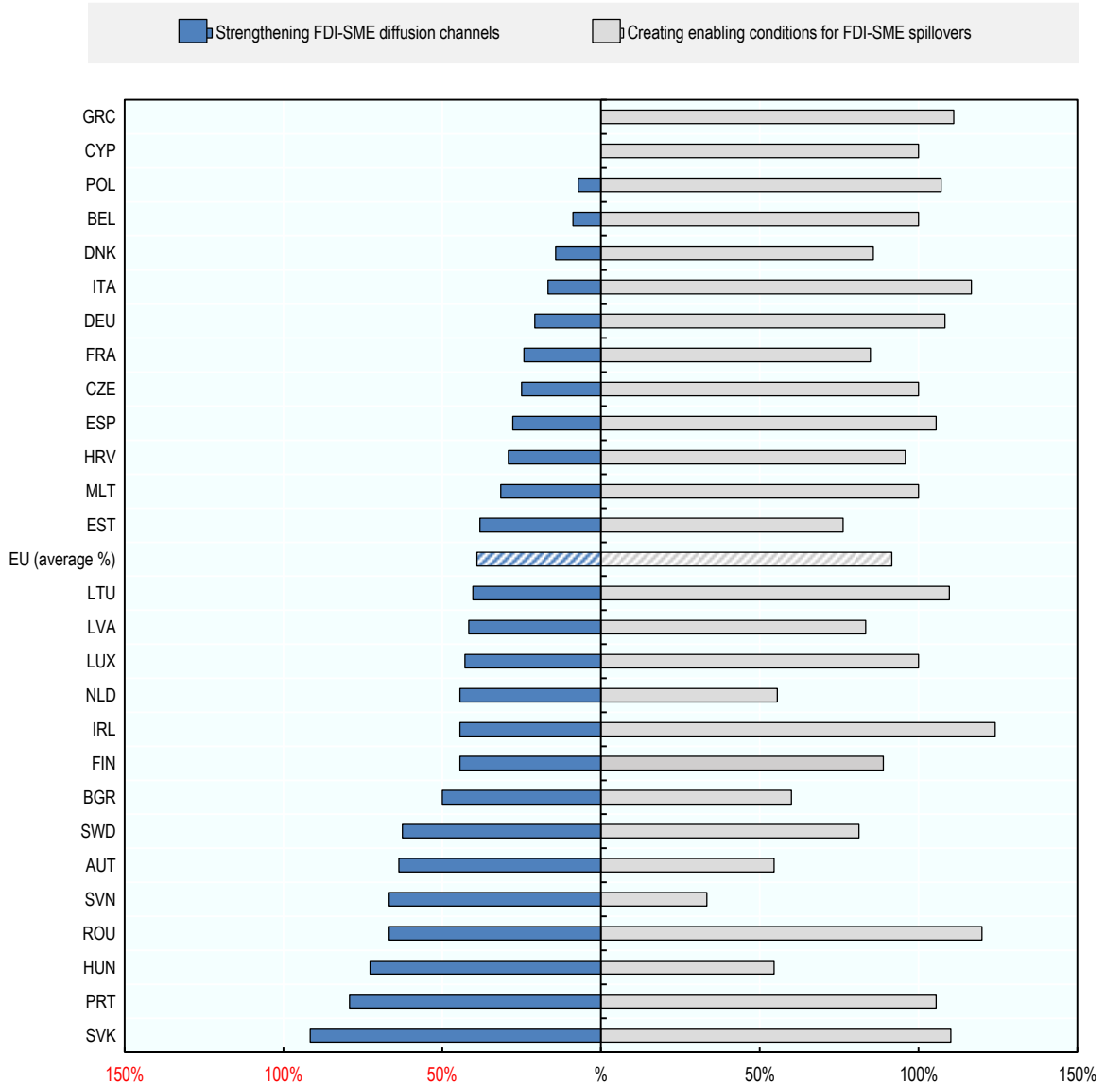
When it turns to developing the FDI-SME spillovers channels, 19% of the measures intend to strengthen value chain linkages between SMEs and foreign affiliates (FAs) and 13% to develop strategic partnerships (Table 5.1). Only a small number of measures address the issues of labour mobility and competition (accounting for 3 and 4% of mapped policies each). This analysis does not imply less policy relevance in the areas where less measures are taken, and methodological limitations should be kept in mind in interpretation (Box 5.1). The density of the policy mix could also reflect the multidimensional dynamics at play in creating the framework conditions for FDI-SME spillovers, and the need to address this complexity through a broader range of measures.

Attracting productivity-enhancing FDI has received more attention in Cyprus[1] (60%), Denmark (43%), Ireland (41%) and Romania (40%) than in other EU countries (17%). Some countries put also stronger emphasis on the economy geography dimension. In Italy (33%), Poland (29%), Romania (27%), Lithuania (26%), the Czech Republic and the Slovak Republic (25% each) more than twice as many efforts are placed on promoting agglomeration economies and clustering than in the EU on average (11%).

A number of factors can explain these variations, including country-specific characteristics, national industrial structure and specialisation, the degree of regional inequality, and the geographical distribution of business and investment activities across the territory, or the policy strategy for promoting investment, SME and entrepreneurship, innovation and regional development.

Figure 5.2. Countries are more active for enabling a spillovers environment than for strengthening the spillovers diffusion channels themselves

FDI-SME policy initiatives by main strategic objective, as a percentage of total FDI-SME policies mapped, national level, 2021



Note: Relative percentage of policy initiatives aiming to create enabling conditions for FDI spillovers to domestic SMEs versus those targeting the diffusion channels of spillovers. Shares are calculated as a % of the total of national initiatives in place, based on an unweighted count. For countries with few initiatives (observations), interpretation of indicators should be done with caution. Shares may be higher than 100% when policy initiatives respond to several policy objectives at the same time. EU (average %): average of the national shares of the 27 EU countries. For a typology and definition of "enabling conditions" and "diffusion channels" of FDI spillovers, please refer to the Policy mapping methodology and Chapter 1 of this report.

Source: Experimental indicators based on EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

Table 5.1. The EU FDI-SME policy mix are mostly oriented towards increasing the absorptive capacity of SMEs

Distribution of FDI-SME policy initiatives by objective, as a percentage in terms of prevalence across all policies mapped by country, 2021

	Diffusion channels				Enabling conditions			
Country	Value chain linkages	Strategic partnerships	Labour mobility	Competition and imitation effect	FDI spillover potential	SMEs absorptive capacity	Economic geography factors	# policy initiatives
Austria	18%	45%	0%	0%	0%	55%	0%	11
Belgium	3%	3%	3%	0%	3%	88%	9%	34
Bulgaria	40%	10%	0%	0%	20%	30%	10%	10
Croatia	21%	8%	0%	0%	25%	71%	0%	24
Cyprus	0%	0%	0%	0%	60%	40%	0%	5
Czech Republic	20%	5%	0%	0%	15%	60%	25%	20
Denmark	0%	0%	14%	0%	43%	43%	0%	7
Estonia	19%	10%	5%	5%	0%	62%	14%	21
Finland	33%	0%	11%	0%	0%	89%	0%	9
France	12%	6%	6%	0%	6%	70%	9%	33
Germany	8%	13%	0%	0%	13%	88%	8%	24
Greece	0%	0%	0%	0%	33%	67%	11%	9
Hungary	45%	9%	9%	9%	0%	55%	0%	11
Ireland	19%	15%	2%	9%	41%	65%	19%	54
Italy	8%	0%	8%	0%	25%	58%	33%	24
Latvia	21%	17%	4%	0%	8%	67%	8%	24
Lithuania	16%	15%	2%	8%	32%	52%	26%	62
Luxembourg	29%	14%	0%	0%	14%	86%	0%	7
Malta	5%	16%	11%	0%	0%	95%	5%	19
Netherlands	44%	0%	0%	0%	0%	56%	0%	18
Poland	7%	0%	0%	0%	7%	71%	29%	14
Portugal	26%	36%	3%	14%	31%	60%	15%	72
Romania	13%	33%	20%	0%	40%	53%	27%	15
Slovak Republic	27%	41%	12%	12%	22%	63%	25%	59
Slovenia	50%	0%	0%	17%	0%	17%	17%	6
Spain	11%	11%	6%	0%	28%	72%	6%	18
Sweden	19%	38%	6%	0%	0%	75%	6%	16
EU (average %)	**19%**	**13%**	**4%**	**3%**	**17%**	**63%**	**11%**	**626**

Note: Shares are calculated as a percentage of the total of national initiatives in place, based on an unweighted count. Shares may be higher than 100% when policy initiatives aim to address several policy objectives at the same time. For countries with few initiatives (observations), interpretation of indicators should be done with caution. EU (average %): average of the national shares of the 27 EU countries.
Source: Experimental indicators based on EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

Design of the FDI-SME policy mix across EU Member States: instrumentalisation and targeting

Public action to foster FDI spillovers on domestic SMEs is delivered through a broad set of policy instruments. These are defined as identifiable techniques for public action and the means for achieving the goals they are designed for (Lemarchand, 2016[6]), and spread from technical (non-financial) to financial support, from networking assistance to infrastructure and platform facilities, from regulatory easing to new governance frameworks such as national strategies/plans or institutional arrangements (Policy mapping methodology). The instrumentalisation reflects the many possible policy goals pursued, contexts shaping the potential of FDI-SME spillovers, and pathways towards achieving better FDI-SME policy. Instruments, and how they are combined, are therefore often very specific to the objectives they serve. The selection of instruments also reflects national policy styles and some policy legacy (Borrás and

Edquist, 2013[7]). For instance, some instruments, particularly the financial ones, can dominate others for no other reason than they have been important in the past and have attracted around them vested interests that protect their position.

Greater focus on SME capacities is reflected into a more frequent use of financial incentives and technical assistance

EU countries use mainly financial support (57% of all mapped initiatives), and technical assistance and facilitation services (31%), to strengthen FDI spillovers on domestic SMEs (Table 5.2). Financial instruments include grants, loans, tax credits and other forms of direct or indirect funding. Technical assistance, information provision and facilitation services include a wide range of business support measures and services (e.g. consulting, diagnostic, information, matchmaking and networking, training and skills upgrading, incubation, etc.).

However, the density of financial schemes for FDI-SME spillovers may vary across countries, from over 90% of the country's policy mix in Malta (95%) and Germany (92%), to 30% or less in Bulgaria (30%), France (30%) or Cyprus (20%). Likewise, there is a large variation in the density of technical assistance measures implemented across EU countries, from 83% in Slovenia to less than 10% in Croatia (8%) or Germany (8%), the Netherlands (6%) or Malta (0%). The effectiveness of technical support instruments may also vary, e.g. depending on the number of institutions involved in implementation, and the degree of policy fragmentation (Chapter 2).

Table 5.2. Distribution of FDI-SME policy instruments across policy initiatives: An overview

As a percentage in terms of prevalence across all policies mapped by country, 2021

Country	Policy instruments					# policy initiatives
	Network and collaboration platforms and infrastructure	Technical assistance, information & facilitation services	Financial support schemes	Regulatory measures	Governance frameworks	
Austria	9%	27%	55%	9%	9%	11
Belgium	0%	18%	82%	3%	0%	34
Bulgaria	0%	70%	30%	10%	10%	10
Croatia	0%	8%	79%	4%	8%	24
Cyprus	0%	60%	20%	0%	20%	5
Czech Republic	0%	45%	55%	5%	5%	20
Denmark	0%	29%	0%	14%	57%	7
Estonia	14%	19%	57%	0%	10%	21
Finland	0%	22%	78%	11%	0%	9
France	3%	55%	30%	9%	6%	33
Germany	0%	8%	92%	0%	4%	24
Greece	0%	22%	44%	22%	11%	9
Hungary	0%	45%	55%	0%	0%	11
Ireland	9%	28%	50%	4%	19%	54
Italy	0%	25%	58%	13%	13%	24
Latvia	4%	21%	88%	0%	0%	24
Lithuania	24%	29%	56%	5%	8%	62
Luxembourg	0%	57%	43%	0%	0%	7
Malta	0%	0%	95%	0%	5%	19
Netherlands	0%	6%	89%	0%	6%	18
Poland	7%	21%	50%	0%	21%	14
Portugal	7%	31%	42%	11%	15%	72
Romania	20%	13%	80%	0%	0%	15
Slovak Republic	10%	39%	44%	3%	15%	59
Slovenia	0%	83%	33%	0%	0%	6
Spain	0%	33%	67%	6%	6%	18
Sweden	6%	25%	75%	0%	0%	16
EU (average %)	**4%**	**31%**	**57%**	**5%**	**9%**	**626**

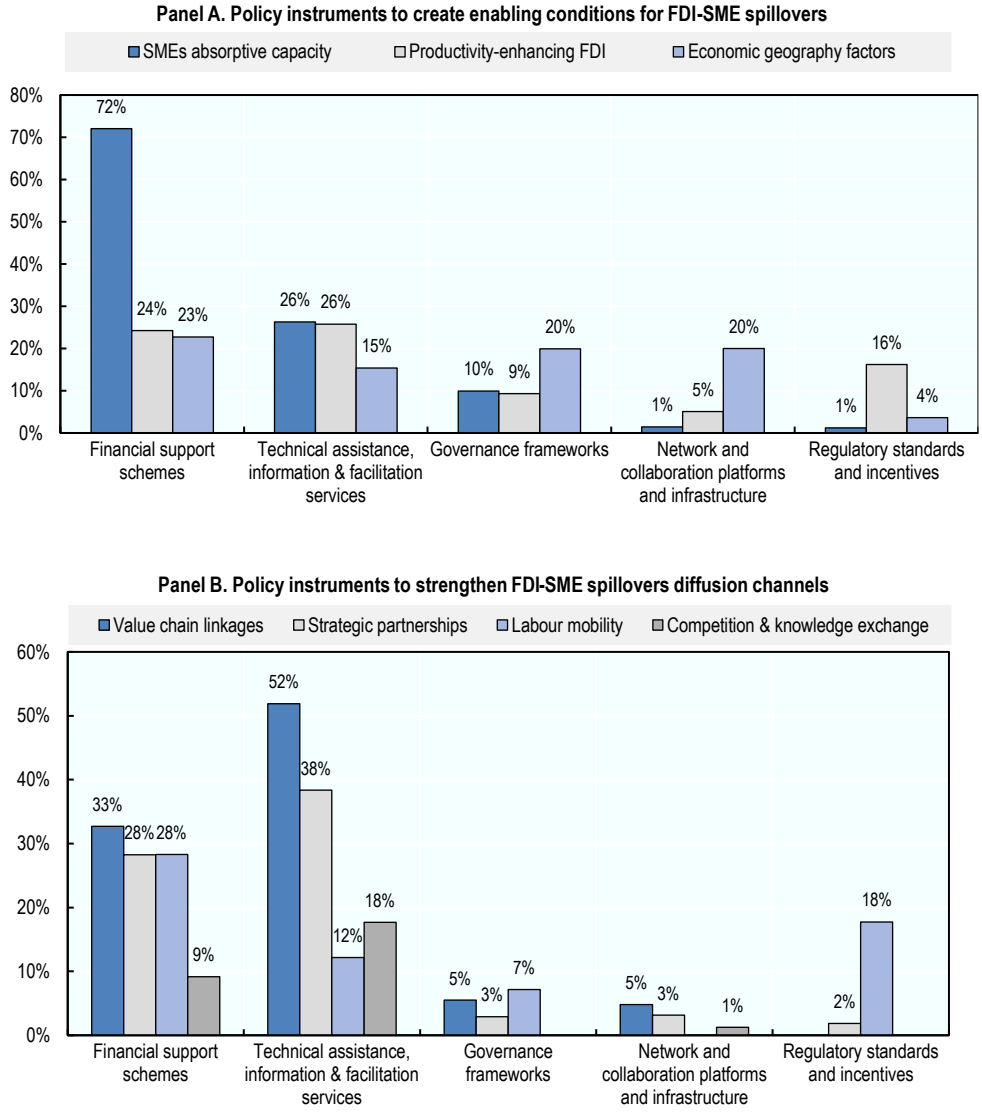
Note: Shares are calculated as a percentage of the total of national initiatives in place, based on an unweighted count. Shares may be higher than 100% when policy initiatives make use of several instruments at the same time. For countries with few initiatives (observations), interpretation of indicators should be done with caution. EU (average %): average of the national shares of the 27 EU countries.
Source: EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

Policy instruments vary depending on the objectives they serve

Most policies aiming to scale up the absorptive capacity of SMEs make use of financial instruments (72%), and to a lesser extent from non-financial support, in the form of technical assistance, the provision of information, or facilitation services (26%) (Figure 5.3; Box 5.2). Broader governance arrangements, such as national strategies and plans, or regulatory provisions and networking platforms are less widespread.

Figure 5.3. Policy instruments vary depending on the objectives they serve

Policy initiatives by type of instruments, as a percentage of all EU initiatives addressing each specific objective



Note: For countries with few initiatives (observations), interpretation of indicators should be done with caution. Shares may be higher than 100% when policy initiatives make address several policy objectives at the same time.
Source: Experimental indicators based on EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

Box 5.2. Increasing SME absorptive capacity: country examples.

Providing direct financial support is the most common approach…

EU governments propose direct forms of funding through grants, loans or vouchers, to support SME activities in R&D and innovation (Annex 5.A). In the Brussels Capital Region (Belgium), the R&D and innovation agency Innoviris supports with grants or repayable advances business R&D projects aiming to develop, complete or implement an innovative product, process or service. Bpifrance provides SMEs with guarantees to facilitate their access to bank credit in the riskier phases of their financing cycle; while the German Federal Ministry for Economic Affairs and Climate Action (BMWK) runs a *Micro-loan Fund* to address the financing needs of smaller businesses, start-ups and self-employed pursuing creative ventures, and that would otherwise have no access to credit.

Many EU funding schemes for business R&D and innovation are designed to encourage science-to-business (S2B) and business-to-business (B2B) collaboration, including with foreign firms, reflecting the importance of networks for raising the innovation capacity of SMEs (Chapter 2; Box 5.5). Innovation voucher programmes such as those implemented by the Austrian Research Promotion Agency (FFG) or Enterprise Ireland (EI), allow SMEs to purchase academic support and expertise and build linkages with knowledge institutions.

EU governments also support financially the digital transformation of SMEs as a key lever of SME performance (OECD, 2022[2]). The Austrian *SME.DIGITAL* programme provides comprehensive support for SMEs implementing digitalisation projects, including both consulting services and direct funding for investments in new technologies and digitalisation.

… often combined with non-financial support

Financial support measures are often combined with business consulting and training programmes for enhancing SME internal capacity and supporting organisational change. The Bulgarian SMEs promotion agency BSMEPA delivers training and tailored consulting services on entrepreneurship, innovation and internationalisation to domestic SMEs, both at its national headquarters in Sofia and through its regional offices. Given the importance of human capital for SMEs innovation, training and consulting programmes often focus on enhancing managers' skills. It is the case of the Enterprise Ireland (EI)'s Innovation 4 Growth programme, which proposes educational modules, coaching and peer-learning opportunities to chief executive officers (CEOs) and senior managers, in order to strengthen their innovation culture and openness to new business models and practices. Similarly, the Investment and Development Agency of Latvia (LIAA), in collaboration with the Riga Technical University and Business School, launched a pilot Mini MBA training programme for improving the knowledge and practical skills of middle and senior managers in charge of business innovation and development processes.

Source: OECD Data Lake on SMEs and Entrepreneurship 2022, based on EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

Attracting FDI in productivity-enhancing activities typically involves a more diversified set of instruments, and relies relatively more on non-financial support (26% of all related measures) and investment incentive packages combining financial (24%) and regulatory measures (16%) (e.g. fast-track licensing regimes, other regulatory and administrative easing for FDI) (Figure 5.3).

Box 5.3. Attracting and facilitating knowledge-intensive and productivity-enhancing FDI: country examples

Public services for embedding FDI in the host economy are widely proposed

Many governments provide potential investors with information on local investment opportunities, knowledge infrastructure and SMEs capabilities. Investment promotion agencies (IPAs) across the EU area play a key role in delivering this type of FDI-targeted consulting and information services. In both the Slovak Republic and the Czech Republic, the national IPAs (SARIO and Czechinvest respectively) run real estate databases that facilitate the identification of suitable FDI sites (e.g. building, land, tourism or industrial facilities). Upon request, Germany Trade & Invest (GTAI) provides prospective investors with tailored information and consultancy services, including intelligence gathering (e.g. market research, business opportunity analysis); investment site selection and evaluation; and administrative support (e.g. assistance with tax and regulatory issues).

Another common approach consists in facilitating matchmaking between foreign investors and local partners. The Portuguese programme *Startups Connecting Links* aims to connect domestic start-ups in specific sectors or activities with foreign multinationals (MNEs), with a twofold objective: promoting collaboration between foreign and domestic businesses and favouring the entry of MNEs into the Portuguese market through mergers and acquisitions (M&A). The Spanish *Investor Network*, implemented through the ICEX network of Economic and Commercial Offices abroad, aims to connect international investors with the domestic business fabric and facilitate contact between Spanish companies looking for capital and foreign investors.

Many countries propose investment incentive packages combining financial and regulatory measures

Investment incentives include both financial support aimed at reducing investment costs (such as grant schemes and tax incentives) and regulatory incentives (such as faster licensing procedures for knowledge-intensive projects). In many cases, support is conditional to investing in strategic sectors or activities. Under the Bulgarian *Investment Promotion Act*, investment in manufacturing, high-tech activities, education and human resources development may qualify for customised administrative support, fast track, assistance with real estate acquisition and financial aid for infrastructure development and staff related costs. The Lithuanian government adopted the *Green Corridor for Large-Scale Investment Projects*, a package of laws on investment facilitation which offers tax incentives and cut red tape for large scale strategic investment projects in manufacturing, data processing, and internet server hosting services. Investment incentives may also be place-based. Diverse EU countries have Special Economic Zones (SEZs), including Italy, Latvia, Lithuania, Portugal and Romania. These schemes typically offer different types of incentives (e.g. tax relief, regulatory and administrative easing) to investment projects targeting selected sub-national areas or regions.

Source: EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

Network and collaboration platforms and infrastructure are more frequently deployed (20%) to create agglomeration economies and support clustering. These objectives are also commonly supported through financial instruments and dedicated government arrangements (Figure 5.3) (Box 5.4).

Box 5.4. Enhancing agglomeration economies and clusters: country examples

Public infrastructure such as networking and collaboration platforms supports agglomeration

Local platforms or infrastructure, such as industrial, science and technology parks, or Special Economic Zones (SEZs) facilitate agglomeration by promoting connectivity and exchanges among local stakeholders. They can benefit both foreign and domestic firms, providing land or office space to set up activities and diverse kinds of support to their business operation (e.g. tax incentives). In Latvia there are three SEZs (Liepaja, Latgale, Rezekne) and two free ports (Riga and Ventspils) offering benefits and a favourable tax regime to companies operating locally, including foreign investors. Lithuania has seven Free Economic Zones and five industrial parks across the country, providing physical and/or legal infrastructure, support services and tax incentives for business establishment and operations. In Romania, there are 104 industrial parks (operational or under development) which offer to their resident firms diverse utilities and benefits (e.g. land, building and urban planning tax exemption).

Cluster policy initiatives make a large part of the policy mix

Public support to clusters can take many forms, depending on the stage of development of the host country or region and the level of maturity of the cluster itself. Policies typically feature a combination of financial incentives and technical assistance to incentivise companies to group together or support emerging bottom-up agglomerations. Infrastructure and facilities may also be established to enhance B2B and S2B interactions. The Enterprise Ireland's *Regional Technology Cluster Fund* offer financial support to increase the number of clustering companies in Ireland and enhance collaboration between firms and regional knowledge providers, such as Ireland's Institutes of Technology (IoTs) and technical universities. The Swedish Agency for Regional and Economic Growth also runs a *Cluster Programme* to support selected cluster organizations that are prioritised in regional smart specialisation or development strategies. The adoption of whole-of-government approaches involving several implementing institutions and engagement with local actors is a recurrent characteristic of cluster policies across the EU area.

Financial incentives are provided for developing activities in lagging regions

Many government programmes seek to enhance entrepreneurship and investment in lagging regions through the provision of direct financial support. These include the German *Cash Incentives Programme (GRW)*, implemented by the Federal Ministry for Economic Affairs and Climate Action (BMWK), which provides grants to incentivise investment in eligible German regions. The Italian *Resto al Sud* programme provides non-repayable grants and credit guarantees to cover the costs of establishing a new business in lagging Southern and Central regions, Sardinia, Sicily and the smaller islands in the North and Centre. In Malta, the *Gozo Transport Grant Scheme* provides financial support to compensate the additional transport costs incurred by manufacturing firms operating on the Gozo island.

Source: EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021)

EU governments mainly support FDI-SME linkages through value chains and/or the setting of strategic partnerships on innovation and business development. For both diffusion channels, the composition of the policy mix is relatively similar and relies mainly on information and facilitation services one the one hand, and financial support on the other hand (Figure 5.3). Particularly, over half of the policies identified to foster value chain linkages use technical assistance instruments.

Box 5.5. Promoting value chain linkages and strategic partnerships: country examples

Matchmaking services, online platforms and events to link FDI and SMEs

Most IPAs provide matchmaking services to reduce the information barriers that prevent foreign investors from identifying local suppliers or customers. In the Slovak Republic, SARIO supports several matchmaking programmes targeting foreign firms and their affiliates, including the flagship *Business Link* events and *Slovak Matchmaking Fairs*, implemented under the auspices of the Ministry of the Economy (OECD, 2022[8]). The use of online tools and platforms is common in this area. In Bulgaria, the national SME promotion agency BSMEPA runs an online platform to advertise requests of foreign companies looking for partners in the domestic industry (e.g. local suppliers, local exporters, potential business partners). The Hungarian Investment Promotion Agency (HIPA) maintains a database of domestic firms to help large companies identify suppliers that meet their requirements and could integrate their value chain.

Many EU governments organise or actively support the participation of domestic SMEs in knowledge exchange and information events, which can provide matching opportunities with foreign partners. The Spanish agency Red.es, in collaboration with ICEX Spain Export and Investment, organises national stands in international events to support the internationalisation of domestic firms operating in the digital economy. In Bulgaria, the BSMEPA runs a dedicated project to support domestic SMEs' participation in business fairs, exhibitions and conferences within the country and abroad, in a view to enhancing their export activities, facilitating the establishment of direct contacts and commercial linkages with foreign partners, and fostering their integration in European and international markets.

Assistance for upgrading the capabilities of domestic suppliers

Common instruments to develop value chain linkages are supplier development programmes – such as Portugal's flagship Supplier Club or the Slovak Republic' *Supply Chain Development Programme* – and other business consulting and skills upgrading schemes that seek to align the capabilities of domestic suppliers with the requirements of foreign investors. Some schemes specifically target SMEs or start-ups. In Sweden, the *Leap Accelerator* programme helps technology start-ups develop tailored go-to-market plans and build strategies for internationalisation via diverse training, consulting and peer-learning services (e.g. online collaborative workshops for groups of companies, individual coaching sessions, data-driven analysis tailored to the company's needs).

Financial support for enabling SME integration into GVCs or collaborative R&D

SMEs internationalisation through trade can facilitate market expansion and upgrading and help strengthen the domestic supplier base. The *Dutch Trade and Investment Fund (DTIF)*, set up by the Ministry of Foreign Affairs and administered by Invest International, provides loans, guarantees and export financing to domestic firms wishing to import, export or establish affiliates abroad. In Finland, Finnverra's *Internationalisation Loans* support the costs of establishing and operating SME subsidiaries abroad.

Financial support is also given for collaborative research and development (R&D) and innovation activities involving foreign partners. Many of these schemes specifically target SMEs or reward their involvement with higher grant or loan rates (Box 5.2). The *German Central Innovation Programme for SMEs (ZIM)* includes two sub-schemes (ZIM cooperation projects and ZIM cooperation networks) that support with grants joint R&D&I projects by consortia of SMEs and research institutions. Since 2018, co-operative projects involving foreign partners are also eligible for funding.

Source: EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021)

Regulatory measures (18%) and financial schemes (28%) are more commonly deployed to facilitate the mobility of skilled workers from foreign affiliates and MNEs to local SMEs (Figure 5.3).

Box 5.6. Facilitating FDI-SME spillovers through workers mobility: country examples

Governments use financial and regulatory incentives to attract talent from abroad

Leveraging spillovers from labour mobility requires addressing structural challenges related to the capacity and skills endowment of domestic SMEs. In this perspective, some EU governments provide different types of incentives (e.g. regulation, financial support) to facilitate the immigration of business talent from abroad, in a view to reduce labour and skills shortages in the local business sector.

Regulatory incentives include entrepreneur visa programmes, which seek to attract innovative entrepreneurs and highly skilled workers by allowing them to obtain residence and employment rights after setting up or transferring their business (Chapter 2). The *Startup Denmark* programme, for instance, is a visa scheme aimed at attracting to Denmark talented entrepreneurs from outside the European Economic Area (EEA). Beneficiaries are selected by an independent expert panel based on the quality of their business plan and are entitled to apply for a residence and work permit in Denmark as self-employed. In Ireland, the *Critical Skills Employment Permit* is designed to attract highly skilled foreigners and encourage them to take up permanent residence in the State. Eligible occupations under the scheme are deemed to be critically important to growing Ireland's economy, highly skilled and in significant shortage on the domestic labour market. The *Italia Startup Hub* scheme provides talented non-EU citizens who already resides in Italy and intend to start a new innovative company with a simplified path to extend their residence permit.

Different types of financial incentives (e.g. wage subsidies, payroll tax relief, tailor-designed grant or loan schemes) are also commonly provided. Sweden, for instance, applies a special income tax relief to highly skilled foreign employees in their first three years of employment in the country. Belgium also provides fiscal incentives to encourage the temporary employment of executive staff from abroad by foreign companies operating locally. Some funding measures target national diaspora. The Italian *Smart&Start* scheme, which financially supports the creation of innovative startups in Italy, provides higher funding thresholds for business projects involving at least one Italian PhD who is working abroad and intends to return to Italy.

Work placement and employee exchange programmes with foreign firms operating abroad are also used to expand the local talent pool

The Portuguese investment promotion agency (AICEP) runs the *INOV Contacto* programme, which gives the opportunity to highly skilled graduates to conduct a short-term internship in a Portuguese company, followed by a long-term internship in a multinational company abroad (OECD, 2022[9]). In France, the business internship scheme *Volontariat International en Entreprise (V.I.E.)* allows young nationals to perform 6 to 24-month professional missions at a French company abroad (dealing for instance with local market research, provision of support to local teams, supervision of construction sites, etc.). Although their effectiveness remains subject to broader labour market conditions, programmes of this kind may contribute to facilitate the transfer of knowledge and skills towards the local labour markets.

Source: EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

Instruments to support spillovers through competition and knowledge exchange are less diverse, and mostly include non-financial support (18%) (Figure 5.3). Some funding schemes are also available, mainly in the form of financial incentives for intellectual property rights (IPRs) protection (Box 5.7).

Box 5.7. Creating market conditions for fair competition and knowledge exchange between foreign and domestic firms: country examples

Policy intervention mainly focus on promote IPRs use among SMEs

IPRs play a key role in allowing SMEs to protect the value of their innovation and effectively cope with the competitive pressure generated by the entry of foreign firms. Governments seek to enhance their use among SMEs through a mix of financial incentives and technical assistance.

Examples of financial incentives for IPR protection include the Irish *IP Strategy Offer*, a grant scheme which aims to support R&D-performing innovative SMEs to develop an IP strategy focussed on their individual needs. The scheme seeks to help address two IP-related challenges that SMEs typically face: gaining access to appropriate external IP expertise; and developing internal IP awareness and capability. This is achieved by providing grant aid toward a portion of the costs of external IP advisors and internal IP champions. In Portugal, the *IP Protection* incentive supports firms that, following the implementation of R&D projects, aim to promote the registration of industrial property rights in the form of patents or utility models, at national, European and international level.

Support for IPR use among SMEs may also take the form of business consulting or diagnostic services, to help SMEs familiarise themselves with IPR protection tools and processes and learn about IPRs and their prosecution. The national innovation agency Enterprise Estonia (EAS) provides strategic IP advisory and consultation services for companies, with the aim of protecting and enforcing corporate intellectual property for business purposes. In the framework of its initiative *Promotion of Life Sciences Industry Development*, the Lithuanian Agency for Science, Innovation and Technology (MITA) also provides consultancy services on IP and patenting of innovative ideas for companies operating in the target sector of life sciences.

Networking and demonstration events are common tools to spur tacit learning and imitation

Networking, knowledge exchange and demonstration events, e.g. conferences, seminars, site visits, involve learning opportunities for SMEs through the improved visibility of foreign firm practices and technologies and the informal sharing of views and ideas (Chapter 2). Enterprise Ireland, the Irish SME agency, organises *Best Practice Study Visits* that allow Irish firms to visit the manufacturing plants of foreign firms and get first-hand experience on their business practices and processes. Similarly in Portugal, the national SME agency IAPMEI implements the *Open Days i4.0* initiative, which aims to present the technological capabilities of innovative companies during stakeholder events and promote the sharing of experiences between market actors operating in the same value chain. In addition to moments of networking and information sharing, these public events include visits to the most advanced industrial plants in Portugal, presentations of innovative technologies, exhibitions of technological products and hands-on discussions between business representatives and other market stakeholders.

A few countries use cluster policies to support spillovers from competition and knowledge exchange

Clusters may provide a conducive environment for the diffusion of knowledge spillovers through informal business interaction and information exchange about good practices and standards. Enterprise Lithuania (an agency of the national Ministry of Economy) promotes the sharing of experiences among companies within clusters by organising and co-ordinating the *Cluster Forum*, a monthly meeting of cluster leaders and coordinators, during which participants share experiences, present success stories, discuss, consult, exchange advice on how to solve the most common problems within clusters, and invite cluster experts.

Source: EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021)

Most FDI-SME policies are targeted, and often at SMEs

FDI-SME policies typically combine generic measures with targeted initiatives aiming at specific populations, sectors of the economy, or sub-national areas to help them tackle barriers in capturing spillovers. Across the EU, targeted policies represent 77% of the 626 mapped policies (Figure 5.4, Panel A) and many of them target several dimensions at once.

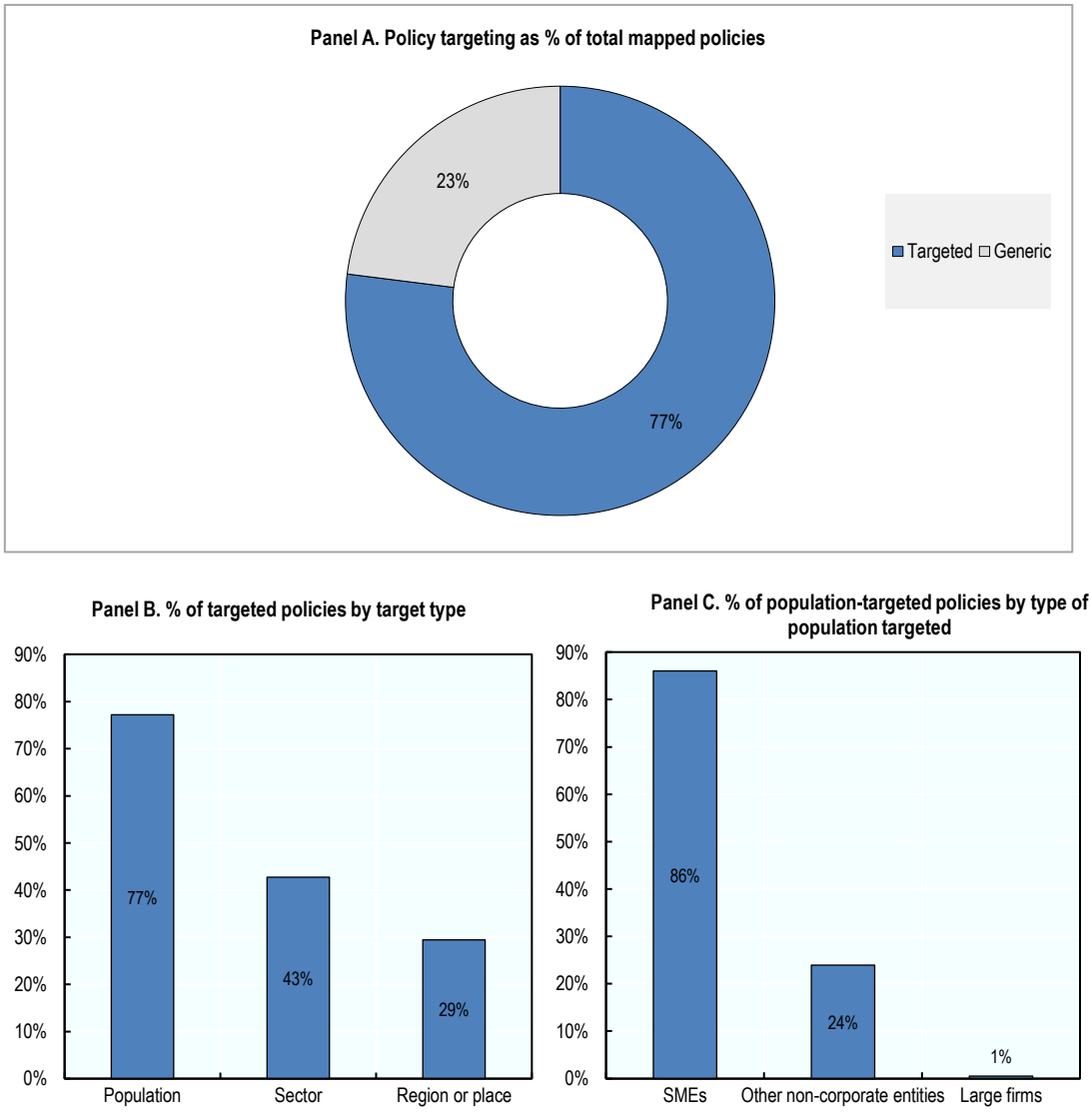
Policies aimed at a specific population represent 77% of all targeted policies (Figure 5.4, Panel B). SMEs are by far the main beneficiaries of support (Figure 5.4, Panel C). Policies targeting non-corporate entities, such as universities and research centres, also aim to ease the transfer of knowledge to local SMEs. Policies towards private investors, business angels and venture capital funds contribute to improving SME access to funding.

Policies with a sectoral focus represent 43% of targeted policies (Figure 5.4, Panel B). These measures either target selected sectors or exclude them from their scope of application. By encouraging the technological upgrading of specific industries, governments intend to attract more knowledge-intensive FDI while helping SMEs operating in those industries scale up their innovation capacity.

A significant share of targeted policies (30%) also takes a place-based approach (Figure 5.4, Panel B). This includes policies targeting specific geographic areas only or giving them preferential treatment. For example, under the *Smart&Start Italy* scheme – which provides interest-free loans to support innovative start-ups in the digital economy – beneficiaries from selected lagging Central and Southern regions are entitled to an additional non-repayable grant.

Policy targeting is more commonly used for enhancing SMEs absorptive capacity and for acting on the economic geography drivers of spillovers, as well as for enhancing the mobility of highly skilled workers. Over 80% of the initiatives addressing these three strategic objectives are targeted. The proportion of targeted measures is slightly lower for supporting productivity-enhancing FDI or the other spillovers diffusion channels (value chain linkages, strategic partnerships, competition) (65-70%).

Figure 5.4. Most FDI-SME policies target specific populations, sectors or places



Note: Panel A: Shares of generic and targeted policies as a percentage of the total 626 policies mapped. Panel B: Shares of policies by target type, as percentage of total targeted initiatives (482). As policies can be directed at more than one type of target, the sum is above 100%. Panel C: Shares of policies by type of population targeted, as percentage of total population-targeted policies (372). SMEs-targeted policies include initiatives applying to SMEs only or providing preferential conditions to them. Other non-corporate entities include: investors (business angels, venture capitalists or VC funds, banks, financing institutions, etc.); universities; research organisations; entrepreneurs; individuals with specific roles or skillsets (e.g. managers, highly-skilled, researchers); government institutions and sub-national governments (e.g. municipalities); and others. For countries with few initiatives (observations), interpretation of indicators should be done with caution.
Source: Experimental indicators based on EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

Many countries adopt governance frameworks to co-ordinate policy intervention in support of FDI-SME ecosystems

Some policy instruments have co-ordination functions and ensure overarching policy governance. This is the case for national strategies and action plans in the areas of SMEs and entrepreneurship, innovation, regional development or investment policy, as well as other governance frameworks with provisions related to FDI and SMEs. Instruments of this type are obviously less numerous, representing only about 10% of total policies mapped across the EU. However, they may play an important role in ensuring the overall

balance of the policy mix in support of FDI-SME ecosystems, by setting goals, procedures and other arrangements that guide public action in relevant policy areas (OECD, 2021[10]) (Chapter 2).

Governance frameworks are more frequently deployed for improving the enabling environment of FDI-SME spillovers, rather than for strengthening diffusion channels themselves. Particularly, national strategies and plans are used by 20% of policies to enhance the economic geography factors of spillovers – a higher share than for any other strategic objective (Figure 5.3). Most of these strategies and plans focus on overcoming regional inequalities and ensuring a balanced development of subnational areas.

Governance frameworks are also common in the area of SME&E, where they account for 10% of the related policies. Some countries adopt self-standing policy documents such as multi-annual SME strategies by the central government or SME action plans; others incorporate SME relevant support in wider policy frameworks, e.g. on innovation (Annex 5.A) (OECD, 2021[10]). Governance frameworks for investment promotion (9%) also include dedicated investment or internationalisation strategies and other strategies with provisions related to strengthening FDI-SME ecosystems.

Box 5.8 provides some country examples of governance frameworks of relevance to FDI-SME ecosystems.

Box 5.8. Governance frameworks to enhance FDI-SME ecosystems: country examples

Governance frameworks on regional development

Regional gaps in productivity and competitiveness may affect the performance of FDI-SME ecosystems, reducing the attractiveness of less developed sub-national areas to foreign investors and limiting the capacity of the business sector to capture FDI spillovers at local level (Chapter 2). To achieve a balanced development of Czech regions, the *Regional Development Strategy of the Czech Republic 2021+* identifies a set of strategic goals, which include providing regions with targeted support; developing the territorial dimension of sectoral policies; strengthening co-operation among local actors; and improving the collection and treatment of regional data. In Italy, the *Southern Italy 2030* strategy aims to support the economic development of southern regions by encouraging investment in entrepreneurship and innovation education and providing tax incentives for companies performing R&D and hiring local staff, with a special focus on attracting foreign investment.

Regional development strategies typically promote the engagement of sub-national actors in their implementation. In Ireland, for instance, the Department of Enterprise, Trade and Employment's *Regional Enterprise Plans* are developed by regional stakeholders in each of the nine Irish regions. Their implementation is overseen by a Regional Steering Committee comprising representatives of local authorities and the regional private sectors.

Governance frameworks on SMEs and entrepreneurship

A number of EU countries adopt dedicated national strategies or action plans on SMEs and entrepreneurship. Some of these governance frameworks put emphasis on new entrepreneurship and start-ups, such as the *Start-up Estonia* strategy, the *Start Up Portugal* + strategy, and the Slovak *Concept for the support of Startups and the development of a Startup ecosystem*. Others rather focus on achieving competitiveness, growth, innovation and digitalisation in the SME population as a whole. The Czech Republic recently adopted a *SMEs Support Strategy 2021-2027*, featuring 107 measures to increase the productivity and competitiveness of Czech SMEs. Key areas in focus include the business environment; access to finance; access to markets; workforce, skills and education; R&D&I; digitalization; low-carbon economy and resource efficiency.

Governance framework on innovation

By improving the governance and co-ordination of the broader national innovation system, innovation strategies may also contribute to create a conducive environment for SMEs innovation and FDI attraction. In France, the *Investments for the Future Programme 4 2021-2025 (PIA 4)* allocates resources to support researchers and entrepreneurs' innovation activities, with a particular focus on supporting (1) priority sectors and technologies and (2) the higher education, research and innovation ecosystem. The German *High-Tech Strategy 2025* provides a framework for co-ordination of all the research programmes financed by the German federal government and orientation for all the national players involved in innovation.

Governance frameworks on investment promotion

Some EU countries adopt dedicated investment strategies. For example, the *Invest in Denmark Strategy 2020-2023* specifically aims to enhance inward foreign investment and also features a focus on attracting technology- and knowledge-intensive FDI. In Portugal, the *Internationalize 2030 Programme,* adopted in 2020, features 43 action measures aimed at improving attraction foreign investment and increasing export over the next decade.

Other countries integrate investment promotion goals in broader innovation and entrepreneurship development frameworks. Particularly, diverse countries developed smart specialisation and industrial strategies that incorporate FDI policy goals. For example, several strategic pillars of Cyprus' *Industrial Policy 2019-2030* – e.g. development of new infrastructure, improvement of the local business conditions, enhancement of industrial internationalisation and export performance – indirectly support the goal of improving the country's attractiveness to quality FDI.

Source: EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021)

Conclusions

This chapter provides insights on the FDI-SME policy mix in the EU area, including their density, the priority given to different strategic objectives, the intensity of use of different policy instruments, and the prevalence of targeted or generic approaches. A pilot mapping of policy institutions and initiatives relevant to strengthening FDI-SME linkages and spillovers was carried out between January and September 2021 across the 27 EU member countries and helped identify 626 FDI-SME policy measures that allow for a first assessment of public support in this area.

The analytical work shows that FDI-SME policies are broad in scope and span across different policy domains, including innovation, entrepreneurship, regional development and investment. It is therefore not surprising that all the 27 EU governments have initiatives in place that can affect, directly or indirectly, the likelihood and intensity of FDI-SME linkages and spillovers. Nevertheless, the pilot mapping suggests that the extent of policy efforts, measured as per the number of policy initiatives on place, varies greatly across countries.

Cross-country differences are also striking in the orientation of the policy mix. If the overall policy focus across the EU is on creating an enabling environment for spillovers (particularly by reinforcing SMEs absorptive capacity), Austria, Hungary and Slovenia put above-average emphasis on strengthening diffusion channels themselves (i.e. value chain linkages, strategic partnerships, labour mobility and competition), and Cyprus, Denmark and Italy aim to improve FDI embeddedness and spillover potential, and encourage agglomeration, clustering and some economy geography enablers.

A strong focus on SMEs and their absorptive capacity is reflected in FDI-SME policy instrumentalisation that is aligned with the objectives pursued. Financial support schemes and technical assistance and information services are the most common instruments used to strengthen FDI spillovers on domestic SMEs. Regulatory measures are more often used to support productivity-enhancing FDI (16%) or facilitate the mobility of skilled workers (20%). Similarly, network and collaboration platforms and infrastructure are more frequently deployed (20%) to enhance agglomeration economies and clustering.

A very high proportion of the mapped FDI-SME policies is targeted at specific populations, sectors of the economy, or geographical places and regions, in order to tackle the barriers that these different types of actors face in attracting FDI and capturing spillovers. The proportion of targeted versus generic policies remains significant whatever the strategic FDI-SME objective(s) pursued, although it is particularly high among policies supporting SMEs development, the economic geography factors, and the mobility of highly skilled workers. Population-targeted approaches mostly consist of policies that target SMEs (82%). Looking ahead, more granular evidence on the industrial sectors or the territorial levels targeted would help gain further insights on this aspect of policy design.

Many factors can explain variations in the overall balance and density of the FDI-SME policy mix across the EU. These include country-specific characteristics such as the national industrial structure and specialisation, the degree of regional inequality, and the geographical distribution of business and investment activities. Initial evidence points to the degree of institutional fragmentation (i.e. the number of institutions involved in FDI-SME policy making) (Chapter 2) as one factor behind cross-country differences in the number of policy measures in place. Further research could help shed light on other factors and help understand to what extent national specificities and contexts, or the diversity of FDI-SME ecosystems, can explain the orientation of the policy mix, and vice versa.

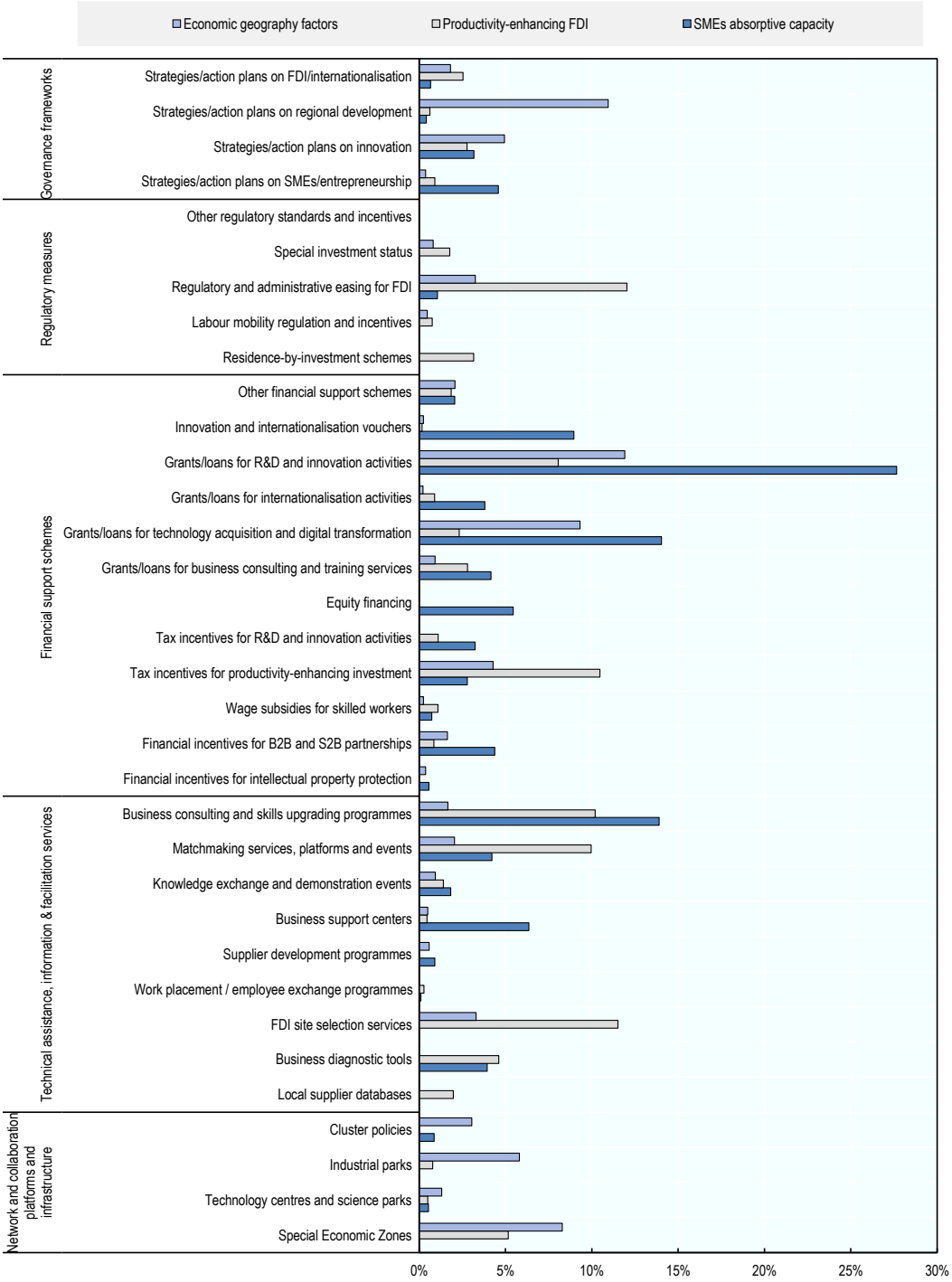
The objective of this pilot exercise was to provide an overview of the character and intensity of public efforts in the policy area under observation. The analysis is based on an unweighted count of initiatives that does not take into account other factors such as, for instance, the scope of national spending on initiatives, nor the strategic importance of some policies as compared to others. More information on the relative weight of policies (e.g. budget earmarked, number of beneficiaries) could help fine-tune the present analysis and provide a better perspective on the balance of the policy mix.

More granular information would also be needed to gain insights on policy governance and implementation aspects and particularly on the effectiveness and efficiency of public intervention. This would require the observation of a broader set of variables, including for instance information on impact evaluation or joint implementation and programming mechanisms in place. However, currently this information is largely unavailable or difficult to collect through desk research. A more in-depth analysis of these aspects was carried out as part of the pilot country reviews of Portugal and the Slovak Republic (OECD, 2022[8]; OECD, 2022[9]), conducted in the framework of Phase I of the FDI-SME project with the support and collaboration of the national taskforces established for the project. Future work under Phase II will aim to address current limitations in data collection and analysis and expand the scope of variables under observation, building on the lessons learnt from the country review process and also through a broader involvement and consultation of national implementing institutions in the policy mapping exercise.

Annex 5.A. Typologies of policy instruments by objective, EU average

Annex Figure 5.A.1. Types of policy instruments supporting enabling conditions of FDI-SME spillovers

In % of total mapped policies supporting each enabling condition

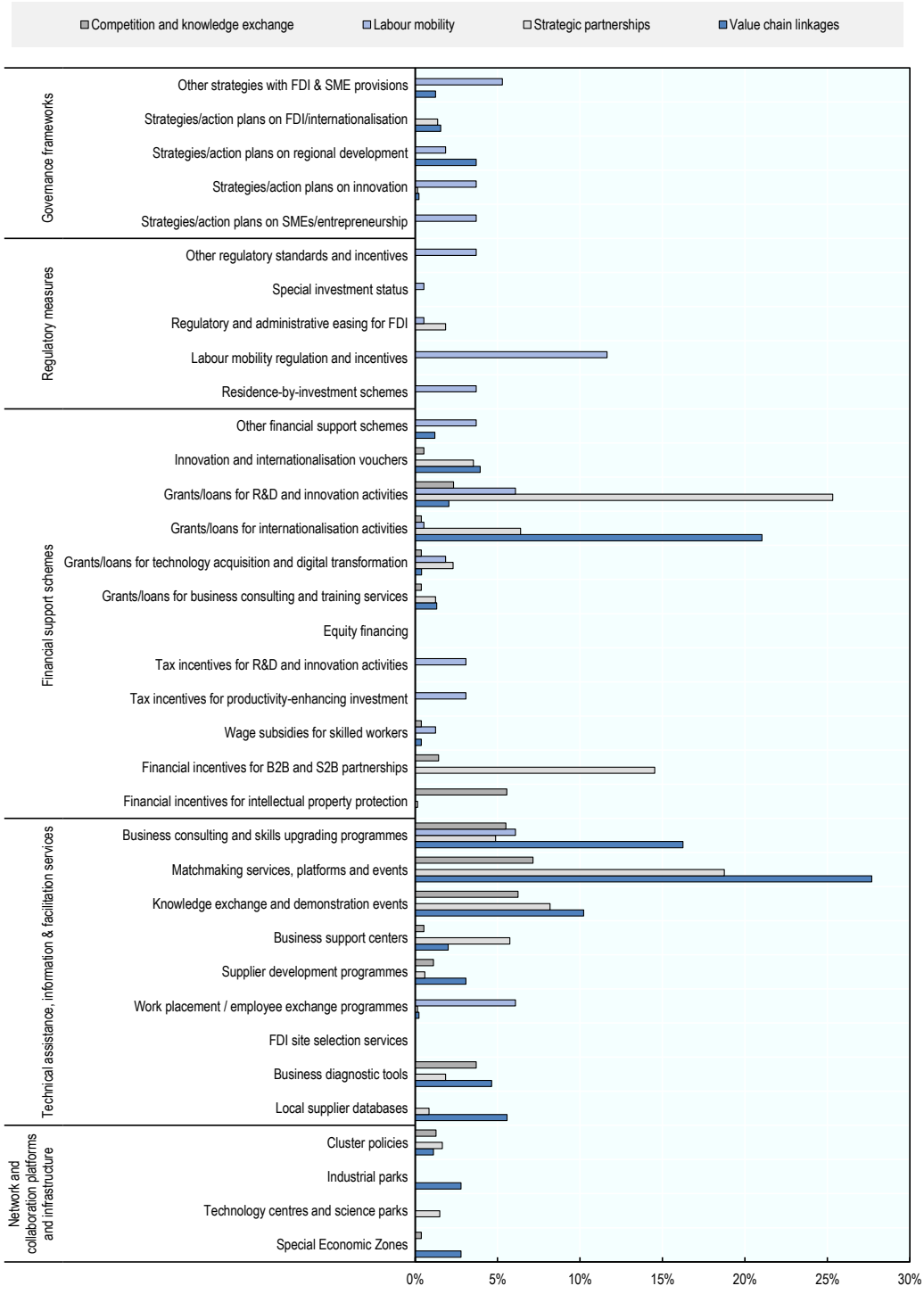


Note: EU average % of national initiatives supporting enabling conditions, by type of instrument used. For countries with few initiatives (observations), interpretation of indicators should be done with caution. Shares may be higher than 100% when policy initiatives make use of several policy instruments at the same time.

Source: Experimental indicators based on EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

Annex Figure 5.A.2. Types of policy instruments supporting FDI-SME diffusion channels

In % of total mapped policies supporting each diffusion channel



Note: EU average % of national initiatives supporting diffusion channels, by type of instrument used. For countries with few initiatives (observations), interpretation of indicators should be done with caution. Shares may be higher than 100% when policy initiatives make use of several policy instruments at the same time

Source: Experimental indicators based on EC/OECD Survey of Institutions and Policies enabling FDI-SME Linkages (2021).

References

Borrás, S. and C. Edquist (2013), "The choice of innovation policy instruments", *Technological Forecasting and Social Change*, Vol. 80/8, pp. 1513-1522, https://doi.org/10.1016/j.techfore.2013.03.002. [7]

Guy, K. et al. (2009), *Designing policy mixes: Enhancing innovation system performance and R&D investments levels*, R&D policy interactions Vienna. Joanneum Research. [3]

Lemarchand, G. (2016), *UNESCO's Global Observatory of Science, Technology and Innovation Policy Instruments*, https://doi.org/10.13140/RG.2.1.1296.2322. [6]

Meissner, D. and S. Kergroach (2019), "Innovation policy mix: mapping and measurement", *Journal of Technology Transfer*, Vol. 46/1, pp. 197-222, https://doi.org/10.1007/s10961-019-09767-4. [1]

OECD (2022), *Financing Growth and Turning Data into Business: Helping SMEs Scale Up*, OECD Studies on SMEs and Entrepreneurship, OECD Publishing, Paris, https://doi.org/10.1787/81c738f0-en. [2]

OECD (2022), *Strengthening FDI and SME Linkages in Portugal*, OECD Publishing, Paris, https://doi.org/10.1787/d718823d-en. [9]

OECD (2022), *Strengthening FDI and SME Linkages in the Slovak Republic*, OECD Publishing, Paris, https://doi.org/10.1787/972046f5-en. [8]

OECD (2021), "SME and entrepreneurship policy frameworks across OECD countries: An OECD Strategy for SMEs and Entrepreneurship", *OECD SME and Entrepreneurship Papers*, No. 29, OECD Publishing, Paris, https://doi.org/10.1787/9f6c41ce-en. [10]

OECD (2021), *SMEs and Entrepreneurship Outlook 2021*, https://doi.org/10.1787/97a5bbfe-en. [5]

OECD (2019), *SMEs and Entrepreneurship Outlook 2019*, https://doi.org/10.1787/34907e9c-en. [4]

Note

[1] Note by Türkiye: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Türkiye recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Türkiye shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Türkiye. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

Policy Toolkit for Strengthening FDI and SME Linkages

Strengthening linkages between foreign direct investment (FDI) and small and medium-sized enterprises (SMEs) is important to boost productivity and innovation across countries and regions in the OECD and beyond. This policy toolkit offers policy advice to national and subnational governments on how to increase knowledge and technology benefits from FDI on domestic SMEs and the local economy. It presents a conceptual framework for understanding the main enabling conditions and diffusion channels of FDI-SME linkages and spillovers, and a set of diagnostic tools to assess the spillover potential. It also provides an assessment tool for policy and institutional frameworks enabling FDI-SME linkages. This toolkit benefits from insights of a pilot mapping of policy initiatives across the 27 EU Member States, which are described in the second part of the report.

Co-funded by
the European Union

PRINT ISBN 978-92-64-52288-6
PDF ISBN 978-92-64-47641-7

9 789264 522886