

# Investment Linkages and Incentives

IN FOCUS



## Promoting Technology Transfer and Productivity Spillovers from Foreign Direct Investment (FDI)

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FINANCE,  
COMPETITIVENESS &  
INNOVATION

INVESTMENT CLIMATE

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FDI

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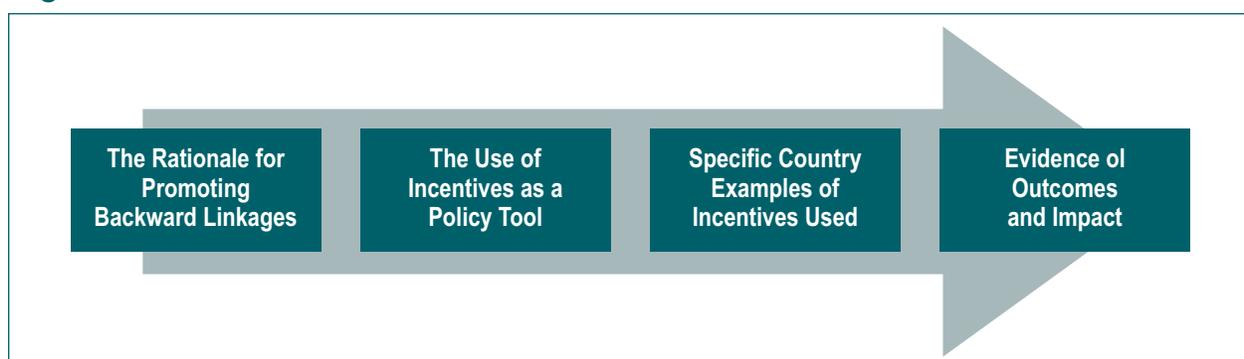
**T**his note seeks to provide an overview of investment incentive policy as a tool for Governments seeking to promote technology transfer and productivity spillovers by multinational enterprises (MNEs) in the host economy to local firms and suppliers. It summarizes international experiences to demonstrate what has worked and what has not worked, as well as the advantages and disadvantages of different investment incentive schemes. Evidence suggests that backward linkages between MNEs and local suppliers are the most important channels for technology and productivity spillovers to local firms (Jordaan et al, 2020). Furthermore, backward linkages offer an important avenue for ambitious local firms to integrate into Global Value Chains (GVCs). However, several market failures and challenges often prevent backward linkages from materializing. Policy makers can use investment incentives and other policy tools to help address these challenges. This note highlights examples of investment incentive schemes used by Governments, as well as their pros and cons.

When using investment incentives as a tool for promoting linkages, it is important to be aware of the costs and shortcomings compared to other policy tools. First, investment incentives represent public expenditures that affect fiscal revenues. For developing countries with particularly scarce resources, this can be a challenge. Therefore, Governments need to make sure incentives are targeted to specific objectives and market failures and the costs and benefits are analyzed and monitored. Second, investment incentives can be

complex and costly for Governments to administer, particularly financial investment incentives. Third, investment incentives need to be compliant with international obligations, such as rules on State Aid in the European Union and rules on performance requirements by the World Trade Organization (WTO).

The note focuses on the role of both investment incentives and other policy tools in encouraging MNEs to develop supplier relationships with local firms. The structure of the note is presented in figure 1.

**Figure 1. Structure of In Focus Note**



## The Rationale for Promoting Backward Linkages and the Key Challenges

**The presence of foreign firms in the host economy can become a major driver of local firm productivity growth and offers opportunities for local firms to integrate in international production networks.** Backward linkages between MNEs and domestic suppliers can promote the diffusion of knowledge, spread good management practices, and help domestic suppliers upgrade their technical and quality standards (Du, Harrison, and Jefferson 2011; Javorcik and Spatareanu 2009; Javorcik and Li 2013). Supply chains of MNEs—notably, backward linkages through local sourcing—offer the most direct channel for positive FDI spillovers and technology transfer for local firms in developing countries (Jordaan et al, 2020; Farole and Winkler, 2014). The presence of MNEs can have positive spillovers on the quality of exports by domestic firms, as Bajgar and Javorcik (2019) show, using data on Romanian manufacturing sector. This occurs via backward vertical spillovers, as MNEs demand inputs at international quality standards from domestic firms. Moreover, MNEs consider the presence of competitive local suppliers important for their locational decisions. A survey of MNEs found that 61 percent of respondents consider linkages to be important or critically important in their location decisions (World Bank 2018, p. 32).

**The potential for MNEs to source inputs locally depends on several factors.** Evidence from the literature and years of observation as practitioners show that the creation of linkages and technology transfers between MNEs and local firms does not happen automatically. The FDI characteristics, host country characteristics, as well as local firm absorption capacity all play a key role. Furthermore, policy coordination failures on the part of Government, information asymmetries and weak local firm capacity are among the most common market failures and barriers to be overcome in order to improve linkages outcomes.<sup>1</sup>

The FDI linkages policy agenda straddles multiple ministries and agencies and touches on policies related to FDI attraction, industrial development, access to finance, small and medium enterprise (SME) development, innovation, trade, and labor policy. However, without effective coordination, these policies might contradict one another, with unintended adverse effects on the host economy. For example, investment incentives extended to attract FDI can have adverse effects on the formation of local linkages. A clear example is the exemption on customs duties for the import of foreign inputs. This policy is aimed at attracting FDI in specific locations—often Special Economic Zones (SEZs). Nevertheless, such investment incentives can put local suppliers at a cost disadvantage with respect to foreign suppliers because of the value added tax charged on their local products. The remainder of this In Focus note will focus on the role of incentives as a key policy instrument in promoting linkages between FDI and local firms.

## How Policy Makers Can Use Investment Incentives and Other Tools to Promote Backward Linkages

This section uses concrete examples to demonstrate what kinds of incentives policy makers can consider addressing the market failures and constraints hindering backward linkages.

**Investment incentives are one of the tools available to Governments to influence MNEs' sourcing decisions, together with other programs, such as matchmaking services, supplier development programs, and local supplier databases.** Investment incentives are typically defined as “measurable economic advantages that Governments provide to specific enterprises, with the goal of steering investments into favored sectors or regions (locational investment incentives), or of influencing the character or impact of such investments (behavioral investment incentives)”

<sup>1</sup> More on this is described in the accompanying InFocus note with summary of FDI linkages literature review (Jordaan et al, 2020).

(James 2009). Behavioral investment incentives can be used to influence FDI sourcing behaviors and thus to promote linkages with local suppliers. This note focuses on behavioral investment incentives targeting change in sourcing behavior by FDI in the host economy that work to increase the integration of local firms in their supply chains. Demand-driven investment incentives and linkages programs appear the most successful in promoting backward linkages, as opposed to schemes primarily targeting local firms, such as more generic small and medium enterprise development schemes.

**Investment incentives, and complementary government support schemes, can help address some of the key challenges and market failures hindering backward linkages development by MNEs in the host economy.** For instance, MNEs can be exempted from paying value added tax (VAT) on local inputs. On one hand, in situations where foreign inputs are exempted from customs duties, VAT exemptions can help compensate for the cost-disadvantage of local products compared to foreign supply. On the other hand, in situations where MNEs already receive customs duty exemptions (such as duty drawback schemes or bonded regimes), VAT exemptions on local sourcing can be used to level the playing field. In addition, rewarding MNEs for training or upgrading the quality of local suppliers can change the cost and risk calculation for MNEs in terms of technology transfer and sourcing locally versus relying on their trusted foreign suppliers. By the same token, sharing the cost of MNEs developing local suppliers through training services and technology upgrades can help close the gap on QCDF<sup>2</sup> issues and overcome coordination problems. In practice, no individual MNE buyer would have the incentive to fully bear the costs of upgrading local suppliers because this would pose the risk of other buyers free riding.

**Several types of incentives are given by governments to FDI to promote backward linkages.** On one hand, FDI can receive corporate income tax incentives for local sourcing, or

financial investment incentives (that is, cash grants or cost-sharing schemes) for upgrading local suppliers. However, providing cash grants or cost-sharing schemes is typically used more in middle-income or developed countries and less so in developing countries, due to resource constraints and the political economy issues around providing investment incentives to MNEs. FDI can also be exempted from paying VAT on local inputs, especially if located in SEZs. More common, especially in developing countries, are investment incentives provided to local suppliers as part of SME development schemes. On the other hand, governments (often investment promotion agencies) also provide complementary programs to FDI. These include: development of supplier databases; provision of matchmaking services; and implementation of targeted supplier development programs. A survey of MNEs found that 61 percent of respondents rating supplier upgrading important, either in the form of direct financial incentives for companies to invest in supplier development or government's own initiatives (World Bank 2018, p. 32).

**There are several pros and cons to using investment incentives.** In terms of fiscal (tax) investment incentives, corporate income tax holidays and concessionary rates tend to be the most common. These investment incentives are easy to communicate to investors and allow for less interaction with tax authorities, which can be particularly useful in contexts where tax administration is less efficient. On the other hand, long-term investors that have no profits or losses in the first years of operations do not reap much benefit from such investment incentives. Moreover, when tax holidays liberate investors from meeting tax obligations, it makes it much more difficult to track the benefits and costs of investment incentives, affecting transparency. In addition, tax holidays are granted without a direct link to desired outcomes, such as investment, jobs, or domestic value added. Finally, this type of investment incentives can create opportunities for tax avoidance and profit shifting.

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<sup>2</sup> Quality, Cost, Delivery, Technology and Flexibility

Other common fiscal investment incentives focus on indirect taxes such as value added tax (VAT) and customs duties on imports. These investment incentives relieve inputs used in the direct production of exports from the burden of indirect taxation. However, these investment incentives can be prone to leakages if imported goods are diverted to other purposes. They can also risk distorting competition, putting domestic suppliers at a cost disadvantage versus foreign inputs and undermine backward linkages formation. Finally, these investment incentives also have no direct link to desired outcomes.

In terms of financial investment incentives, governments often use cost-sharing schemes, such as matching grants, to promote linkages. These

instruments allow investors to access credit for specific activities, such as purchasing equipment, while maintaining private sector ownership, by setting a matching contribution (such as 50-50 or 80-20). In addition, cost-sharing schemes allow governments to better target their investment incentives. However, they are more difficult to administer and can require a substantive financial disbursement. Cost-sharing schemes can also crowd out private investment or promote nonviable firms. Tables 1 and 2 summarize the most common investment incentives and policy tools in support of backward linkages provided by governments to MNEs, along with their main pros and cons, based on a review of the available literature and institutional websites.

**Table 1. Examples of Investment Incentives to Promote Backward Linkages**

Investment Incentive	Pros	Cons
<b>Investment Incentives Promoting Upgrading of Local Suppliers</b>		
Corporate income tax incentives contingent on local sourcing (such as tax credits, reductions, deductions, capital allowances)	<ul style="list-style-type: none"> <li>• No direct disbursement</li> <li>• Easier to administer compared to financial incentives</li> <li>• Link to desired outcomes</li> </ul>	<ul style="list-style-type: none"> <li>• Public expenditure through fiscal revenue foregone</li> <li>• Ineffective if no capable supplier exists</li> <li>• More difficult to target compared to matching grants and cost-sharing schemes</li> </ul>
Matching grants and cost-sharing schemes in support of local firm upgrading	<ul style="list-style-type: none"> <li>• Can stimulate beneficiary's sense of ownership through matching contribution and cost-sharing</li> <li>• Easier to target compared to corporate income tax incentives</li> </ul>	<ul style="list-style-type: none"> <li>• Public expenditure through financial disbursement</li> <li>• Administrative burden for government agencies to manage the program</li> <li>• Compliance cost for private sector (application process, reporting)</li> <li>• Potential market distortions, such as promoting nonviable suppliers, misallocating scarce resources; crowding out private investment</li> </ul>
<b>Investment Incentives to Address Coordination Failures</b>		
Value added tax (VAT) exemption on purchase of inputs from local firms	<ul style="list-style-type: none"> <li>• No direct disbursement</li> <li>• Level the playing field if foreign inputs are exempt from VAT</li> <li>• Easier to administer compared to financial incentives</li> </ul>	<ul style="list-style-type: none"> <li>• Public expenditure through fiscal revenue foregone</li> <li>• More difficult to target compared to matching grants and cost-sharing schemes</li> </ul>

**Table 2. Other Policy Tools to Promote Backward Linkages**

Policy Tool	Pros	Cons
<b>Policy Tools to Promote Quality, Cost, and Delivery Reliability of Local Suppliers</b>		
Systematic Supplier Development Programs (SDP)	<ul style="list-style-type: none"> <li>• Can be very company or sector targeted Proven approach with strong track record of success</li> <li>• Opportunity to start with small pilot and expand when successful proof of concept</li> </ul>	<ul style="list-style-type: none"> <li>• Complex to manage and implement</li> <li>• Costly to implement</li> </ul>
<b>Policy Tools to Address Information Failures</b>		
Matchmaking services	<ul style="list-style-type: none"> <li>• Not costly to implement Simple to administer</li> </ul>	<ul style="list-style-type: none"> <li>• Works only if there is an appropriate domestic supplier base</li> <li>• Requires a minimum level of institutional capacity of IPA or other entity in charge</li> </ul>
MNE and local supplier databases	<ul style="list-style-type: none"> <li>• Relatively basic but effective tool for overcoming information failures</li> </ul>	<ul style="list-style-type: none"> <li>• Costly to implement and maintain up-to-date</li> <li>• Works only if there is a sufficient size and quality domestic supplier base</li> </ul>

Note: MNE = multinational enterprise.

## How Countries Have Used Investment Incentives to Promote Backward Linkages

The discussion that follows presents eight examples of countries using investment incentives directed to MNEs to promote backward linkages and productivity spillovers, often in combination with other policy tools. However, it is important to note that, while the examples present some positive lessons learned for developing countries, the global experience on investment incentives has been mixed in this space.

**Over the years Malaysia has used several types of investment incentives to strengthen linkages between MNE and domestic firms** (Ruffing 2006; InvestPenang website). Since 1980s, various behavioral incentives have been introduced to improve linkages and upgrade the technical capacity and quality of domestic suppliers. To encourage large companies to participate in its current Industrial Linkage Program (ILP), expenditures incurred in training of employees, product development and testing, and factory auditing to ensure the quality of vendors' products, will be allowed as a deduction

in the computation of corporate income tax. Large industrial firms in Malaysia also receive corporate income tax relief of 5 percent if they buy primary products from national SMEs. Supplier firms enjoy either Pioneer Status, with income tax exemption of 100 percent of statutory income for ten years, or an investment tax allowance (ITA) of 100 percent qualifying capital expenditure for five years. Moreover, in conjunction with these incentives, the private sector pursued its own initiatives to upgrade local skills. Hewlett-Packard, Intel, and Motorola joined forces with the Penang Development Corporation as early as 1989 to create the Penang Skills Development Center (PSDC). The three MNEs formed the steering committee to create a tri-partite PSDC structure, combining government, academia, and industry. They persuaded 24 electronics investors to contribute equipment for the new PSDC campus and led the group in assigning executives to teach the skills needed to design and produce sophisticated electronic subassemblies and final products (PSDC; Athukorala 2017).

**Early on in its FDI success, Singapore introduced the Local Industry Upgrading Program (LIUP) to support the transfer of technology, marketing,**

**and business process knowledge from MNEs to domestic SMEs (Perry, Tan Boon Hu, 1998; Coe and Perry 2004).** The LIUP provided investment incentives for MNEs to upgrade their local suppliers through a relationship of long-term mentorship. Through the program, local suppliers developed new products and processes and engage in joint research and development (R&D) with the MNE mentor (UNCTAD 2011). As part of the LIUP, the Economic Development Board (EDB) covers part of the salary of an MNE manager or engineer who works with the local supplier in order to transfer knowledge and build their capacity. As a result of the program, several Singaporean firms have become efficient suppliers, transitioning from low-wage, labor-intensive activities into more capital- and knowledge-intensive industries (McKendrick, Donner, and Haggard 2000). For example, STMicroelectronics received financing under the LIUP. The company sent a manager to train local manufacturers on issues related to large-scale production processes, quality control, standard setting, and the broader needs of the MNE buyer. This helped result in nine indigenous companies becoming significant international players (UNCTAD 2011). The LIUP also provided training investment incentives for Singaporeans to pursue their studies in and enter selected areas of expertise. It helps local firms improve their operational efficiencies, capabilities, and capacity to develop new products and services. One of the most renowned examples is the partnership between Hewlett Packard Singapore and its local supplier, FJ Industrial. In addition, the government introduced the Partnerships for Capability Transformation (PACT) in 2010. PACT works with large MNEs and local companies to identify and implement collaborative projects between the large organization and local SMEs in areas of knowledge transfer, capability upgrading, and the development and test-bedding of innovative solutions. Like the LIUP, PACT operates on a cost-sharing basis. SMEs whose projects are approved are eligible for up to 70 percent funding support for qualifying development costs.

**South Africa's Strategic Investment Program (SIP) offers an initial capital allowance (ICA) of 50 percent or 100 percent for foreign companies that extend linkages to domestic firms.** Creation of linkages with South African SMEs is a prerequisite to benefit from ICA. Another tax allowance investment incentive (12I TAI) supports greenfield and brownfield investments for capital investment and training. It offers an additional investment allowance of R350 million–R900 million for greenfield and brownfield projects, an additional training allowance of R36,000 per employee, and a maximum additional training allowance per project of R20 million. To qualify for this allowance, projects should provide general business linkages, acquire goods and services from SMEs, create direct employment, and provide skills development within South Africa. South African's Ministry of Trade and Industry also provides targeted grants to support the growth and development of the automotive sector. The Automotive Investment Scheme rewards investments in new/replacement models and components that will increase plant production volumes, sustain employment, and strengthen local automotive value chain. It provides for a grant of 20 percent to 30 percent of the value of qualifying investment in productive assets (Invest South Africa; Barbour 2005).

**In Taiwan, China, a Center-Satellite (CS) Factory System was launched in 1984 already to organize and integrate satellite factories that serve a central factory.** The program identifies potential central firms, whether they are receiving FDI or not, and seeks to persuade them to establish a Center-Satellite factory system. The arrangement helps address coordination failures and reduce the central firm's operating costs and offers a wide range of vendor assistance and productivity enhancement programs. Companies in special zones also enjoy a fiscal investment incentive (zero percent value added tax) for purchases of raw materials, fuel, supplies, semi-finished materials, and machinery from areas outside of the special zones in Taiwan, China (Battat, Frank, and Shen 1996).

**The government of Thailand has introduced merit-based investment incentives to attract and stimulate investment in projects or activities that benefit the country or a targeted industry at large.** Specifically, the Board of Investment (BOI) offers competitiveness enhancement investment incentives to MNEs that develop local suppliers with at least 51 percent of Thai shareholding. MNEs that provide advanced technology training and technical assistance receive additional corporate income tax exemptions of up to 200 percent of eligible expenditures ([Thailand Board of Investment](#)).

**Chile has used financial investment incentives to promote backward linkages and productivity spillovers in strategic sectors.** To attract high-tech FDI in sectors with high value added, Chile's investment promotion agency (InvestChile) offers a wide range of tax incentives and subsidies to cover pre-investment studies, acquisition of fixed assets, staff training, and R&D activities, in addition to broader marketing and pre-investment services. The Integrated Promotion Initiatives (IFI) support the implementation of new technological investment projects or the expansion of existing projects, it offers up to 30 percent of investments implemented during the first two years of projects, worth over US 2 million dollars, provides training of specialized human capital, and promotes supplier development ([InvestChile](#)).

**The Czech Republic has used financial investment incentives in combination with a broader supplier development program** (Malinska and Martin 2016; OECD 2001; World Bank 2019). The Czech Pilot Supplier Development Program operated from 2000 to 2002. Czech's investment promotion agency, CzechInvest, administered a 95 percent matching grant awarded to local suppliers to participate in the "intensive support phase." Local firms were closely advised by Czech and international consultants to upgrade their offering to meet MNE's demands. The program also tackled information asymmetries through the funding of databases and matchmaking services. A dozen MNEs were involved throughout the project and 45 SMEs received targeted training based on needs uncovered during business reviews. The program led to US\$46 million in new business contracts by

2003, 57 percent of participating suppliers recorded higher value added content, and participating MNEs increased local sourcing from 0 percent–5 percent to 2.5 percent–30 percent. Czech Republic also offers financial support to broader manufacturing sector, technology centers, and business support services centers. Eligible firms enjoy corporate income tax relief for 10 years, receive cash grants for job creation up to approximately US\$25,000 per job, and cash grants for training and retraining up to 50 percent of training costs. Strategic investment projects also receive cash grants for purchase of fixed assets up to 10 percent of eligible costs. To address information asymmetry between MNEs and local firms, CzechInvest also built a database containing standardized profiles of more than 3,400 Czech manufacturing and ICT companies by subsector to connect foreign investors to domestic suppliers.

**In Ireland, the National Linkage Program (NLP) provided financial investment incentives to FDI together with quality upgrading services to local suppliers** (Görg, Hanley, and Strobl 2011; UNCTAD 2006). In the early 1980s, the Irish Industrial Development Agency introduced the National Linkage Program to address both demand-side and supply-side constraints. On one hand, the program supported the upgrading of local suppliers in targeted sectors. The program worked closely with over 250 MNEs to identify high potential local suppliers. Once part of the scheme, firms were monitored for technology improvements, quality, cost, and service requirements. On the other hand, the NLP provided grants to MNEs to encourage them to link with local suppliers. The two key criteria for MNEs to benefit from the grant were employment and local content. The results were startling. As a result of the program, many local SMEs became suppliers to international firms such as IBM, Apple, and Dell. Ireland also offers financial investment incentives to companies that carry out in-house R&D projects and collaborative projects with industrial partners and third-level institutes such as universities and research institutes. Training grants are available across the country to develop the competitive capabilities of companies already located in Ireland.

## How Effective Have Investment Incentive Programs Been in Promoting Backward Linkages

Recent empirical evidence indicates the potential that investment incentives and other complimentary policy instruments can offer in stimulating backward linkages (Jordaan et al, 2020). In Ireland, empirical evidence shows that financial incentives (grants) to foreign MNEs have succeeded in forming linkages with suppliers in certain cases (Görg, Hanley, and Strobl 2011). In Chile, the program combining matchmaking services with a financial incentive (subsidized credit) was found to significantly increase sales, employment, and the sustainability of SMEs (Arráiz, Henriquez, and Stucchi 2013; Guimon et al, 2017). In Czech Republic, the Supplier Development Program, which combined financial investment incentives (matching grants) with other policy instruments, was found to increase sales for about one-third of all participating firms and helped one-fifth of firms initiate exports or obtain contracts of higher value-added content (Mariscal and Taglioni 2017; Javorcik, B. S., and M. Spatareanu. 2009).

**In Singapore, an evaluation of the Local Industry Upgrading Program (LIUP) found that suppliers in partnerships with large firms improved productivity by 17 percent on average by the mid-1990s, while value added per worker rose by 14 percent.** By 1994, 180 SMEs and 32 buyer firms, including 28 MNEs, formed a partnership under the program. By 1999, the LIUP had 670 local vendors and 30 MNEs participating (Battat, Frank, and Shen 1996). Case studies show that supplier upgrading through LIUP is limited in the electronics sector, but the horizontal partnership in the software sector yielded more benefits (Coe and Perry 2004). More than 40 suppliers have benefitted from PACT since 2010, mostly from the oil & gas and medical technology industry. Overall, PACT has been an effective tool to deepen the FDI-SME linkages in Singapore. (World Bank, 2019)

**In Taiwan, China, the Center-Satellite Factory System has been instrumental in establishing 139 CS factory systems comprising 2,075 firms and accounting for more than one-third of the value of the island's output in the manufacturing sector.** Most of the systems are concentrated in three sectors: electronics, metal engineering, and motor vehicles. The electronics industry, particularly the semiconductor sector, has formed a major part of Taiwan, China's economy and export base since 1980s. In 2007, the semiconductor industry overtook that of the United States, to become second only to Japan (Battat, Frank, and Shen 1996).

**In Malaysia, the Penang Skills Development Center (PSDC) has become one of the most successful Workforce Development Institutions in the world.** Over the past four decades, Penang has grown to become a major export production hub with more than 250 branch plants employing over 250,000 workers. The MNE-local firm partnership strengthened over time, resulting in a large pool of local electronics and equipment firms (Athukorala 2017). The electrical and electronics (E&E) industry remains the mainstay of Malaysian economy today. Penang has received global recognition as one of the most dynamic industrial clusters in the world, thanks to its world-class capabilities and efficient supply chain.

**In Thailand, the merit-based incentives to promote supplier linkages has also proved effective.** Today, Thailand is the largest automobile exporter in the Association of Southeast Asian Nations (ASEAN), the third largest in Asia after Japan and the Republic of Korea, and the seventh largest exporter in the world. More than 80 percent of total value is produced by local companies, which represents the highest localization rate in Southeast Asia (World Bank 2016).

**While some of these cases dates back to the 1980s or 90s, many of these programs or successive iterations are still in place today and continue to be useful tools for deepening linkages.** For

example, Malaysia's Industrial Linkages Program is now tailored to local machinery and equipment (M&E) players to promote collaboration between companies to further adopt advanced and new technologies ([Malaysia Investment Development Agency](#)). The program has successfully led to ongoing business and technical engagement on M&E between Malaysian companies and Italian companies. The Penang Skills Development Center continues to be the leading talent development institution in Malaysia. It provides a wide range of training on engineering skills, digital skills, and business skills to meet changing business demands ([Penang Skills Development Centre](#)).

**While most of the cases described are from middle- and high-income countries, and programs were designed at the time when FDI took off in these countries, they can provide good insights and key principles for low-and middle income countries receiving FDI today.** Many of the economies had much lower income levels than they have today when they initiated these programs (including Chile and Singapore). With the right policy instruments, government can strengthen backward linkages by combining public and private resources to remedy market failures. Low-income countries can focus on improving local suppliers' capabilities through carefully designed supplier development programs. This requires concerted effort among different government institutions to promote backward linkages in an outward-looking and market-oriented approach.

Finally, the cases presented have achieved successful results in promoting backward linkages also thanks to effective targeting of the market failure and good administration of the programs. However, there have also been many less successful examples in light of the many challenges associated with their implementation. Therefore, investment incentives should only be used to target a specific market failure or policy challenge and should be implemented in a cost-effective manner.

## Conclusion and Policy Recommendations

Investment incentives targeting MNEs can be a powerful tool for governments to influence MNE sourcing behavior and promote backward linkages and technology transfer with local suppliers. They can help overcome a specific market failure. For instance, investment incentives can help compensate for shortcomings in quality, cost, and punctual delivery of local suppliers that often prevent MNEs from sourcing more from local firms. Moreover, alignment of investment incentives may be needed in some countries to help offset the cost disadvantage of potential local suppliers with respect to imports by MNEs that enjoy customs duty exemptions on imports of raw materials, inputs, and machinery. In practice, investment incentives are often used in combination with other policy tools, such as the design and implementation of targeted supplier development programs, provision of matching making services by the national investment promotion agency as part of its aftercare services to investors, and the development of high-quality supplier databases. The latter can be very helpful in overcoming information asymmetries.

However, investment incentives have several shortcomings and not all their programs end up being successful, including those targeting backward linkages and technology transfer. Investment incentives (particularly financial investment incentives) can be difficult to administer. They are very costly for public finances, so they should be well targeted to address specific market failures in order to be effective. In addition, investment incentives should be implemented in compliance with international obligations, such as WTO rules on performance requirements. Finally, due to public resource constraints, low-income countries might find it challenging to utilize investment incentives to promote backward linkages. Therefore, the other policy tools described in the note might be a more appropriate solution.





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