



SKILLS AND FOREIGN DIRECT INVESTMENT PROMOTION: What Can an Investment Promotion Agency Do?

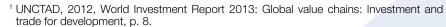
Low skill availability can constrain the ability of an investment promotion agency (IPA) to promote its location as an attractive place to invest. This is especially true in the case of relatively mobile, high valueadded investments for which cost-competitive skilled labour is a major determinant. Although most IPAs are not explicitly mandated to develop skills, their mandates are typically broad enough to permit some sort of intervention. At the policy level, an IPA's influence is usually exerted only through advocacy for the education, labour and immigration policies that will determine the location's attractiveness. IPAs can have a higher, more direct impact on their location's labour pool by working directly with companies, educational institutions and workers through standard IPA functions. In most economies, multiple institutions will already be engaged in some form of skill development, including general education, technical and vocational schools and short-term training programmes. An IPA's first challenge is identifying gaps in the existing landscape where it can add value.

THE LINK TO FDI PROMOTION

Services and advanced manufacturing, both of which demand increasingly sophisticated skills, are driving the global economy. In 2012, the majority of foreign direct investment (FDI) flows was in services.1 A review of priority sectors at top-ranked IPAs around the world shows leading sector-targeting priorities to ICT, business process outsourcing, knowledge process outsourcing, life sciences, biotechnology, biomedicine, semiconductors and electronics.² However, the skills needed to attract such investments are in short supply globally. This is vividly illustrated by AT Kearney's 2011 Global Services Location Index, which ranks the FDI

attractiveness of 50 locations based on scores for labour skills and availability, business environment and financial attractiveness. China and India top the rankings on the strength of their comfortable lead in skills (surpassed only by the United States of America), but the rest of the top 10 locations in the Index have a weak score (1.38 out of 3), making skills the weakest category by far. This suggests that the single most significant thing a country can do to improve its relative attractiveness to service FDI is to improve its skills. This may be done by training local workers and/or by bringing in trained workers from abroad. This conclusion is supported by a review of the correlation between human capital and FDI attraction, using data from the 1960s through the 1990s.3 There was

The IPA Observer series is prepared by the Investment Promotion Section of UNCTAD's Division on Investment and Enterprise (DIAE). Its objective is to show examples of strategic and operational best practice in investment promotion from agencies worldwide to practitioners and governments in developing countries, with a view to share lessons that are practical and replicable for their investment promotion agencies (IPAs).



² Top regional performers in the World Bank Group's global investment promotion best practices 2012: Austria (high-income OECD), Bangladesh (South Asia), Botswana (sub-Saharan Africa), Hong Kong, China (East Asia and Pacific), Israel (Middle East and North Africa), Nicaragua (Latin America and Caribbean) and Poland (Europe and Central Asia).

³ Koji Miyamoto, 2003, Human capital formation and foreign direct investment in developing countries, OECD Development Centre, Working Paper No. 211, p. 20.



little correlation between the two in the 1960s and 1970s, when most FDI was driven by access to resources, markets and unskilled labour for lowend manufacturing. However, as FDI flows shifted toward services and high-end manufacturing in the 1980s and 1990s, the correlation between human capital and FDI attraction grew. A similar correlation exists between a location's openness to foreign skilled labour and its FDI inflows.⁴

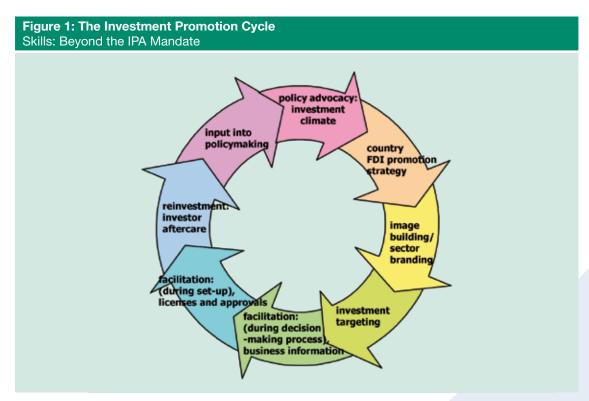
Sixty-two per cent of IPAs in developing countries say that the prospect of skill transfer is one of the main reasons for targeting companies.⁵ However, FDI should not be viewed as a panacea for skill shortages. Rather, it can be half of a virtuous cycle of skill development. The local supply of basic skills attracts FDI with slightly more advanced skills. This, in turn, incentivizes the further local development of skills.

Government policies to improve a country's competitiveness in global value chains go through upgrades in the labour pool.⁶ Skill development is an area where Governments are increasingly

showing that they can effectively act to improve the value propositions of their locations and land FDI projects. Skill development by the public sector is most efficient and effective for development when it is demand-driven and formulated in close collaboration with the private sector. To date, there has not been any research done on the role of IPAs in this area. However, among public institutions, IPAs are one of the best positioned to act as a bridge between transnational corporations and other stakeholders in skill development.

HOW TO INTEGRATE SKILL DEVELOPMENT

Skill development should not be seen as something separate from FDI promotion, but rather as a natural outflow and input of its various aspects. Figure 1 illustrates the classic concept of an IPA's various functions in the investment cycle and how they feed into each other. Table 1 describes ways in which IPA-led skill-development efforts contribute to the success of each of an IPA's functions or benefit from their outputs.



Source: World Bank/UNCTAD, 2014.

⁴ Dieter de Smet, 2013, Employing skilled expatriates: Benchmarking skilled immigration regimes across economies, IFC, World Bank.

⁵ UNCTAD IPA survey, 2013. The other two priorities are job creation and FDI projects that create linkages with local suppliers.

⁶ UNCTAD, 2012, World Investment Report 2013: Global value chains: Investment and trade for development, p. 8.

⁷ Koji Miyamoto, 2003, Human capital formation and foreign direct investment in developing countries, OECD Development Centre, Working Paper No. 211, p. 20.

Table 1. Synergies Between Skill Development and IPA Functions	
Function	Synergies with skill-development efforts
FDI promotion strategy	(a) Mapping out skill availability and the potential for development on a sector-by-sector basis.
	(b) Benchmarking skill quality, availability and cost with competing locations.
	(c) Introducing current labour force status in SWOT and designing a plan to upgrade/expand the pool.
Image building and sector branding	Utilizing specific labour endowments and Government development support as part of a targeted image-building campaign.
Investment targeting	(a) Targeting companies that need the skill pool developed at the location.
	(b) Targeting companies that have the potential for skill upgrading (organized preferably around sector specialty).
	(c) Targeting companies in the education sector.
Facilitation	(a) During the investment decision-making process: Understanding and matching project workforce needs.
	(b) During the project set-up: Labour sourcing, expatriate's visas and permits, etc.
Reinvestment: Investor aftercare	Articulating skill development as a key component of the IPA aftercare/business development strategy: Anticipating labour needs for company/sector expansion and operations upgrades.
Input into policymaking/ policy advocacy	Elaborating policy initiatives in the areas of education and immigration and engaging in private—public dialogue on present and future skill needs.
Monitoring and evaluation	Measuring IPA success in terms of:
	(a) new investment, reinvestment and sector/company upgrades.
	(b) the number of jobs created as a result of the skill-development programme.

Source: UNCTAD, 2014.

PROMOTING SKILLS IN PRACTICE

IPAs can act directly or indirectly to develop workforce skills. Direct action typically occurs as an IPA takes up the administration of a training or recruiting programme, whether for a sector or a particular company. Indirect action occurs when IPAs use their position as a bridge between the international business community and domestic stakeholders to transmit the labour needs of the former to the latter. Such interventions may be focused on the short- or long-term skill needs of a country, a particular sector or even a particular firm. Each IPA and country setting may suggest a different approach. However, experience shows that it pays in terms of investment returns and jobs.

COSTA RICA: MATCHMAKING INDUSTRY AND EDUCATION PROVIDERS

The Investment Promotion Agency of Costa Rica, CINDE, is well known for proactively targeting FDI and influencing the development of strategic

sectors from assembly to high technology and services. It does this, in part, by closely surveying the skill demand of foreign investors, bringing them together with academia in Costa Rica to design and deliver training programmes and informing students of rewarding career paths in demand. Since 2005, CINDE's leadership has resulted in over 10,000 workers being trained in high-value skills, such as those demanded by the country's quickly growing life sciences, advanced manufacturing and clean technology sectors. Critical skills expanded include English, medical device engineering, accounting and cloud computing.

CINDE does not have a specific mandate to develop the labour pool. However, its Aftercare Department sees skill development as fundamental to maintaining the country's competitiveness and, therefore, to the department's purpose of getting existing companies to reinvest in increasingly value-added activities. With a staff of five, the Aftercare Department leverages its credibility and strong relationships to rally companies, educational institutions and the Government to

act on shared interests. "Every year CINDE invites the foreign companies it has helped establish to its annual meeting to discuss the state of Costa Rica's investment climate" states CINDE's Aftercare Director. "CINDE visits some 120 investors regularly as part of its aftercare programme, and asks top management and HR directors about the skill sets needed to meet the company's long-term strategic goals. The companies expect that their skill development requests will be followed up on in detail."

CINDE must decide how and when to add a skill set to its list of priorities for development. Considerations for this decision are typically the following:

- (a) consensus among companies in a sector that a skill is vital to their development;
- (b) relative intensity of the need, as expressed by interviewees;
- (c) strategic importance of the company or sector;
- (d) complementarity of the skills with CINDE's support of the Government's national development goals, such as multilingualism and "second-tier" cities.

In a typical year, CINDE selects about 12-15 skills for development. For each of these, CINDE forms a working group of five or six companies, which will collaborate with the eventual education partner in elaborating and delivering the curriculum. With its menu of high-demand skills in hand, CINDE contacts some of the country's 62 universities, colleges, technical schools and vocational schools that are likely to have the expertise and capacity to develop a tailored programme, which may range from one-week training on the fundamentals of analytical thinking, to courses on cloud computing, up to six-year engineering programmes in information technology and other engineering areas. The English programme Tools for Success Plus, offered to technical high school students, is sponsored by companies and includes follow-up internships. While CINDE measures its success by the numbers of enrollees and graduates, there is evidence that these programmes have led to real employment by foreign investors. For example, 80 per cent of the approximately 1,500 participants in Tools for Success have been retained as paid employees.

The key to successfully replicating CINDE's approach lies in enhancing the IPA's credibility at identifying skill gaps in demand in the market as well as effective partner selection and management. These fundamentals are sustained by CINDE's strong sector knowledge, a track record of shared goals with the private sector and a robust aftercare function.

Today, skill development is a key element of CINDE's success in continuing to attract and retain

FDI. While the Government remains essential to the inclusive long-term development of education, CINDE targets the narrowest and most crucial of skill-set needs and works directly with the demand drivers and suppliers of those skills. CINDE's focused and streamlined intervention enhances the responsiveness of Costa Rica's educational system to its foreign investor community.

LITHUANIA: GETTING HUMAN CAPITAL TO STAY

In the 1990s, as Lithuania began the transition to a market economy and aspired to develop knowledge-based sectors, the country focused on increasing the training and development of requisite labour in the science, technology, engineering and mathematics (STEM) fields. The IPA Invest Lithuania targets companies in ICT, advanced manufacturing and life sciences, and understands that these sectors can only grow in tandem with the STEM labour pool. Invest Lithuania has, therefore, made skill development an integral part of its mission. Its efforts are distinguished by proactive promotion to foreign companies that will train local workers and by giving the skilled and experienced Lithuanian diaspora a path back home. "Every job that Lithuanians have with a foreign company, whether in Lithuania or abroad, is an opportunity for skill transfer," states Invest Lithuania's Managing Director. "We want Lithuanians working abroad to bring new skills home, and we want the foreign companies here to leave as much knowledge as possible. Our job is to help that happen."

Twenty-six of the country's 50 largest taxpaying companies are foreign and an important source of technology, practices and skills that are unavailable domestically. As administrator of the country's "Invest+" programme, which offers financial incentives to foreign firms that generate certain social goods, Invest Lithuania encourages the foreign companies that it targets to invest in upgrading the STEM skills the country needs. In the last two years, 10 of the companies that Invest Lithuania has proactively attracted have invested over US\$2 million in training in areas such as information technology services, design, communications, agricultural machinery and mechanical and electrical engineering. These companies, which include industry leaders such as Computer Sciences Corporation, COWI, Kinze Manufacturing and KB Components, typically have two to three years to meet negotiated training targets (e.g. number of trainees and number of internships). Companies are then required to maintain these target levels for at least five years. Invest Lithuania's programme operates on the expectation that once the incentive helps to get the companies started with the training

infrastructure, it will be in their self-interest to continue the training.

Under the Create for Lithuania programme, highly skilled Lithuanian professionals working abroad are invited to return to participate in a programme that is structured around three four-month rotations at a range of public institutions, including the Prime Minister's Office, ministries, parliament and State bodies focused on improving the investment climate. Although applicants from all technical fields are considered, those with STEM backgrounds are especially encouraged to apply. Many programme participants work on sectorlevel policy issues during their placements, giving them an investment climate advocacy experience that combines with their technical sector expertise and makes them highly desirable to foreign and local private-sector companies at the end of the programme. Through their placements, these individuals are exposed to foreign companies in their fields and build a good network of contacts. To date, 70 per cent of participants have remained in Lithuania at the end of the programme, with about half of them in specialist positions in the private sector and the other half serving in public institutions that oversee and support them, including as advisors to senior officials at the Ministry of Economy and the Ministry of Education and Science. Through its various initiatives. Invest Lithuania is making a difference in stemming the country's brain drain to the direct benefit of FDI priority sectors.

PENANG, MALAYSIA: A HOLISTIC APPROACH TO MEETING INVESTORS' NEEDS

investPenang, a state IPA in Malaysia, came into existence in 2004. At the time, a skill development mechanism was operational in the form of the Penang Skill Development Centre (PSDC), whereby established businesses and local academia partnered to train more than 10,000 workers to meet corporate growth plans. Nonetheless, investPenang found the IPA was in a special position to enhance that partnership by expanding three elements of the skill equation, the pool of companies, the pool of educational institutions and the pool of workers being trained.

While PSDC builds the skills of companies already operating in Penang, investPenang represents the skill needs of high-value industries that the state is trying to attract. PSDC was set up as a non-profit training centre to address skilled labour shortages in 1987 by eight major foreign electronics companies in Penang, including Intel, HP and Hitachi, and it continues to be driven primarily by the needs of established investors. However, investPenang follows FDI trends and feeds local institutions of higher learning, including PSDC, with information

on the skills needed to be competitive among targeted potential investors.

While PSDC is a training centre itself, investPenang works to attract foreign universities, thereby expanding training capacity in the region. Together with other state agencies, investPenang facilitated the establishment of two universities proposed in Batu Kawan, which will expand the state's highly skilled labour supply in critical areas. A satellite campus of the United Kingdom of Great Britain and Northern Ireland's Hull University will graduate students in engineering, finance and accounting, which are needed to grow the state's priority sectors. The Asian Women's Leadership University. which is associated with the United States' Smith College, will help the state attract top talent among women to the region and encourage local talent among women to join the workforce.

Finally, while PSDC works with the local labour pool as it is, investPenang seeks to expand its size by attracting highly skilled individuals from abroad. investPenang expands the local labour pool by contacting foreign-based Malaysians, matching job seekers with employers and advocating measures that improve the liveability of Penang for locals and expatriates. investPenang holds events with Malaysians graduating from universities in Australia, Japan and the United Kingdom, raising awareness of the full range of exciting job opportunities back home. Interested individuals may then use the Penang Career Assistance and Talent Centre, managed by investPenang, to find job opportunities and approach employers. However, "the main thrust for global talent attraction is the liveability of our location," according to the General Manager of investPenang. Thus, investPenang engages heavily in advocacy at the state and federal level to ensure that Penang state remains attractive for Malaysians and highly skilled expatriates alike. "We are proud that George Town, Penang's capital, is ranked the eighth most liveable city in Asia, and we are working to remove any bottlenecks, such as expensive housing, that could squeeze out our talent."

SKILL DEVELOPMENT IS A MUST

The three case studies generate some useful lessons applicable across the wider spectrum of IPAs, as follows:

• Engage proactively: IPAs, by definition, work on a country's attractiveness for FDI. That is, they improve their locations' value propositions by advocating changes to the investment climate. If skill availability is arguably the largest constraint to the attraction and expansion of high value-added investment projects, there is a rationale for proactive engagement by IPAs regardless of mandate or institutional set-up. Anticipating the skills needed to upgrade existing sectors is essential for the locations to stay competitive,

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sustain investment, anchor projects and extract more value from FDI;

- Define a strategic focus: In any given country, there are public and private organizations working on education. An IPA's first challenge in intervening effectively is understanding who these players are and what, if anything, they are doing to understand and service the skill demand of established foreign companies and new investments the location tries to attract. Then, the IPA must decide where to focus its particular assets in terms of the following strategic orientations:
 - 1. Broad versus narrow focus: Individual interventions may aim to build the skill supply for a sector overall or ensure that specific investors obtain the skilled workers they need.
 - 2. Present versus future focus: Will the IPA focus on the needs of established industries or on building the skills needed to allow for the establishment of target sectors?
 - 3. Local versus foreign talent: Will the IPA develop local talent or facilitate the attraction of foreignbased talent?
 - 4. Role of intermediary versus that of programme administrator: Will the IPA be a matchmaker between those that demand and supply skills or directly manage a training programme itself?
- Develop strong relationships with companies and educational institutions: The most effective skill-development programmes will be demand driven at the company level. The IPA should be a trusted broker between companies and educational institutions, so that the skill sets required are clear. Engaging with companies on an ongoing basis to track changing skill demands should be part of the IPA aftercare department work plan. In order to have industry-leading companies share their precise skill needs for future growth. IPAs need their trust and well-established communication channels. Likewise, to persuade educational institutions that it is in their interest to adjust their curricula or student numbers, IPAs need

- credibility as an objective partner and well-established communication channels. This credibility is built on an IPA's strong sector knowledge, a track record of results and a sound system for managing partnerships;
- Define skill-development tasks across all IPA functions: By integrating skill development into an IPA's corporate strategy and translating it into an action plan throughout each function, including the advocacy of education policy, targeting of foreign education institutions for investment, image building as a location that appreciates and develops talent and project facilitation through assistance with staffing; ensuring that there are appropriate "M and E" indicators to report on the success of the skill development initiative.

CONCLUSIONS

A country's economic development and its attractiveness to FDI depend heavily on the skills of its workforce. This is especially true for new sectors, in which a country's ability to meet evolving labour demand is untested. As such, IPAs should support skill development and can do so in a variety of ways, as their mandates and strengths permit. Although most IPAs are not necessarily expected to develop skills, the rationale for doing so is implicit in most typical IPA mandates. In fact, many successful IPAs judge skill-development initiatives to be among the most important ways that they create value for the sectors they support. The role of an IPA in skill development is that of an objective, knowledgeable and wellconnected broker. The stronger an IPA's sector knowledge and stakeholder relationships are, the more qualified it is to actually drive labour pool transformation. However, an IPA does not need to lead to have an impact. The key is to understand the skill gaps, what is being done to fill them and where best the IPA's assets may be applied to make these efforts more effective. Any IPA can do this, and those with the initiative to do so should expect greater success in attracting, retaining and expanding FDI opportunities.

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