

# Promoting technical skills to win foreign investment: Learning from other markets



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A report by  
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**'Promoting technical skills to win foreign investment: Learning from other markets'**



WorldSkills UK established a Skills Taskforce for Global Britain in 2021 with the mission to explore how the UK could become a global leader in using technical skills to compete for and win foreign direct investment (FDI). This report by OCO Global is a critical part of the evidence base that will support the Taskforce's analysis and sheds vital new insights on the link between skills and inward investment.

The findings of OCO Global's study into how other markets promote technical skills to win FDI reveal an inward investment landscape that is becoming more competitive and is changing in focus. Competition is becoming fiercer, with a greater number of markets entering the race to attract investors and established markets becoming more strategic and less laissez faire in their approach to FDI. At the same time investors' needs and priorities are changing with an increasing focus on talent and on the technical skills which may have been overlooked in the past, but which are critical for thriving sectors such as tech, advanced manufacturing and life sciences.

The consequence is that skills and inward investment are now integral to each other. All of the investment promotion agencies (IPAs) featured in the case studies in this report (deliberately selected to offer a range of approaches and economic contexts) have a sophisticated skills offer to attract investors. The most successful IPAs also target firms for the high-quality skills they can bring, and the positive spillover effects they have on the local skills base. Whether you're interested in attracting more investment to the UK or developing world-class skills, the message is clear - skills and inward investment need to be part of the same conversation.

The UK has historically enjoyed a very strong position in terms of attracting FDI, but since losing its top spot for FDI projects in Europe to France and with a renewed Government focus on attracting high-skilled, high-wage jobs to all parts of the UK, these examples that highlight how other countries make skills and inward investment work for each other could prove useful.

Singapore and Ireland are the standout examples of how skills can be an effective tool for attracting FDI. Singapore's Investment Promotion Agency EDB Singapore, is a critical stakeholder in the Institute of Technical Education, helping to determine which skills should be developed to attract prospective investors. EDB Singapore also seeks out companies that will have significant spillover effects, so that Singapore can continue to develop high-quality cutting-edge skills. WorldSkills standards are also used by the Institute of Technical Education as to ensure the skills they are developing are world-class. The Irish IPA IDA Ireland is also a significant stakeholder in the skills system and uses sophisticated skills mapping across Ireland to show prospective investors the pipeline of talent they could draw on if they invested.

These insights are invaluable for our Skills Taskforce as they prepare to set out recommendations to make sure that high-quality skills can help attract and retain FDI in all parts of the UK by 2030. We are grateful to OCO Global for producing such an insightful report and to all their partners who helped inform this study. We look forward to publishing the WorldSkills UK Skills Taskforce report in the Spring and using the insights from this report to show how we can learn from international best practice and identify ways for skills and inward investment to work better together.



# EXECUTIVE SUMMARY

**Skills and foreign direct investment have a symbiotic relationship. Access to talent rates highly in inward investors' criteria for choosing investment locations so, in the competition for internationally mobile capital, a location's skills offer is crucial to success in attracting investment. Skills drive FDI.**

At the same time, while foreign investors clearly have a vested interest in training local staff to perform their jobs well, the benefits of such upskilling do not accrue solely to the investors but also to the staff they train and to wider society. The new knowledge and techniques that investors bring with them spill over into their host economies as workers acquire skills that they can take with them to new employers. FDI drives skills.

Such a relationship of interdependence creates the possibility for a virtuous (or vicious) circle, where improvements (or declines) in skills and FDI may reinforce one another.

When this relationship is well understood and cultivated by the institutions that control investment attraction and skills policy respectively, the long-term results can be profound.



**For the purposes of this report, we have investigated the experience of six locations, including:**

The Republic of Ireland, France, Costa Rica, Singapore, the (US) State of Ohio and the (Australian) State of Victoria.

Although there are differences in approach, we have identified three major themes in international best practice, finding that the most successful handling of technical skills and FDI involve the investment promotion agencies (IPAs) of each location:

**Partnering effectively with institutions responsible for skills policy.** This allows for the demands of foreign investors to be factored into skills and education policy and can utilise the propensity of FDI to act as a lead indicator for wider skills demand.

**Targeting specific investors because of their expected impact on skills.** Advancing a location's capability frontier – i.e., the limits of what it can produce – is a key goal of economic development; the gap between the skills a location currently possesses and those it wants to acquire can be most effectively bridged using the expertise of the world's leading companies - foreign direct investors.

**Encouraging technical skills transfers from foreign investors once they have arrived.** Foreign investors are typically 60-100% more productive than the average domestically owned company but for these benefits to proliferate through the economy, the transfer of skills to domestic employees is crucial; every opportunity to facilitate and, where necessary, incentivise this, should be taken.

The UK has enjoyed considerable success in attracting FDI over recent decades, owing to its position as an English-speaking European nation with a competitive business environment.

However, exiting the EU has altered the investment outlook, with the UK facing greater competition for FDI from its European neighbours. Concurrently, COVID-19 has affected the supply of investors, not only in terms of the sectors that remain resilient in the face of the pandemic, but in the nature of FDI itself. The demonstrated viability of home working for large swathes of economic activity increases the FDI focus on those sectors and business activities for which a physical workplace remains necessary. And these business activities rely disproportionately on technical skills.

Furthermore, technical skills and FDI in combination are central to solving many of the UK's most pressing economic challenges. Raising productivity, particularly in order to 'Level Up' the regions outside London and the South East, requires private sector investment in addition to government funding and yet it is the availability of skills that so often determines where the highest value investment will land.

Similarly, Net Zero and the UK's endeavour to be a science superpower both require a combination of domestic technical skills and foreign expertise and capital to realise their ambitious goals.

Though the stakes are high, the UK has an enviable opportunity: to take advantage of its unusually high proportion of foreign-owned businesses to drive up its own productivity through skills development. To do this, it must ensure foreign investors are aware of the country's technical skills infrastructure and that their incentives to hire and train local staff are aligned to those of the country.



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# INTRODUCTION

In this section, we have provided an overview of the context for this project, the approach we have used to deliver this report and an outline of how the report has been structured.

Skills are consistently rated as one of the most important factors for executives when considering whether or not to invest in a country. The World Bank's 2019-20 Global Investment Competitiveness Report highlights that over 85 per cent of investors rate talent and skills as critically important or important<sup>1</sup>. Similarly, EY's 2021 Attractiveness Survey for Europe highlights the importance of digital skills in investment decisions: 92 per cent of international investors say that the availability of a workforce with technology skills is an important factor that determines where they invest<sup>2</sup>.

As an independent charity that works in partnership with employers, educational institutes and governments, WorldSkills UK can play a unique role in raising education standards, particularly in apprenticeships and technical education, and in helping to link training more effectively to the needs of employers.

WorldSkills UK established a Skills Taskforce for Global Britain in 2021 with the aim of helping make the UK a global leader in using high-quality technical skills to secure long term international investment, that will create jobs and growth in key sectors across the nations and regions of the UK.

With 12 members representing different parts of the UK and with a background in both skills and investment, the Skills Taskforce has been steering this project to uncover how skills, inward investment policy and delivery could work better to aid the UK's economic recovery; and make sure the UK can use its technical skills as a calling card for international investment by 2030.

The Skills Taskforce will publish its final report in Spring 2022, with recommendations for Government, inward investment agencies, skills providers and WorldSkills UK.

Government approaches to investment attraction can be highly interventionist. For example, certain locations choose to provide very direct support to investors, through a grant or a government funded training programme. By contrast, other locations adopt a less interventionist approach by setting up a framework for tax or regulations of which investors can take advantage.

Equally, sometimes government support can be heavily weighted in favour of more fiscal programmes, e.g. through a loan or a tax rebate; or more process driven and com-

mmercial in nature, e.g. through visa assistance or fast track licensing.

Many IPAs apply these types of incentives directly in the areas of skills and workforce development.

To support the Skills Taskforce in developing a greater understanding of how the UK's skills compare with its competitors; what international investors are looking for in terms of skills in the UK; and how the UK can more effectively connect its skills development and inward investment activities, this report has developed a series of international case studies looking

at how locations around the world incorporate information about their technical skills offer into their FDI promotion strategies.

The report details the findings of interviews and desk research focused on selected countries and provides a series of recommendations on how the UK can integrate its skills development activities with its inward investment initiatives.

For the project methodology and definitions and usage of key terms, see Appendix A.

## PROJECT OVERVIEW

The Skills Taskforce commissioned OCO Global to deliver a research study that aims to understand the role of IPAs in developing in their economies, and how they can then position this as an asset to international investors.

This report highlights how other countries incorporate information about their technical skills offer into their FDI promotion strategies.

### Research has considered the following areas:

- How national and regional IPAs in other markets promote their technical skills offer and how effective this is in building a case for foreign investment
- How information about a locality's skills offer is gathered and how it is then described in both marketing materials and in propositions to companies considering investment
- How prominently the promotion of availability of skilled staff and access to training features alongside other incentives such as tax or visa policy
- How feedback from investors informs the development of the skills offer and system within other markets

## DOCUMENT PURPOSE

This report represents the final output of the methodology outlined in Appendix A and aims to offer the Skills Taskforce insights into how other IPAs have approached skills development and integrated their activities into investment promotion efforts.

It also offers a series of recommendations on how the UK can improve its investment attraction efforts by placing more emphasis on skills development as part of the investment promotion agenda.

We begin the report by examining the current skills and FDI landscape in the UK and consider its approach to skills development and promotion in relation to its investment attraction efforts.

We then present a selection of detailed case studies on the six selected locations. We review the approaches adopted by these locations in relation to investment promotion and skills development and highlight specific initiatives or programmes of note.

Finally, in Chapter 4, we analyse the findings from chapters 2 and 3 to draw inferences about best practice in the promotion of technical skills in FDI attraction and its implications for the UK.

<sup>1</sup>World Bank Group, 'Global Investment Competitiveness Report: 2019/2020: Rebuilding Investor Confidence in Times of Uncertainty,' 2020. [Website](#).

<sup>2</sup>Ernst & Young, 'EY Attractiveness Survey Europe: Foreign investors back Europe, but is Europe back?,' Jun 2021. [Website](#).

# FDI AND TECHNICAL SKILLS IN THE UK

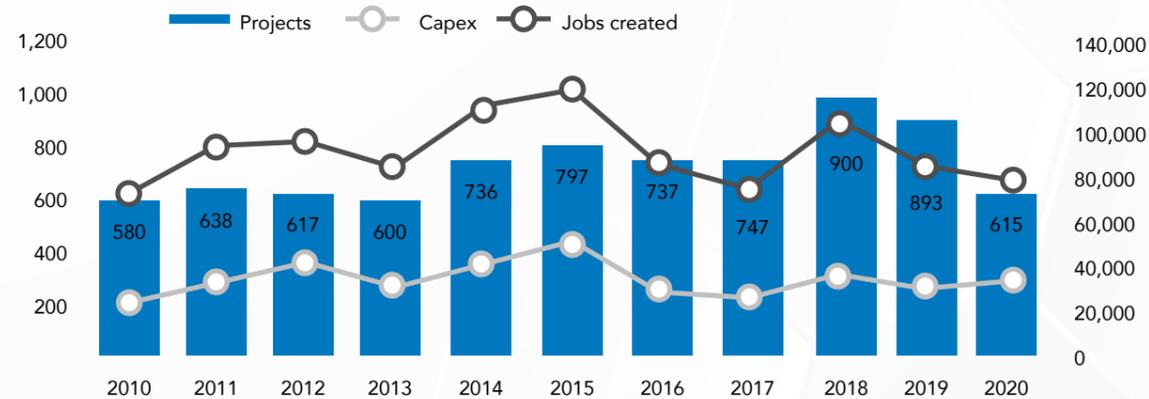
In this section, we outline the UK's FDI performance, how the promotion of technical skills is incorporated into the UK's pitch to foreign investors and how the sentiment of investors in the UK towards skills has evolved.

## THE UK HAS A STRONG TRACK RECORD IN ATTRACTING FDI

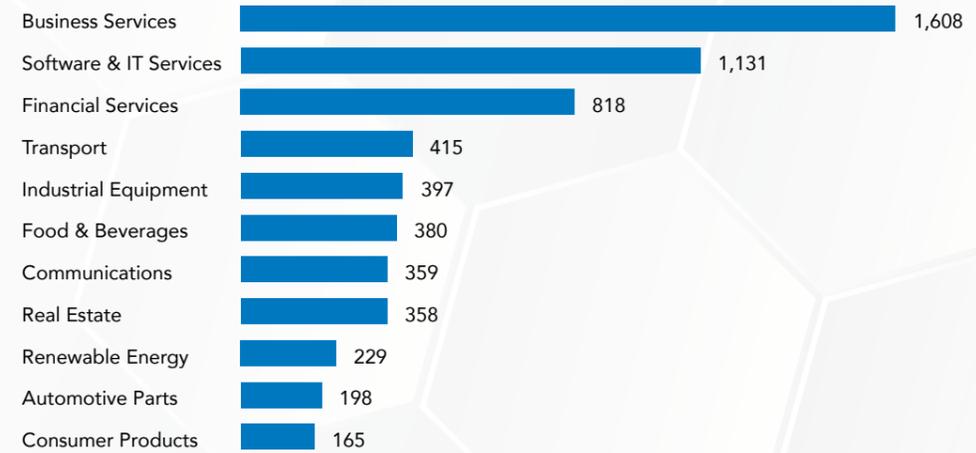
The UK is a world leader in FDI attraction, ranking 2nd worldwide (behind the USA only), for the number of inward FDI projects over the past decade. Between January 2010 and December 2019, the UK attracted a total of 7,933 FDI projects<sup>3</sup>, representing 26.8% of all projects coming into Western Europe in that period.

These projects represent a total capital investment of USD 336.97bn. Over the same period, an estimated 574,000 jobs were created by FDI.

FDI into the UK has fluctuated over the past 10 years peaking in 2018, seeing an 8% decrease the following year in 2019.

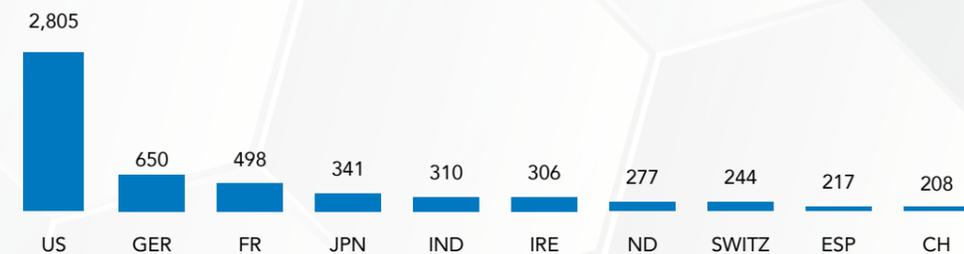


By 2019 the value of the UK's FDI stock was \$2.1tn, leading amongst European countries and worth more than the FDI stock of Germany and France combined.



Most inward FDI flows are directed to Business, Software, and Financial Services consistently leading in number of projects per sector over the past decade.

In terms of source markets, the United States accounts for 35% of all projects into the UK while EU countries make up 35% of projects entering the country. EU countries also make up six of the top ten source markets for FDI projects.



<sup>3</sup> FDI Markets, accessed Nov 2021.

# HOWEVER, THE UK IS FACING INCREASED COMPETITION FOR FDI

The UK's historic success in attracting FDI has been built on a range of factors, including:



English-speaking



Access to European Market



Stable institutions



Low corruption

However, there have been signs in recent years that the UK may have started to lose its competitive edge. The 2020 EY Attractiveness Survey reported that although the UK remains one of the most attractive destinations for investment in Europe, it has lost its top spot in Europe to France for the last two years.

This drop in perceived attractiveness appears to be at least partly attributable to Brexit.

When investors were asked to evaluate the attractiveness of particular attributes of the UK offer, the two categories that suffered the largest falls between 2015 (pre referendum) and 2019 were 'Access to European market' and 'Stability and Transparency of political, legal and regulatory environment' – two of the UK's historic strengths.

By 2019 the value of the UK's FDI stock was \$2.1tn, leading amongst European countries, second only to the US worldwide and worth more than the FDI stock of Germany and France combined.

Fig 1 – EIM Investment Monitor: FDI projects into Europe

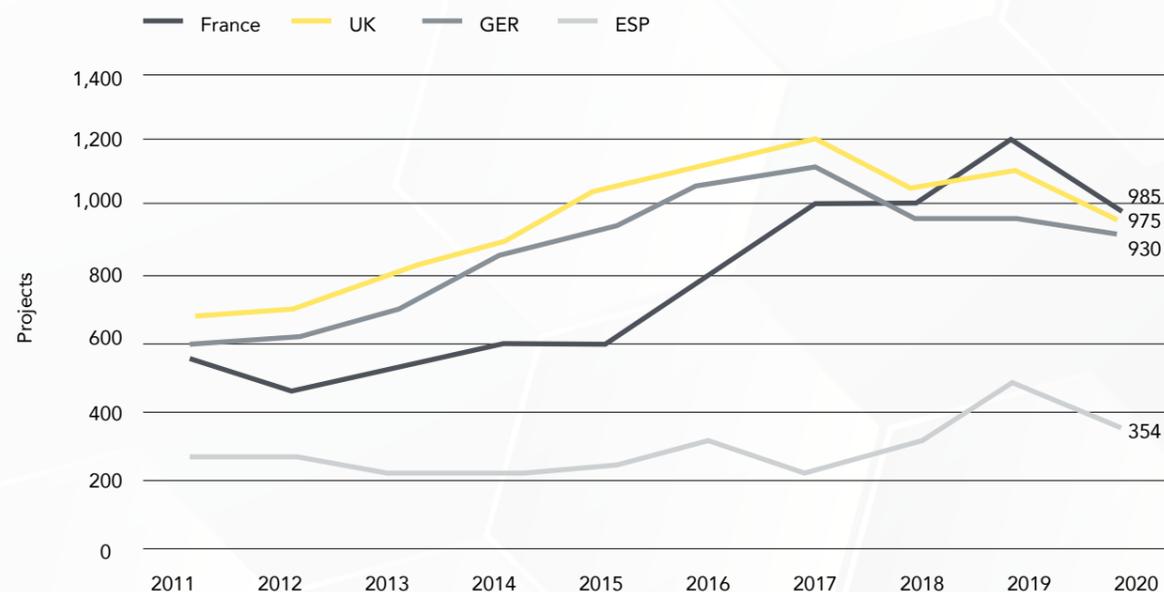


Figure 2 - for each of the following criteria, from the point of view of your company how attractive is the UK as an FDI destination? (Source: EY Attractiveness Survey)

Factor	2015 in %	2019 in %	Difference
Stability & Transparency of Political & Reg Environment	82	53	-29
Access to European Market	83	60	-23
Stability of social climate	86	64	-22
Transport and logistics infrastructure	81	67	-14
Local labour skills level	80	67	-13
Availability and cost of real estate	53	41	-12
Quality of life, diversity, culture and language	90	83	-7
Technology, telecommunications infrastructure	85	78	-7
Education	85	78	-7
UK's domestic market	78	71	-7
Corporate Taxation	68	69	1
Labour costs and legislation	51	65	14
Research and innovation capacity	81	NA	-
Level of business regulation	NA	63	-

However, also suffering a significant drop was the perceived level of local labour skills, albeit that labour costs were viewed as more attractive, following the fall in the value of the pound.

# THE COVID-19 PANDEMIC HAS ALTERED THE FDI AND SKILLS LANDSCAPE

The COVID-19 pandemic had a significant effect on FDI flows, with UNCTAD reporting global declines of 35 per cent in 2020.

This represented the lowest level in FDI flows since 2005 and was almost 20 percent lower than after the 2009 global financial crisis, with the fall in FDI significantly sharper than the fall in GDP and trade. Lockdowns in place around the world caused existing and new investment projects to slow or be reassessed.

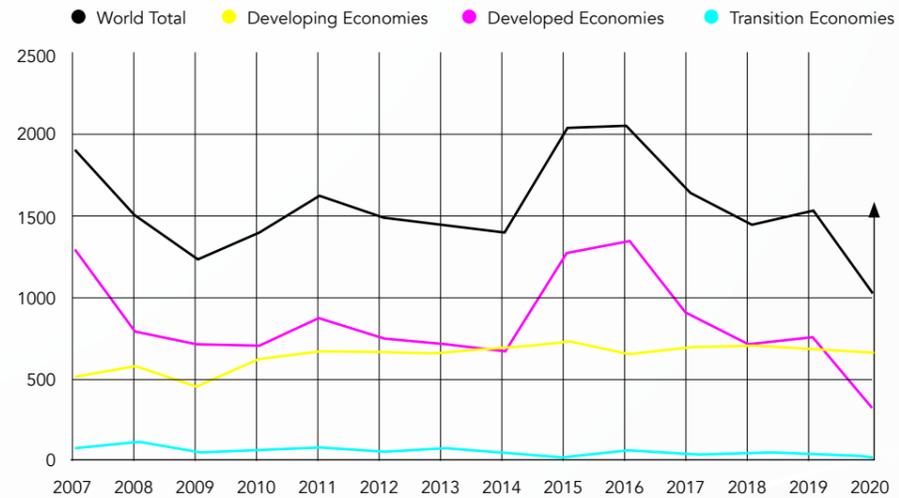


Fig 3 - UNCTAD - World Investment Report 2021

The decline was felt most prominently in developed economies where FDI fell by 58%. In developing economies, however, FDI decreased by only 8% - a significantly more moderate decline. Consequently, developing economies accounted for two thirds of global FDI in 2020.

The impact of the pandemic was concentrated in the first half of 2020, with recovery for cross-border M&As and international project finance deals in the second half of the year. By contrast, greenfield investment continued its negative trend throughout 2020 and into 2021.

However, FDI flows have recovered more strongly than expected. Flows in the first half of 2021 reached \$852 billion which recovered more than 70% of the loss induced by the COVID-19 pandemic. Developing economies in particular, have recorded the biggest rise in FDI, but flows in developing economies also increased significantly with a growth acceleration in East and South-East Asia, a recovery close to pre-pandemic levels in Central and South America and increases in other economies across Africa and West and Central Asia.

Investor confidence remains fragile although improvements are evident. Uncertainty remains as the world tries to rebuild after extended periods of lockdown and restrictions. Geopolitical tensions that fell away when the pandemic hit, such as Brexit and the subsequent introduction of the Northern Ireland protocol, have emerged again with a renewed focus as the UK negotiates its own trade agreements outside of the European Union. AT Kearney's FDI Confidence Index reports respondents were less optimistic about the outlook for the global economy than they have been since 2016 with concern about how quickly the economy will recover from COVID-19<sup>4</sup>. Similarly, UNCTAD reports fragile investor confidence in industry and global value chains, demonstrated not least in the continued downward trajectory of greenfield investments<sup>5</sup>.

However, while investors remain cautious, there is evidence that investor confidence is improving. UNCTAD's Investment Trends Monitor suggests that investor confidence is evident in infrastructure, with COVID-19 stimulus packages, long-term financing conditions and overseas investment programmes helping to improve investor perception<sup>6</sup>.

Additionally, continued vaccine rollout is playing a part in this shift as the world tries to rebuild after the pandemic. And investors have an even greater focus on skills availability.

Compared with a year ago, how has your view of the global economy changed?

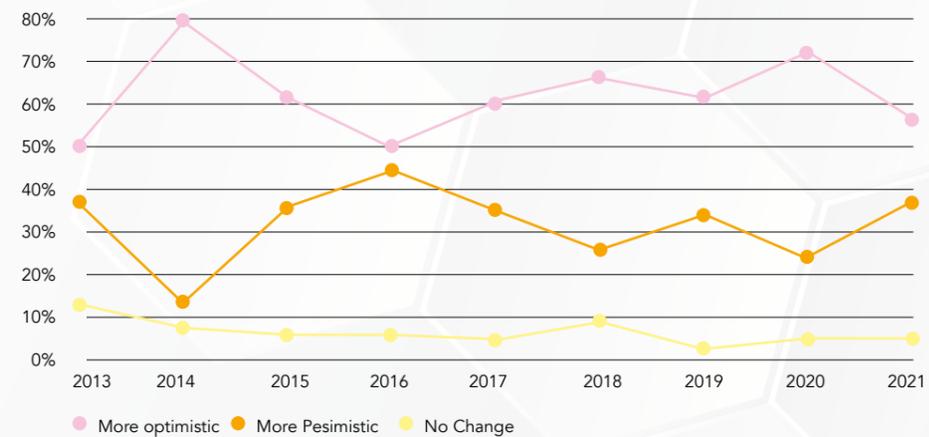


Figure 4: Investors are more pessimistic about the economy this year than they were last year. Source: AT Kearney

4 AT Kearney, 'On shaky ground: The FDI Confidence Index 2021,' 2021. Website.

5 UNCTAD, 'Global Investment Trend Monitor, No. 39,' Oct 2021. Website.

6 UNCTAD, 'Global Investment Trend Monitor, No. 39,' Oct 2021. Website.

**As lockdowns and restrictions are lifted, many sectors have emerged from the pandemic with altered skills requirements. Perhaps most obvious has been the shift to digital and online.**

Some degree of remote working looks set to stay, with 79% of senior managers anticipating employees will continue to work from home at least some of the time<sup>7</sup>. This places a greater emphasis on technical skills: according to a Department for Digital, Culture, Media & Sport report, 82% of jobs advertised online now require digital skills<sup>8</sup>.

In truth, this has accelerated an existing trend rather than started an entirely new one. Similarly, a shift towards AI and robotics are anticipated to lead to 14% of the global workforce needing to reskill, according to a McKinsey Global Institute report<sup>9</sup>.

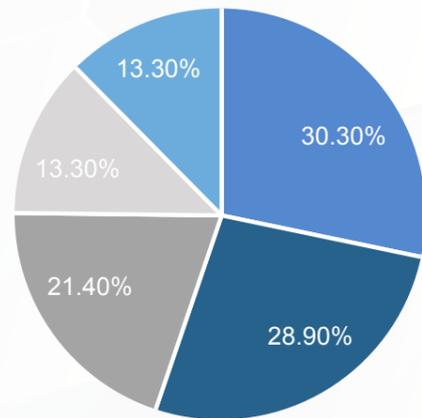
The problems associated with extended supply chains during the pandemic has put renewed focus on the shift towards near-shoring and automation.

AT Kearney polled investors on which factors were most important when choosing an investment destination. The categories most closely relating to skills – Technological and innovation capabilities; research and development capabilities and Talent / skill level of labour pool - all retained or increased their ranking in investors' perceived importance between 2020 and 2021<sup>10</sup>.

**Foreign companies considering the UK say that a skilled workforce is a top priority when considering where to invest.**

In the last year, the implementation of the Trade and Cooperation Agreement between the UK and the EU has led to vocational skills shortages in certain sectors that have traditionally relied on imported EU labour, such as hospitality, agrifood and logistics. These effects have been exacerbated by the Covid-19 pandemic, which has seen structural skills shortages, not just in the UK, but in developed economies across the world.

- Skilled workforce availability
- Proximity to markets or customers
- Domestic market growth
- Industry cluster
- Transport infrastructure



**Figure 5** – Top motives of investors considering the UK. Source: FDI Markets

This presents a particular threat to the UK, since whilst investors choose locations based on a variety of factors, the leading motive for projects landing in the UK in 2020 was 'skilled workforce availability' accounting for 30.3% of all projects entering the country, followed shortly by proximity to markets or customers accounting for 29% of projects<sup>11</sup>.

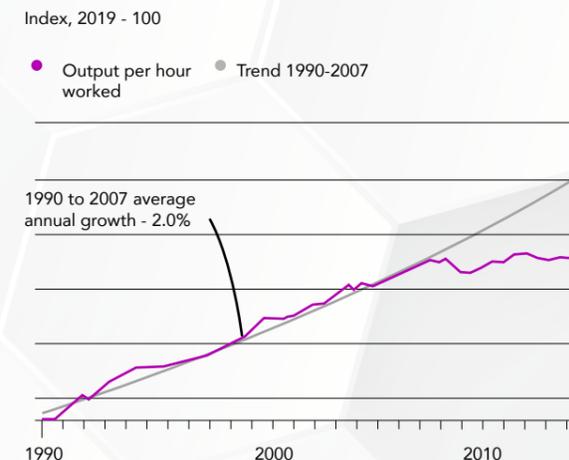
7 WeWork and Workplace Intelligence, 'The future of work is hybrid—here's what that will look like,' Apr 2021. **Website.**  
 8 Burning Glass Technologies and Department for Digital, Culture, Media and Sport, 'No Longer Optional: Employer Demand for Digital Skills,' Jun 2019. **Website.**  
 9 McKinsey & Company, 'Jobs lost, jobs gained: What the future of work will mean for jobs, skills, and wages,' Nov 2017. **Website.**  
 10 AT Kearney, 'On shaky ground: The FDI Confidence Index 2021,' 2021. **Website.**  
 11 fDi Markets, accessed Nov 2021.

**DESPITE ITS SUCCESS IN ATTRACTING FDI, THE UK SUFFERS FROM LOW PRODUCTIVITY**

**An enduring paradox for the UK is that despite its excellent track record in attracting foreign direct investors, whose productivity is some 70% above the UK average<sup>12</sup>, the UK's own domestic productivity remains stubbornly low in relation to its OECD counterparts.**

Country	GDP per hour worked	GDP per person employed
	US Dollar	US Dollar
Ireland	109.6	194,157.6
Luxembourg	106.0	159,722.5
Norway	93.2	128,788.7
Denmark	84.6	115,979.7
Belgium	81.7	128,892.3
Switzerland	79.4	122,970.5
France	77.1	117,104.3
US	76.8	133,812.0
Sweden	76.4	110,922.7
Austria	75.0	114,738.1
Netherlands	75.0	107,908.6
Germany	74.8	103,315.5
Iceland	72.4	107,122.7
Finland	69.2	106,423.5
G7	68.5	112,388.0
Euro Area (19 countries)	66.9	105,283.3
UK	65.4	100,543.6

**Table 1:** Productivity level in the OECD<sup>13</sup>



Although there are question marks over the comparability of different countries' productivity measures<sup>14</sup>, there seems to be little doubt that the UK's productivity growth has stalled since the financial crisis.

**Figure 6:** UK productivity since the financial crisis (source: FT.)

12 Office for National Statistics, 'UK foreign direct investment, trends and analysis: August 2020,' Aug 2020. **Website.**  
 13 OECD.Stat, 'Productivity: Level of GDP Per Capita and Productivity,' accessed Nov 2021. **Website.**  
 14 See, for example: Office for National Statistics, 'International comparisons of productivity (ICP) methodology updates: labour input measurements February 2021,' Feb 2021. **Website**

This is especially surprising, given the UK's first tier higher education system. The UK is home to four of the world's top ten universities and seventeen of the top one hundred, according to the QS World University Rankings (see Table 1 for comparisons with our case study locations).

Country	No. of Universities in QS top 100
USA	28
UK	17
France	3
Ireland	0
Germany	3
Australia	7
Singapore	2
Costa Rica	0

**Table 2:**  
Number of leading universities  
Source: QS

Various theories have been proposed to explain the discrepancy between the UK's leading position in higher education and its relatively low level of productivity.

An argument advanced by Thorsten Beck of Cass Business School is that there is a 'missing middle' in UK education – between high class academic education and basic skills for low-skilled workers, the UK requires 'a strong technical education system with apprenticeships as in, for example, in Germany'<sup>15</sup>.

Whatever the solution, there is empirical evidence that a skills mismatch exists. The gap between the skills available in the workforce and those demanded by businesses is greater than that in most developed competitors, as illustrated in Table 1. Over 40% of UK workers are employed in an occupation for which they do not have the correct qualifications, representing the fifth-worst skills mismatch among 30 countries analysed<sup>16</sup>.

<sup>15</sup> Ilzetzki, Ethan, 'If the UK is high tech, why is productivity growth slow? Economists weigh in,' London School of Economics, Mar 2020. [Website](#).  
<sup>16</sup> The OECD Skills for Jobs database indicates that 28% of the UK workforce is underqualified for their occupations, while 13% are overqualified, based on educational attainment being higher or lower than that required for the job. NB ILO data differs slightly.

**Table 3:**

Skills mismatch level

This is investigated further by the Industrial Strategy Council's 'UK Skills Mismatch in 2030 report' (2019).

The report highlights the degree of skill shortage (-) or surplus (+) per knowledge skill.

Country	Share of over educated(1)	Share of under educated (2)	Sum (1) + (2)
India	14	48	61
Costa Rica	12	39	51
UK	22	22	44
US	27	15	42
France	21	21	42
Ireland	26	14	40
Australia	19	20	39
Singapore	NA	NA	NA
HK	NA	NA	NA

## 2.5 TECHNICAL SKILLS AND FDI LIE AT THE HEART OF MANY CURRENT CHALLENGES IN UK ECONOMIC POLICY

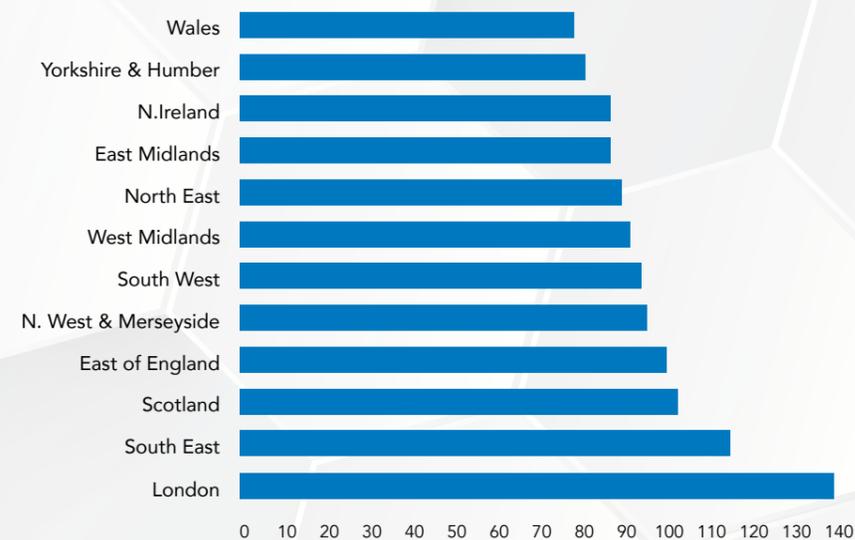
Both technical skills and FDI have significant roles to play in addressing a number of the government's current economic challenges:

### Levelling up

'Levelling up' the country requires the creation of higher paying jobs in comparatively less well-off regions.

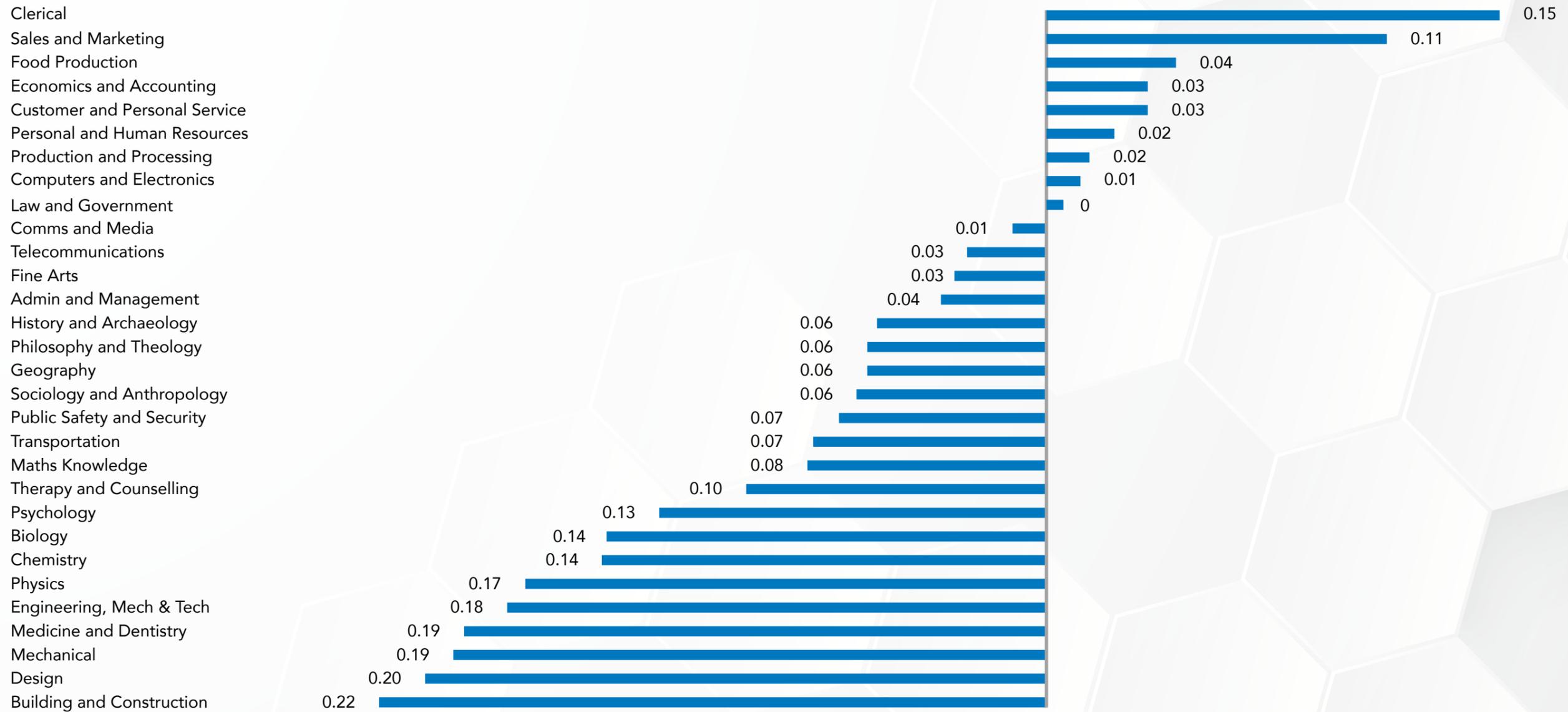
As Fig 3 illustrates, London and the South East currently enjoy significantly higher levels of output per hour worked than other areas of the country.

Achieving those productivity increases is heavily dependent on technical skills, particularly as the regions of lower productivity have fewer graduates per head of the population (see Fig 4)



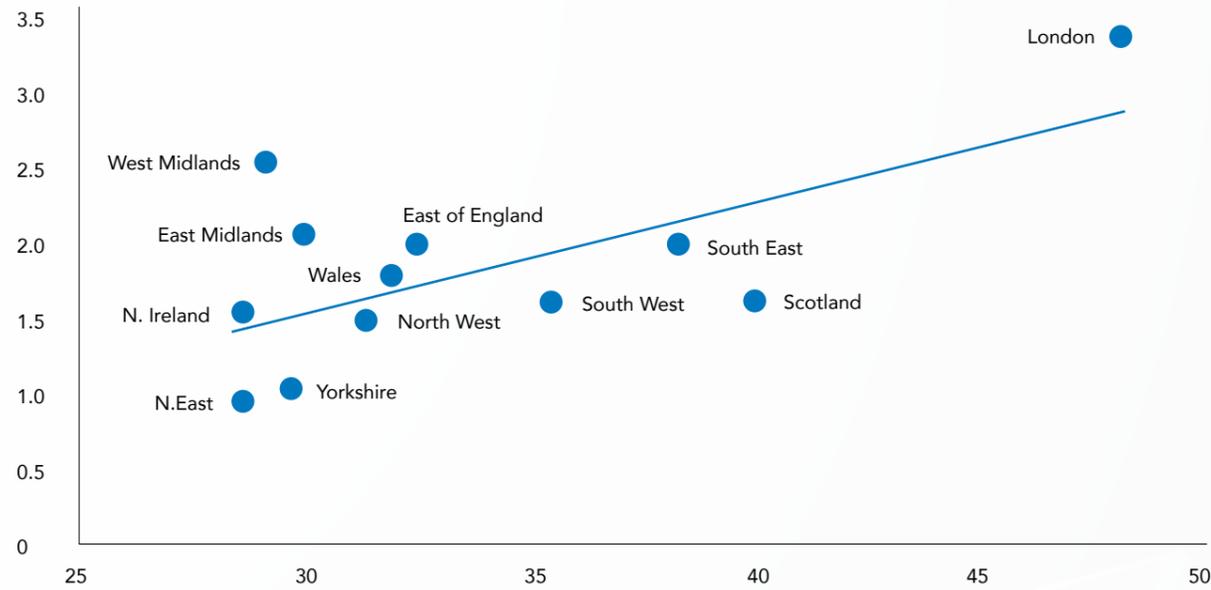
**Figure 6:**  
Productivity by UK region

**OECD Index showing the degree of skill shortage (-) or surplus (+) per knowledge skill.**



**Table 4:**  
Degree of skill shortage (-) or surplus (+) PER KNOWLEDGE SKILL Source: UK Skills Mismatch in 2030  
(from OECD Skills need database)

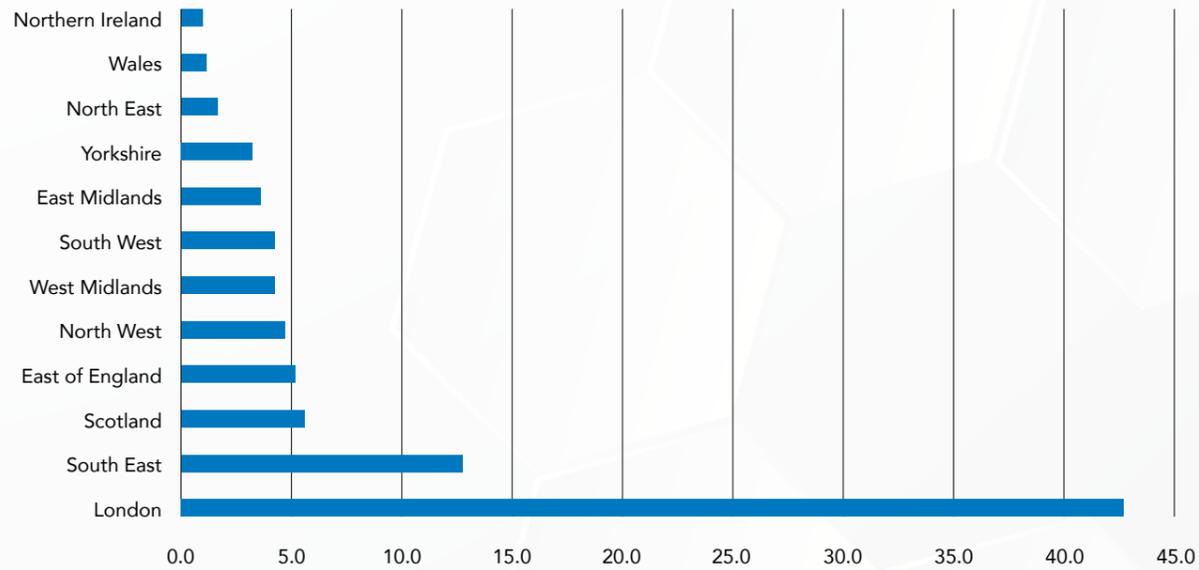
### Average percentage of degree-educated population vs GVA growth by region



**Figure 7:**  
Percentage degree-educated vs GVA growth<sup>17</sup>

The disparity between regions is even more stark in terms of inward FDI received. Figure 8 illustrates the share of UK FDI going to each UK region.

### Share of FDI by Region 2019



**Figure 8:**  
Share of FDI by UK region (source: ONS)

<sup>17</sup> Economic Research Council, 'UK Regions: Percentage of Degree-Educated Population vs GVA Growth,' May 2019. [Website.](#)

### Net Zero

The government's commitment to achieve net zero carbon emissions by 2050 through a green industrial revolution requires a new set of vocational skills, from decarbonisation and the development of hydrogen and nuclear to carbon capture and storage and electrification of transport, as well as the shift to digital. The Net Zero Strategy claims to support up to 440,000 new jobs by 2030<sup>18</sup>.

The expected role of foreign direct investors is made explicit in the government's 10-point plan. For instance, the government is anticipating private sector investment of £20 billion into offshore wind and £4 billion into hydrogen technology<sup>19</sup>.

### Shift to 'high skills, high wage' economy

Following the UK's exit from the European Union, the end of free movement of labour has coincided with well-publicised labour shortages in certain sectors / subsectors such as hospitality, fruit picking and HGV driving. UK government policy is to reduce the country's reliance on cheap imported labour and instead move from a 'low wage, low skill' economy to one of high wages and high skills. However, although restricting the supply of imported labour may already be delivering wage increases in those sectors<sup>20</sup>, it does not, in itself, lead to higher levels of skill. Higher wages without higher skills would represent simply a transfer of surplus from employers to employees, harming competitiveness, jeopardising the UK's attractiveness to foreign investors and risking inflation. Improving the level of technical skills is critical to ensuring that higher wages can be achieved without such a loss of competitiveness.

FDI already contributes to higher technical skills and higher wages through its above average productivity<sup>21</sup> and this effect can be magnified by attracting investment into specific high skill growth sectors, such as advanced manufacturing, biopharma and artificial intelligence (AI).

### 'Science superpower'

The government's aspiration to build on the UK's historic reputation for scientific endeavour to become a modern day 'science superpower' is heavily dependent on the development of technical skills, including those in engineering, sustainability, digital and data skills, and language skills<sup>22</sup>.

<sup>18</sup> UK Parliament, 'Government not sufficiently grappling skills gap needed for net zero,' Oct 2021. [Website.](#)

<sup>19</sup> UK Gov, 'The ten point plan for a green industrial revolution,' Nov 2020. [Website.](#)

<sup>20</sup> Miskin, Stephanie, 'HGV driver says 40% pay rise shows industry's desperate situation,' BBC, Sep 2021. [Website.](#)

<sup>21</sup> Office for National Statistics, 'UK foreign direct investment, trends and analysis: August 2020,' Aug 2020. [Website.](#)

<sup>22</sup> Council for Science and Technology, 'The UK as a science and technology superpower,' Jul 2021. [Website.](#)

## 2.6 INVESTMENT PROMOTION IN THE UK

In the UK, the single national IPA is the Department for International Trade (DIT) (formerly UKTI). It works on a 'UK First' basis, i.e. it is tasked with acting in the country's national interest.

It has primary responsibility for 'lead generation' – i.e. the activity of discovering companies who may be interested in investing in the UK – mainly through its overseas network based in Embassies, Consulates and High Commissions. And through an outsourced service, DIT has responsibility for enquiry management.

However, in England, DIT works closely with 'Local Enterprise Partnerships' (LEPs) that are collaborations between local authorities and businesses, representing 39 different regions across the country. Separately, the Devolved Administrations (DAs) have local responsibility for investment into Wales, Scotland and Northern Ireland respectively and London is also treated separately, represented by an IPA linked to the Mayor's Office. These LEPs and DAs are responsible for the 'aftercare' of a majority (in number) of the UK's account managed foreign investors, whilst the largest and most significant investors are managed through (in increasing order of size): the (outsourced) Investment Services Team; DIT's in-house Sector Teams or the HMG Strategic Relationship Management (SRM) team, through which the largest investors have ministerial access.

In 2020 the UK government announced the creation of an additional body, the Office for Investment (OFI) designed to "unlock significant strategic investments aligned to the government's priorities" by ensuring that the highest value investors receive the strongest possible cross-government support<sup>23</sup>.

The UK offers a number of initiatives to promote technical skills to foreign direct investors. A government-funded workplace **apprentice scheme** offers participating firms £3000 per apprentice, subject to certain conditions<sup>24</sup>, while its Kickstart Scheme provides funding for employers to create 6-month job placements for 16-24<sup>25</sup> year olds. Once in the UK, foreign investors can avail themselves of a **Knowledge Transfer Partnership (KTP)** which provides a part-funded grant to support the salary of an 'associate' who is employed by an academic institution but seconded to work at a company for between one and three years, to help transfer the latest academic thinking into a vocational context<sup>26</sup>.

However, while access to talent features heavily in DIT's investment promotion activity, the major focus is on higher education rather than primary / secondary education or technical and vocational skills. For example, DIT's promotional "Why UK" proposition document refers to "talent" 52 times, "universities" 23 times and mentions world-class research and leading MBA programmes but does not contain any references to apprenticeships or technical / vocational education at all.<sup>27</sup> (See FIG 9)

<sup>23</sup> Website

<sup>24</sup> UK Gov, 'Employing an apprentice: Get Funding,' accessed Nov 2021. Website.

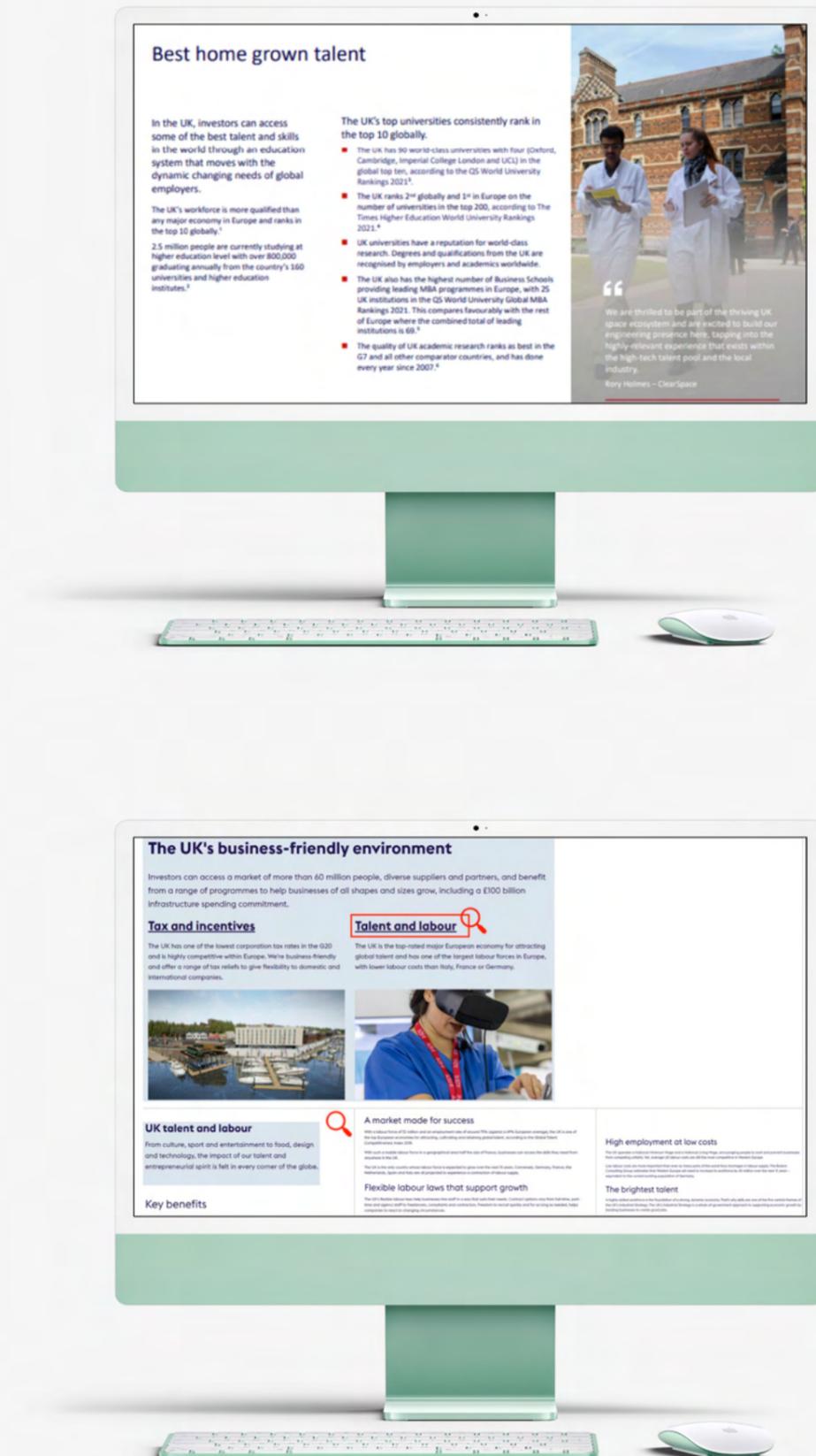
<sup>25</sup> UK Gov, 'Kickstart Scheme,' accessed Dec 2021. Website.

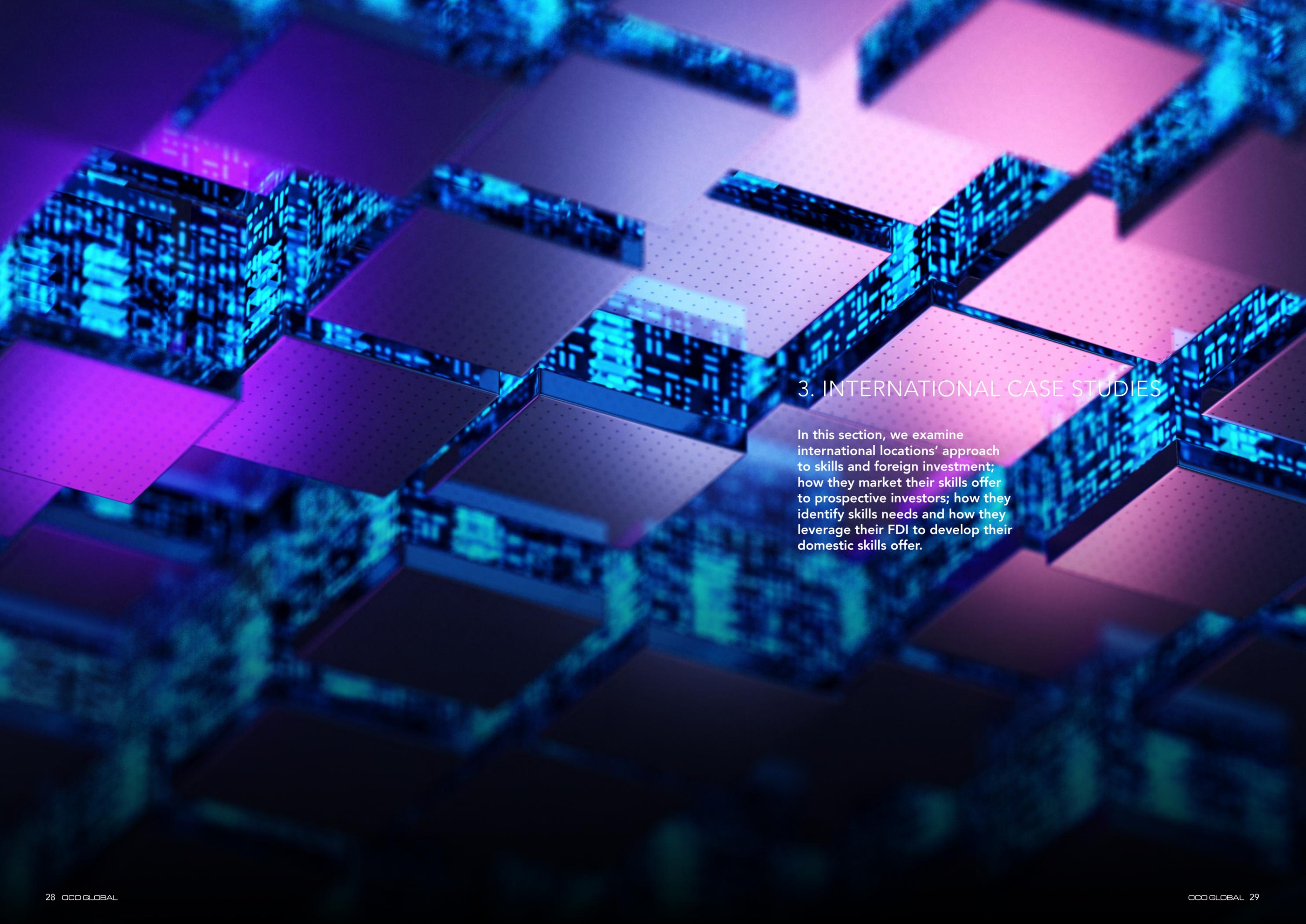
<sup>26</sup> UK Research and Innovation, 'Knowledge Transfer Partnership guidance,' accessed Nov 2021. Website.

<sup>27</sup> Department for International Trade, 'Why UK? Global Britain's new story,' Jun 2021.

Figure 9:

UK talent offer in Why UK?





### 3. INTERNATIONAL CASE STUDIES

In this section, we examine international locations' approach to skills and foreign investment; how they market their skills offer to prospective investors; how they identify skills needs and how they leverage their FDI to develop their domestic skills offer.

## 3.1 SINGAPORE

### 3.1.1 Background

Singapore is a highly developed island city state in South-East Asia with GDP per capita of \$58,000 in 2020; its citizens enjoy some of the highest standards of living in the world. Its rapid economic development post-independence from Malaysia - with GDP - growth rates averaging over 6% between 1965 and 1995 - was built on international entrepôt trade and manufacturing exports. However, in the last three decades, the economy has pivoted to become more services oriented, with noted strength in banking and finance.

Aggressive pursuit of foreign direct investment has played a central role in replacing low skill, low wage activities that have moved offshore, with higher value-add manufacturing, services and ultimately the knowledge economy. EDB Singapore, the country's investment promotion agency, has overseen a dramatic increase in inward investment. In 1992, Singapore recorded net FDI inflows of \$2.2 billion. The equivalent figure for 2019 was \$120 billion, a more than 50-fold increase. It continues to be a stand-out performer in attracting inward investment, with Singapore's FDI stock<sup>28</sup> increasing from \$900 billion in 2012 to stand at \$1.91 trillion in 2019<sup>29</sup>; the 7th highest in the world, yet with a population of just 5.5 million.

Singapore benefits from its status as a 'gateway' to Asia. Alongside its reputation for low corruption and an effective legal system, this has depended on the excellent linguistic skills of its population. Although Malay remains the official language, it is the English demanded by foreign investors that is the de facto national language of its population. Despite its rise as a financial centre, and unlike its fellow Asian 'tiger' Hong Kong, Singapore retains a significant industrial and manufacturing base, with integrated circuits as its single largest product export<sup>30</sup> and sizeable pharmaceutical and petrochemical sectors.

### 3.1.2 EDB Singapore's approach to skills promotion

Balancing the requirements of advanced manufacturing; its successful and growing financial sector and the global transition to digital has presented Singapore with a skills gap; one that it has historically filled with foreign labour. As of June 2019, Singapore's labour market of 3.7 million workers included 1.4 million foreigners.

However, over the last decade, the Singapore government has taken steps to increase productivity and limit the requirement for foreign labour. A foreign worker quota is being progressively reduced (from 40% in 2019 to 38% in 2020 to 35% in 2021). However, EDB Singapore treats skilled immigration as a positive contributor to skills development, especially in Singapore, especially in those sectors that it has identified as growth areas for the country. This is illustrated by the Tech.Pass: a special visa that allows entry for established tech entrepreneurs, leaders and technically skilled experts from around the world to 'perform frontier and disruptive innovations'<sup>31</sup>

EDB Singapore views technical skills development as central to its mission. It is arguably the most successful example of an investment promotion agency with an integrated skills and training remit. With a mandate to support business and provide high quality jobs for Singaporeans, since its inception, EDB Singapore has worked closely with the Ministry of Manpower (MoM). In its early days, EDB focused on primary and secondary education but as Singapore's economy developed, EDB and the MoM switched their focus to technical and vocational skills. The Institute for Technical Education was launched in 1992 and EDB ensured that it retained close ties to its account-managed international investors. The result has been a more than doubling of the number of students in technical education between 1995 and 2016<sup>32</sup>.

**EDB Singapore has a central role at the interface of foreign investors and skills policy. In that role, it performs two crucial functions:**

**It ensures that Singapore's skills and education programme meets the needs of investors.** Through its conversations with both existing and prospective investors, EDB Singapore identifies the skills that multinationals currently demand and then feeds that information in Singapore's education policy to make sure the courses on offer meet the evolving needs of inward investors.

**EDB Singapore actively courts FDI with the highest skills spillovers.** EDB Singapore targets investors that it believes will bring skills that will help Singapore achieve its industrial policy. As illustrated in Fig 10, examples include Sunstrand, a high tech aerospace components manufacturer in the 1970s when Singapore was trying to develop higher value add manufacturing; ST Microelectronics, a semiconductor giant, in the 1980s; Citi (and many other banks) in the 1990s and Facebook and Google in the last decade as it has shifted towards the knowledge economy and digital skills.



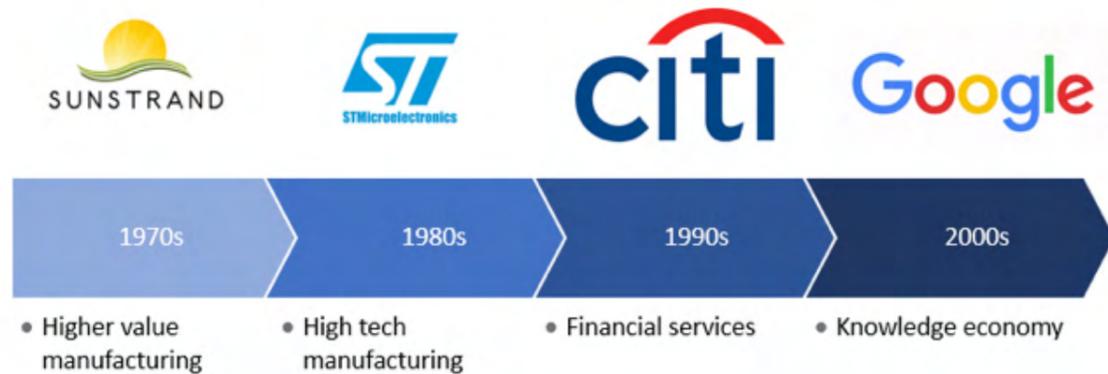
28 FDI Stock – The total value of accumulated capital attributed to foreign direct investment

29 Statistics Singapore, 'Foreign Direct Investment in Singapore,' 2019. [Website](#).

30 The Observatory of Economic Complexity, 'Singapore,' accessed Nov 2021. [Website](#).

31 EDB Singapore, 'Incentives and Schemes: Tech Pass,' accessed Nov 2021. [Website](#).

32 Stewart, Vivien, 'Singapore: Innovation in Technical Education,' Asia Society, accessed Nov 2021. [Website](#).



**Figure 10:**  
EDB Singapore targets investors to drive its industrial strategy

### 3.1.3 Notable policies or initiatives

Skill promotion features heavily in the EDB Singapore proposition, with prospective investors clearly signposted towards the high level of technical skills in Singapore and the skills development infrastructure available through institutional partnerships. Once a targeted investor has landed, EDB works with them to develop and deliver training programmes. Early examples included the EDB-Tata Training Centre; the EDB-Rollei Training Centre for optics and precision mechanics and the EDB-Philips Training Centre for precision machining<sup>33</sup>. More recently EDB Singapore has partnered with Google (see Fig 12). In each case, the foreign investor was provided with financial inducements as well as preferential hiring access to graduates of the programmes.



**Figure 11:**  
Singapore's talent promotion (source: EBD Singapore)

33 UNCTAD, 'Best Practices in Investment for Development: How to integrate FDI and skill development Lessons from Canada and Singapore,' 2011. **Website.**

**Figure 12:**  
EDB partnership with Google

### Google / EDB partnerships education programme

Google first invested in Singapore with a data centre in 2011, in a deal negotiated by EDB. A second data centre followed in 2015 and a third in 2020.

#### Digitise

In 2016, EDB and Google announced Digitise: a joint education programme in coding and digital marketing. It provided training and on-the-job experience at a number of partner firms in Singapore and Sydney. For Google it was an opportunity to develop staff cost effectively in an area of surging demand. Changes in online behaviour and the exponential growth in digital marketing meant Google was hungry for digital talent. The partnership with EDB Singapore was a first for Google but it expressed its intention to export the programme worldwide.

#### Skills Ignition SG – A Grow with Google Program

In 2020 EDB Singapore's relationship with Google took another step forward with the launch of Skills Ignition SG, creating 3,000 new jobs and a skills initiative. It is a partnership between EDB Singapore, SkillsFuture Singapore (SSG) and Infocomm Media Development Authority (IMDA).

#### It offers two programmes:

1. A nine-month place and training programme for up to 600 applicants, comprising three months of vocational training before a six month work placement with Google or one of its partners
2. Two six-month full time training courses in Digital Marketing and Cloud Technology

**“Facing a future where business operations and decisions are increasingly data-driven, it is important for Singaporeans to have the necessary digital skills to contribute to the new economy. DIGITIZE is a step in the right direction to provide Singaporeans with the necessary experience to develop digital skills for the marketing industry.”**

### Singapore: Key Takeaways

#### Integrated Skills

EDB Singapore has an integrated skills and FDI remit

#### Strong Governmental Partnerships

EDB has worked closely with the Ministry of Manpower switching their focus to technical and vocational skills. The Institute for Technical Education was launched in 1992 and EDB Singapore ensured that it retained close ties to its account-managed international investors.

#### Strategic Positioning

EDB Singapore has a central role at the interface of foreign investors and skills policy including: ensuring that Singapore's skills and education programme meets the needs of investors and actively courts FDI with the highest skills spill overs.

#### Reduced Reliance on Immigration

The Singapore government has taken steps to increase productivity and limit the requirement for foreign labour

## 3.2 COSTA RICA

Costa Rica is one of Latin America's most open and democratic economies. It is considered a development success story with steady economic growth over the last 25 years. The country is now categorized as an Upper Middle-Income Economy and has a GDP per capita of approximately \$21,000 (PPP).

### 3.2.1 Background

In May 2021, the country was formally welcomed into the OECD. The country is ranked fifth in Latin America in both the World Bank's Ease of Doing Business Index and the UNDP's Human Development Index.

Bordered by Nicaragua to the North and Ecuador to the South, the country has a population of around five million people and is a long-standing stable democracy. After the Civil War in 1948, the government chose to uphold universal suffrage and abolish the Army, and since then has been one of the few democracies to operate without a standing army. Defence expenditure was instead invested in education and as a consequence, the country has a near 100% literacy rate and a highly educated workforce, many of whom speak English.

The country has evolved from an economy that once depended solely on agriculture, to one that is more diverse, based on tourism, electronics, and medical components exports, and increasingly IT and Business Services.

Costa Rica has a long and proud history in attracting FDI. Between 1996 and 2005, Costa Rica was the only country in Latin America where the majority of its FDI went into manufacturing – some 68% of all FDI inflows. Key to its success was the introduction of the Free Trade Zone Regime in 1981; and a highly literate and educated workforce. Intel were one of the earliest foreign owned companies (FOCs) to take advantage of these assets and in 1997, making a ground-breaking investment worth some 300 million dollars in a semiconductor chip manufacturing plant in Heredia. At its height, the company employed over 3,000 people in Costa Rica.

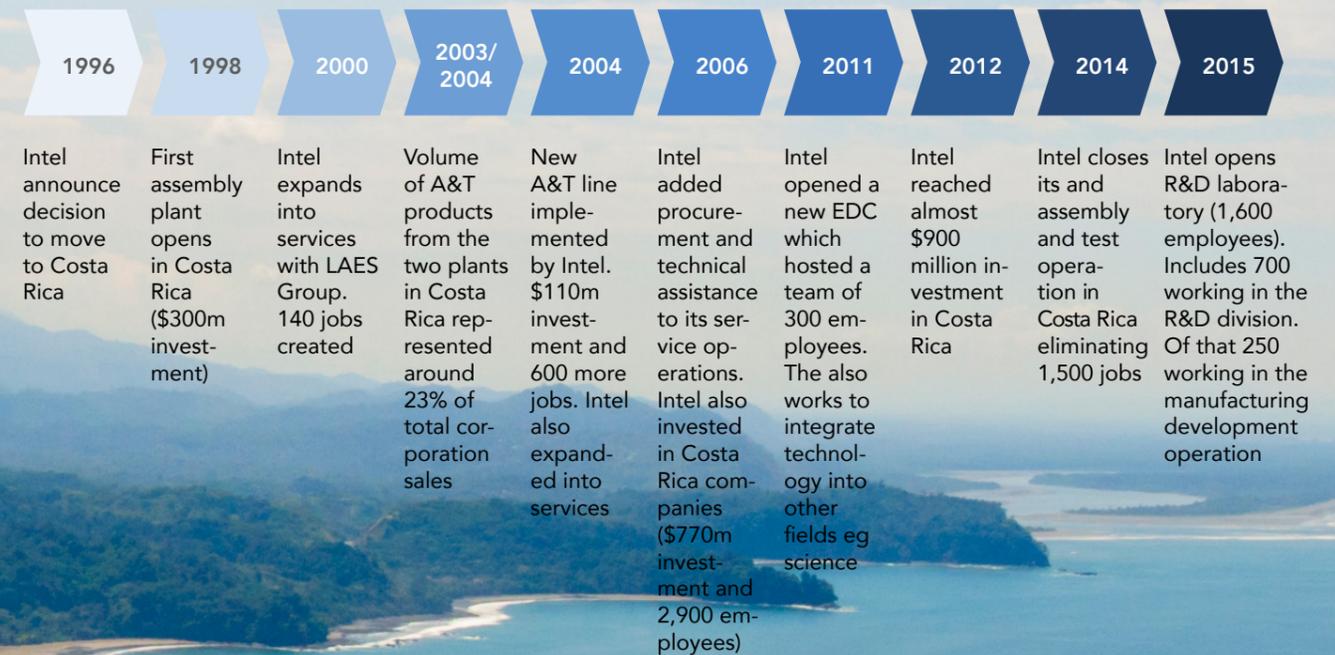


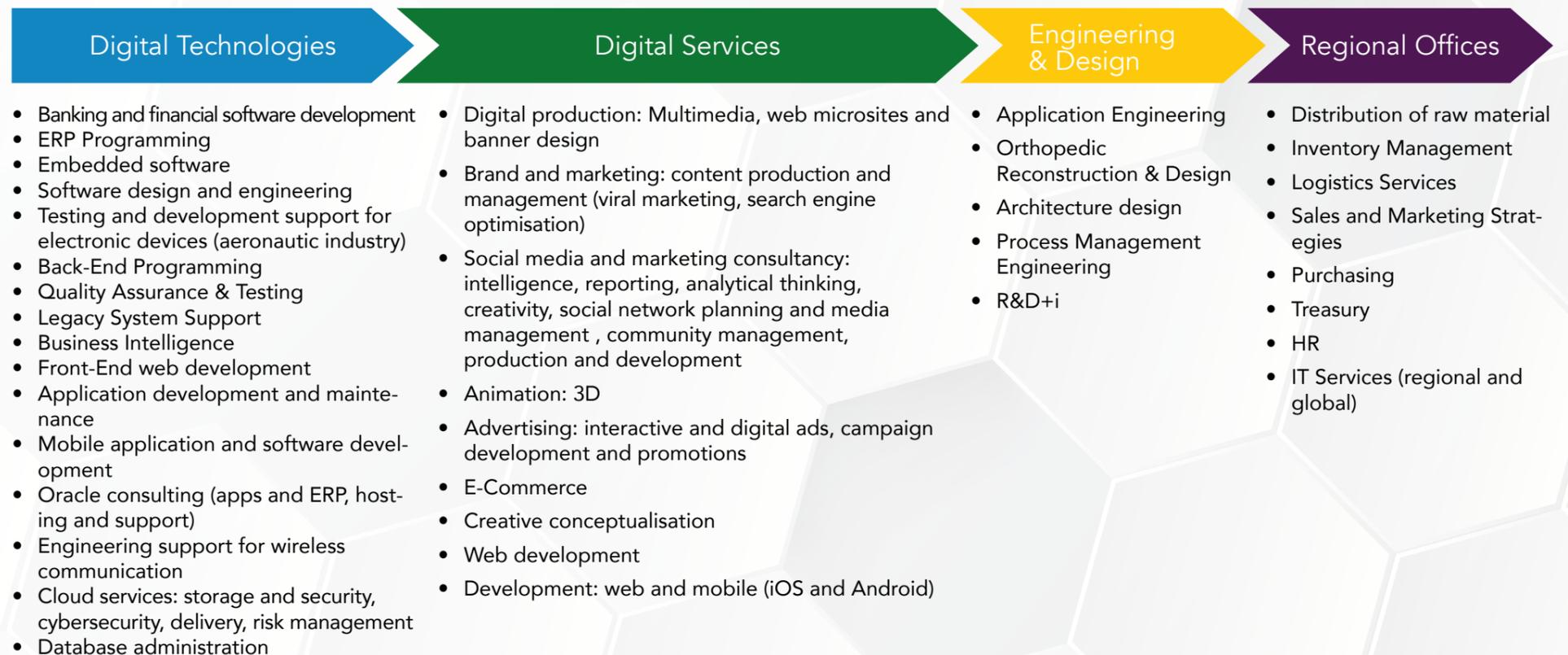
Fig 13 - Costa Rica FDI Timeline

More recently, Costa Rica has had great success in attracting foreign investors operating in the services sector to its economy. The country is home to over 300 multinational enterprises and the services sector has experienced significant growth with over 50 times as many people employed in the industry as compared to the year 2000.

Costa Rica is recognised as a global leader in shared services; has a growing digital and software industry; and is well known for its capabilities in process innovation. The country's development in the services industry began in the late 1990s with the arrival of companies such as P&G and Sykes.

These companies began by setting up functions delivering back-office processes, for example transactional finance and accounting processes in the case of P&G, and a contact centre with Sykes. The investments from these companies demonstrated Costa Rica's potential as a location for captive functions and allowed it to gain 'first mover advantage' with respect to off-shored services in Latin America.

Following the early success of these entrants, the services sector has gone from strength to strength, and has now expanded into ICT, having attracted approximately 20 digital and software companies to Costa Rica since 2013.



**The majority of Costa Rica's foreign investment comes from the USA. Such investors are typically looking at locations in Central and South America as potential locations for nearshoring, e.g. as a back office for certain corporate facilities, or to host a call centre or shared service function.**

For foreign investors operating in the services sector, they are often driven by cost, and want to invest in a location that is cost competitive. However, they also have requirements for the investment location to be politically stable; within 3 to 4 hours of company headquarters; and most importantly from a skills perspective, they require a destination with access to a bilingual labour force.

Increasingly for investors operating in the services sector, when investing in Central and South America, they are also look for a talent pool that is educated to university level and has strong business and finance skills, e.g., in areas such as financing, accounting or procurement.

More recently, investors in the services industries investing in the region have cited that they are also looking for greater digital competence; and workers with experience of handling large data in locations that offer strong, secure internet connectivity.

For foreign investors operating in the Manufacturing sector, when considering Central and South America, access to markets is the most common motive.

Specifically, companies who have invested in Costa Rica have been looking to capitalise on the country's geographic position, time zone and/or proximity to other markets to supply their product. Costa Rica's key selling points as a destination for investment are its geographic position and time zone. Costa Rica's proximity to both the USA and South America, the Atlantic and Pacific oceans and the Panama Canal, coupled with the fact that it shares the same time zone with the USA, Canada, and Mexico, means that Costa Rica meets many market access requirements for manufacturing investors. From a skills perspective, Costa Rica has branded itself as a destination where companies can find workers with expertise in precision manufacturing, specifically in the field of medical devices.

Such companies choose to invest in the country as they have high confidence, they will be able to find the skilled workers required. Because of the technical nature of the products supplied by medical devices and medtech companies, the industry has highly specialised skills requirements. For example, science and engineering skills are required as well as a technical understanding of the devices being produced and sold. Similarly, due to the tightly regulated nature of the medtech industry both domestically and globally, knowledge of regulatory affairs is valued across many different business areas.

### 3.2.2 CINDE's approach to technical skills promotion

Established in 1982, CINDE, (Coalición Costarricense de Iniciativas para el Desarrollo), Costa Rica's foreign investment promotion agency has played a key role in supporting foreign investors who have been interested in setting up in the country. CINDE is a private, non-profit, non-political organisation working to attract investment into the country.

The organisation has a number of different departments each responsible for different investment promotion functions. CINDE's Investment Climate team plays a key role in the Skills development agenda, and in working with existing investors to address issues they may have identified in relation to availability of talent. Around 60% of staff in the Investment Climate Team are devoted to work on talent development.

#### **They design and deliver a range of activities aimed at skilling (upskilling and reskilling) human talent in several areas including:**

Language skills, technical and soft skills; increasing the orientation of vocational courses towards science, technology, engineering, arts and mathematics (STEM) and looking at new approaches of matching educational development with labour market demands, including new ways of teaching and learning.

### 3.2.3 Notable policies or initiatives

#### **Language Initiatives**

One of the most important requirements of foreign investors is the need for a bilingual workforce. In response, CINDE has delivered a number of initiatives aimed at training individuals of all ages to reach the required language proficiency.

These levels are aligned to the Common European Framework of Reference for Languages (CEFR). CINDE runs several schemes with a focus on training individuals to reach a minimum proficiency level of B1 in English and C1 or native speaker level in Portuguese.

Many schemes are also supplemented by internships in the company sponsoring the individuals place on the scheme; or recognised through a formal technical certification from an industry association.

#### **Tools for Success+**

Tools for Success+ is a programme aimed at Technical High School students in Costa Rica.

The programme aims to improve the Portuguese or English Language skills with a 100% scholarship allocated to students for a 16-month period on either an English or Portuguese course.

The programme has been running for over 11 years and in total, over 3,500 students have taken part in the scheme. Since its inception, over 85% of participants have achieved an English level B1 or above; 75% have participated in an internship from a sponsor company and 60% of participants have ended up in employment and on the sponsor company's payroll.

B1 in English and C1 or native speaker level in Portuguese. Many schemes are also supplemented by internships in the company sponsoring the individuals place on the scheme; or recognised through a formal technical certification from an industry association.

### Partnerships between industry and academia

Many of Costa Rica's foreign investors require their workers to have specialised knowledge in specific disciplines. As a result, CINDE have worked with key stakeholders across the educational landscape to develop tailored courses that are accredited by the relevant institution and respond to the needs of companies.

Courses range from technical programmes such as medical device manufacturing and clean rooms maintenance and operations, delivered by the National Learning Institute (INA) and approved by the Ministry of Public Education; through to degree programmes in computing and engineering delivered by local universities; and post graduate programmes, such as cyber security, delivered by international universities.

Programmes cut across a range of disciplines in both the manufacturing and services sectors. CINDE works directly with its investors to develop content for the curricula and in certain cases will also look for opportunities for company staff to be involved in either delivering content directly to students; or in training lecturers on the content specifics so that students are receiving the required training needed in their companies. CINDE has also put in place a number of strategic partnerships with ed-tech firms to support skills development.

For example, in 2020, Coursera, a leading online education platform teamed up with CINDE to train 50,000 people in the strategic and technical skills required for Industry 4.0.



**University of Minnesota**  
Masters Program in Engineering of Medical Devices



**RICE University - Bioengineering Department**  
Specialisation: Engineering and Design in Medical Innovation



**University of Wisconsin Stout**  
Program: Fundamentals of Packaging Technology by IoPP  
Specialisation: Medical Packaging



**Georgia Tech**  
Certificate: Procurement & Supply Chain Management. Course: Cybersecurity for the industry.  
Language specialized training



**IXL Center**  
Certificate: Global Innovation Management Institute (GIMI)



**Copenhagen Institute of Interaction Design**  
Summer School: Interaction Design



**Arizona State University**  
Tailor-made course & curricula: 5G & Telecommunications support the design for the medical device industry with the opportunity to develop new curricula in new sectors



**Global Center for Medical Innovation**  
Collaboration to establish a center of medical innovation in Costa Rica, providing training across 9 medical device companies

### International Strategic Academic Alliances

CINDE has worked with a number of international academic institutions, international investors and local academia (public and private) to develop new specialised programs that aim to accelerate the transfer of knowledge and technologies needed by foreign investors.

### Academic Industry Council

CINDE has worked with investors and industry associations to develop a more structured approach for investors to feed their needs into academic curricula. Through the establishment of the Academic Industry Council CINDE aims to implement a more interactive and agile communication mechanism between schools and academic institutions and experts in their respective technical areas. This will ensure that academic activities are more relevant and are adapted and focused on the new technologies and practices emerging from business, leading to more suitably qualified graduates with more relevant skills.

### Aftercare focused on skills development

CINDE has a major focus on skills development as part of its aftercare activities. For example, every year, CINDE holds an annual job fair which its existing investors are invited to attend to advertise jobs for which they are hiring.

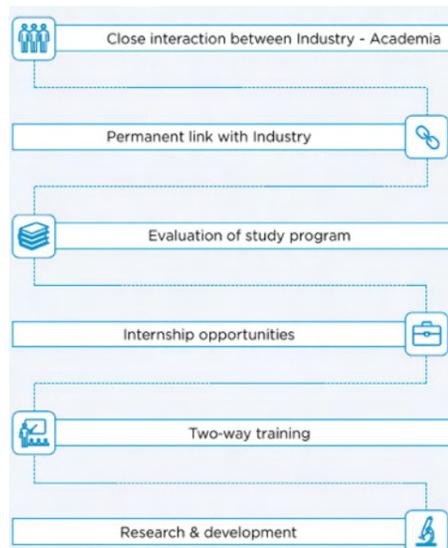
In last year's job fair in 2020, more than 50 companies attended, advertising and aiming to fill around 3,000 vacancies. Prospective applicants were required to pre-register and complete a language test at prior to the event. CINDE also has an online recruitment platform available to inward investors. On this platform, JobLink, companies can advertise jobs they would like filled. Finally, perhaps one of CINDE's most targeted interventions is its annual HR survey aimed at regulating salaries across investors operating in the shared services sector to ensure the sector remains cost competitive.

### Preparing for the future

CINDE works closely with a range of different stakeholders to help profile the skills demand for the future. It has a range of initiatives underway aimed at predicting the future demands of employers and therefore the future requirements of the workforce.

Working with the Inter-American Development Bank, Crystal Ball is a program introduced by CINDE that aims to help match the supply of knowledge economy jobs with the demand for them.

With an investment of \$2.8 million dollars, the project consists of the development of an AI-based digital employment orientation platform to predict and recommend lifelong vocational learning paths to keep user's employability opportunities high, personalized to each person's professional experience, capabilities, and interests, with the aim of impacting over 30,000 people.

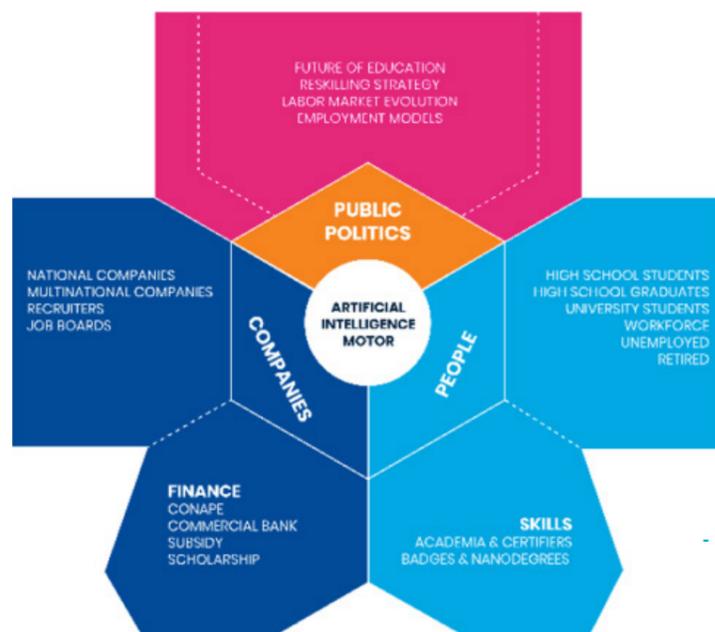


#### Profiling Models

- Interests
- Aspirations
- Skills
- Vocation
- Academic Level
- Context

#### Traceability

- Database Interrogator
- Analytics
- Association Algorithms



#### Profiling Models

- Positions
- Skills
- Career
- Comparatives

#### Traceability

- Evolution of Positions
- Identification of New Positions
- Skills Association

### Annual HR Survey

BPO is a major proposition for Costa Rica. The country is home to many foreign investors with call centres or back-office operations. One of the major reasons why investors chose Costa Rica is the bilingual capability of the workforce. However, when attracting new investors in this sector, Costa Rica struggles with cost-competitiveness, in particular against Colombia. Although it has a great talent pool, competition for these workers across companies is significant.

There is often regular movement of workers from one company to another, and this is often driven by salaries, and employees wanting a higher salary. However, such dynamics only serve to decrease Costa Rica's cost competitiveness even further and make it less attractive to new investors. Consequently, CINDE plays a key role in working with companies in the sector to manage salaries.

The agency benchmarks salaries through an annual HR survey. Through this survey, CINDE is able to gather data on salaries across all roles in the sector. Strict confidentiality is maintained through the benchmarking process, and aggregate results are shared with investors.

Additionally, investors are able to see how they compare to the industry average and adjust their salaries accordingly. In addition, this service helps to keep cost transparent; but ensures that companies do not compete destructively. Furthermore, this service, also ensures that Costa Rica's proposition remains cost competitive in BPO sector.



### Costa Rica: Key Takeaways

#### CINDE helps set skills agenda

CINDE's Investment Climate team plays a key role in the Skills development agenda, working with existing investors to address skills issues. Around 60% of staff in the investment Climate Team are devoted to work on talent development

#### Annual HR Survey to benchmark salaries

Through the Annual HR Survey, CINDE is able to gather data on salaries across all roles in the sector

#### Partnerships between industry and academia

CINDE works with key stakeholders across the educational landscape to develop tailored, accredited courses that respond to the needs of companies

#### Aftercare programmes

CINDE has a major focus on skills development as part of its aftercare activities. For example every year, CINDE holds an annual job fair which its existing investors are invited to attend to advertise jobs for which they are hiring

### 3.3 FRANCE

France has a similar sized economy to the UK and while France's GDP per capita is marginally lower than the UK's<sup>35</sup> (\$38,625 vs \$40,284), France's productivity per worker hour is about 15% higher than the UK's, i.e., it achieves a similar output with less time input from its workers.

France has proved to be an increasingly attractive destination for FDI, attracting Europe's largest share of FDI for the last two years according to EY's Attractiveness Survey<sup>36</sup>.

	2017	2018	2019	2020
France	1,019	1,027	1,197	985
UK	1,205	1,054	1,109	975

**TABLE 5:**  
Number of FDI projects, 2017-2020

**Source: EY European Investment Monitor**

The relative improvement in France's FDI performance vis-à-vis the UK's in recent years may be partly attributable to Brexit but may also be the result of attempts by its IPA, Business France, to improve international perceptions of its business climate and particularly its labour market. Since May 2017, the French government of Em-

manuel Macron has implemented significant labour market and tax reforms which have brought more flexibility in the former (relaxing the rules on companies to hire and fire employees) and less burden in the latter (reducing corporate tax on profits). In addition, the government has worked to simplify procedures for companies

and investors, particularly through the 2019 business transformation and growth (PACTE) Act. These structural, long-term reforms have enhanced France's attractiveness for businesses, and they were largely relayed globally by Business France and the French Chambers of Commerce.



<sup>34</sup> World Bank Open Data, accessed Nov 2021. [Website.](#)

<sup>35</sup> UK Parliament, 'Productivity: Key Economic Indicators,' Jan 2022. [Website.](#)

<sup>36</sup> Ernst & Young, 'EY Attractiveness Survey Europe: Foreign investors back Europe, but is Europe back?,' Jun 2021. [Website.](#)

### 3.3.2 Business France's approach to technical skills promotion

A key pillar of the government's business reforms has been a commitment to put vocational skills development at the forefront of its response to the new challenges of digital transformation, climate change etc. Macron cited "training, apprenticeships and unemployment insurance" as one of the three key factors in economic transformation<sup>37</sup>. This has been backed up by the launch of a €15 billion Skills Investment Plan and a COVID-19 recovery plan strengthening skills and transforming vocational training.

#### An ambitious Skills Investment Plan (2018-2022)

The Plan, earmarked €15 billion until 2022, aims to adapt vocational training to the new needs of the economy and particularly France Relance priority sectors: workers in industry, digital technology, ecological transition and the health sector.

At the end of 2020 there were over one million additional people at a distance from the job market who have already been trained since 2018 thanks to the Plan. At the end of these training programmes, six out of ten people attained jobs. This broadening will continue in 2021 (+ 41% over the first quarter on the first quarter of 2020).

Goal to train 1 million job seekers who are little-or not- qualified and one million young people who are some distance from the labour market.

#### Examples of national measures:

**CléA digital:** providing basic digital skills to the least qualified;

**Prépa apprentissage:** successful completion of apprenticeship for young people;

**FOAD:** providing 100% remote courses, targeting specific profiles (15 000 entries in 2020);

1000 validations of acquired experience for refugees;

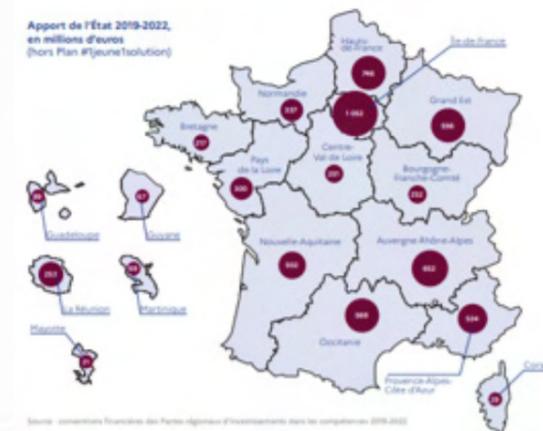
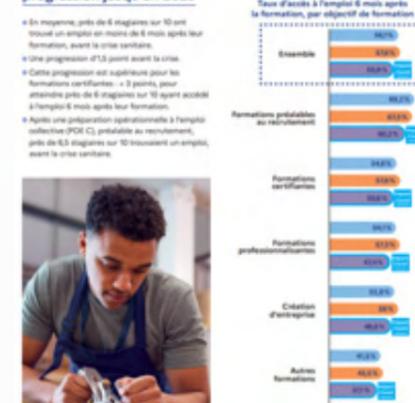
"Enhancing your professional image" workshop to prepare jobseekers for a job interview.

**Mid-term performance report** was published in 2020, detailing achievements nationally and in regions, as well as key future milestones:

Actions carried out in the framework of the Regional Pacts: financing training courses leading to qualifications; calls for local experimental projects.

Examples of national calls for experimental projects: aimed at refugees or the "invisible" populations.

Le taux d'accès à l'emploi 6 mois après la formation est en progression jusqu'en 2020



37 France Gouvernement, 'PACTE, the Action Plan for Business Growth and Transformation,' accessed Nov 2021. [Website](#).

The French focus on skills appears to be paying dividends, with 87% of foreign chief executives believing that workforce education and training in France is an attractive criterion for foreign investment<sup>38</sup>.

#### "France Relance" the government recovery plan to build France of 2030, including the development of its future talents

In 2030, France will need a well-trained workforce. France Relance is thus investing heavily (€36 billion) in France's greatest asset: its people. To avoid widening inequalities, the recovery plan is designed in such a way as to provide better support to young and vulnerable people seeking employment across the country.

#### Strengthening skills and transforming vocational training:

To respond to new activities linked to the ecological transition, the circular economy and digital technology, the recovery plan will increase workforce training availability by about 400,000 people and transform vocational training systems to make France a leader in the area of digital technology and educational innovation.

#### Training young people in strategic, high-growth sectors:

To deal with the expected increase in young jobseekers, €1.6 billion has been allocated to increase the number of certificate-based training courses for all young people arriving on the labour market from September 2020.

#### The Recovery Plan sets a clear timeframe and details measures' cost estimates

However, Business France has made attracting tech investors and startups a strategic priority and, in this area, it is concerned that a gap exists between those skills demanded by inward investors and those currently available in the workforce. This tech skills shortage predates the pandemic<sup>40</sup> but has been exacerbated by it. And it is further compounded by a difference in cultural expectations between the French government, which prefers CDI (permanent) contracts, and investors, who often wish to hire under the CDD (fixed term contract).

38 Business France, 'Continuous improvement in France's attractiveness abroad,' Feb 2019. [Website](#).

39 Business France, 'Continuous improvement in France's attractiveness abroad,' Feb 2019. [Website](#).

40 Agnew, Harriet, 'France faces growing threat of skills shortages,' Financial Times, Oct 2018. [Website](#).

### 3.3.3 Notable policies or initiatives

To address these gaps France has taken a multi-pronged approach: relaxing labour laws for apprentices, promoting tech skills within the country and leveraging foreign talent to develop technical skills.

The new “contrat d’apprentissage”, which facilitates work-study placements from 6 months to 3 years, confers significant tax advantages<sup>41</sup> and is available to foreign investors and domestic companies alike. The government invested a further one billion euros in the scheme in 2020, boosting the state subsidy per apprentice to 5,000 euros for apprentices under 18 and 8,000 euros for over 18s.

In conjunction with greater support for apprenticeships, Business France has actively courted tech entrepreneurs to set up in France. This is facilitated by the popular Tech Visa (see Fig 14) that allows startup founders, international investors and people of exceptional technical talent expedited visas to live and work in France. This is designed to secure the influx of necessary expertise to drive domestic skills growth.

#### FIGURE 15 - Young Graduate Programme

The V.I.E. international internship program is probably the best European trainee program for young professionals eager to gain experience abroad. It allows companies headquartered or with a subsidiary in France to send these promising talents anywhere in the world for a 6 to 24 months mission, train them, and, in most cases, hire them.

With more than 40,000 potential applicants, the V.I.E. database is the most extensive to recruit future international talents. In addition, to support companies’ international growth under the sanitary crisis, the French government, with its “FranceRelance” recovery initiative, has set up a V.I.E Stimulus Cheque of up to €10,000 per intern, which is 30% of the cost for a one-year assignment.

#### The program started in France in 2000 and is open to:

French women and men aged from 18 to 28 years who have met their national service obligations.

EU citizens who have completed their national service obligations in their country of origin.

It is a public assignment to gain professional experience in a branch or a subsidiary of a company headquartered in France, a piggyback company, or a local joint venture for a defined period never exceeding 24 months.

Further supporting tech skills growth is an online tool for developing, testing and accrediting tech skills (see Fig 16).

<sup>41</sup> Republique Francaise, ‘Contrat d’apprentissage,’ accessed Nov 2021. [Website](#).

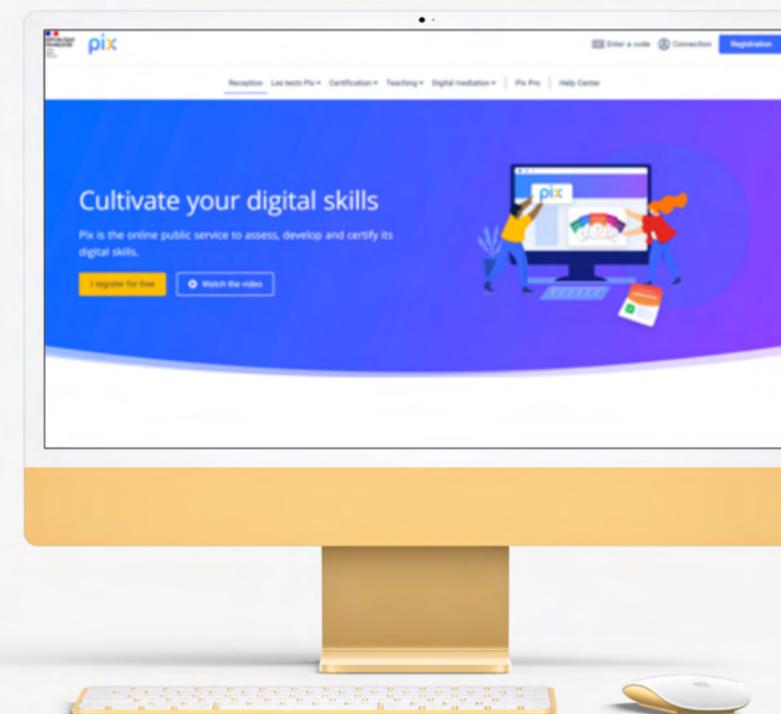
#### Figure 14 - French tech visa

The French Tech Visa is a dedicated procedure for obtaining a Talent Passport residence permit in the 3 categories that concern Tech talents:

- International startup founders, selected by partner incubators and accelerators,
- International talents recruited by hyper-growth companies selected on the basis of the beneficiaries of the Pass French Tech program
- and International investors setting up in France.

This is an highly successful visa, including for attracting US talents from the silicon valley.

A separate scheme to facilitate learning from abroad involves internships for French or EU citizens living in France to be trained abroad by companies with headquarters or subsidiaries in France (see Fig 13)



**FIGURE 16 - Online certification for tech skills**

To deal with the growing requirement for digital skills, the French government made available in 2016 an online tool for testing, developing and certifying digital skills (<https://pix.fr/>). Pix is a non-profit structure constituted as a public interest group who has the mission of supporting the general level of digital skills. It brings together different public actors engaged in the fields of education and training. It is made of a team of 70 people who put their know-how at the service of a common goal.

### France: Key Takeaways

#### Investment Promotional Material

France’s skills offer features prominently in Business France’s investment promotional activity including flagship events, such as the CES and Choose France

#### Strategic Focus on Tech Skills Shortage

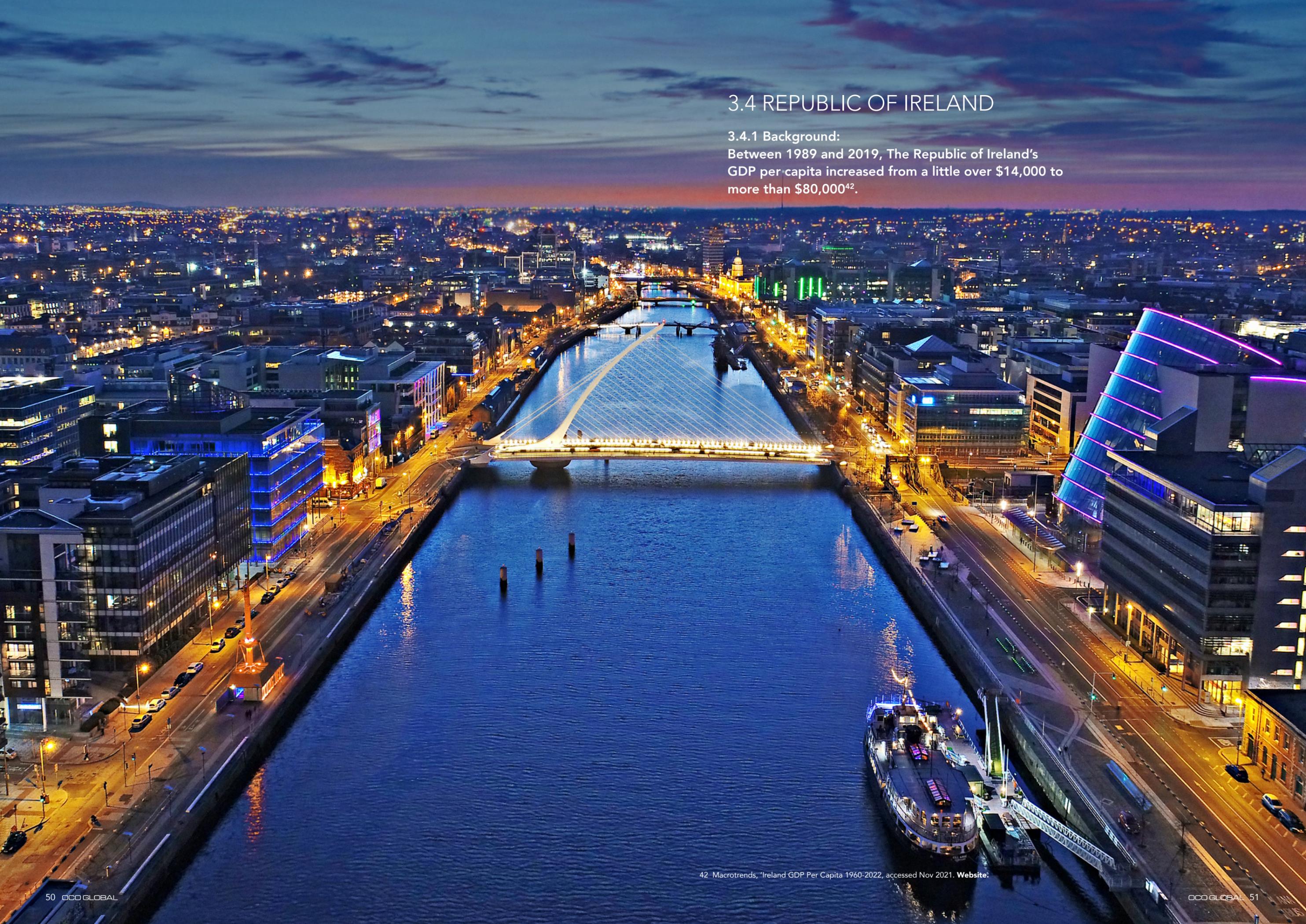
87% of foreign chief executives believing that workforce education and training in France is an attractive criterion for FDI. However, Business France has made attracting tech investors and startups a strategic priority and is concerned with the digital skills gap

#### Skills Benchmarking

Annual report covering all key areas to attract FDI, including “Education and Human Capital” but also “Foreign Skills” and “Research & Innovation”

#### Skills As A National Priority

France Relance is investing heavily (\$36 billion) in a skills renewal programme

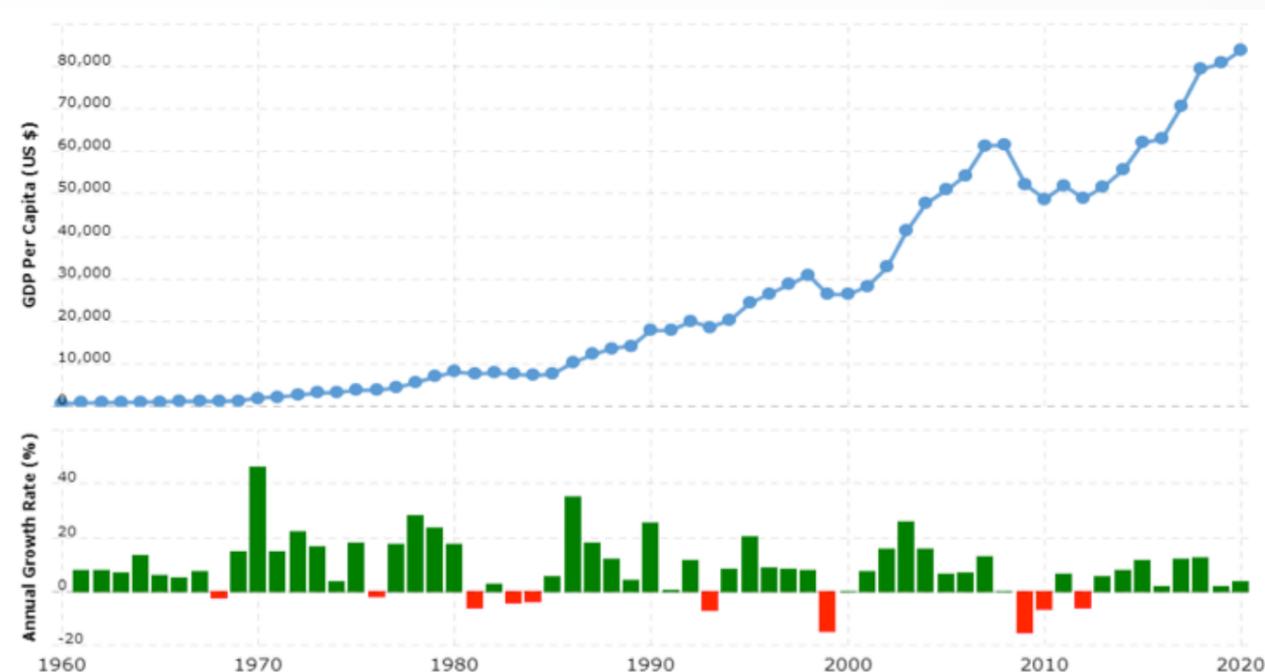


## 3.4 REPUBLIC OF IRELAND

### 3.4.1 Background:

Between 1989 and 2019, The Republic of Ireland's GDP per capita increased from a little over \$14,000 to more than \$80,000<sup>42</sup>.

<sup>42</sup> Macrotrends, 'Ireland GDP Per Capita 1960-2022, accessed Nov 2021. [Website](#).



**FIGURE 16 -** Republic of Ireland GDP growth

Though there is little doubt Ireland is a much more prosperous country than it was thirty years ago, it is widely acknowledged<sup>43, 44, 45</sup> that Ireland’s economic performance is exaggerated by GDP figures, which are distorted by profits of multinational companies.

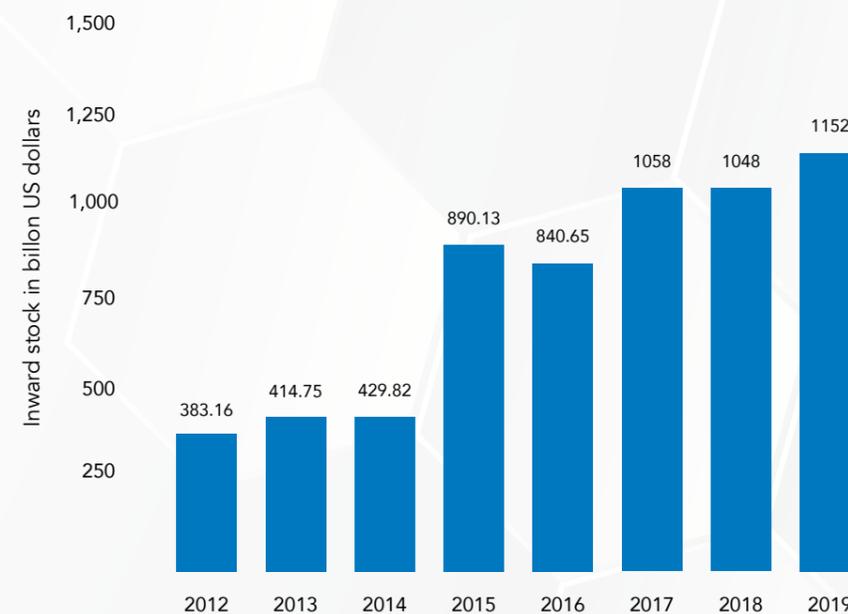
However, this caveat itself points to a major engine of Ireland’s economic progress: its success in attracting FDI. It’s stock of FDI trebled between 2012 and 2019 (see Fig 17), driven by global giants such as Intel, Apple, Facebook and Google. For six years between 2012 and 2017, Ireland topped IBM’s Global Locations Trends report for high-value FDI.

This sustained influx of FDI has seen Ireland’s economy transform from an agricultural to a knowledge economy, now dominated by tech, financial services, and life sciences.

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This sustained influx of FDI has seen Ireland’s economy transform from an agricultural to a knowledge economy, now dominated by tech, financial services, and life sciences.

**Figure 19:** Republic of Ireland GDP growth



### 3.4.2 IDA Ireland’s approach to technical skills promotion

**There are many reasons multinationals choose locations and there is little doubt that Ireland’s low corporation tax rate (12.5% since 2003) has had a major bearing on its attractiveness as a destination for inward investment.**

So too, its historic ties with the USA (which supplies around ¾ of its FDI) and its status as an English-speaking country inside the EU.

Nevertheless, its hugely successful IPA, IDA Ireland, has for a long time viewed skills as its highest priority. In its view ‘the competition lies in skills’, with multinationals looking for talent and the next generation of talent<sup>46</sup>. IDA Ireland considers this to be particularly true in its major growth sectors such as pharma, medtech, financial services and believes that with the pace of technological change increasing, the need for a skills system to adjust quickly is crucial.

IDA Ireland maps the supply of skills at both a regional, sector and activity level and makes this freely available to prospective investors (see Fig 20), enabling them to take advantage of industry clusters.

43 Honohan, Patrick, ‘Is Ireland really the most prosperous country in Europe?’, Central Bank of Ireland, Feb 2021. [Website](#).

44 Pogatchnik, Shawn, ‘Multinationals make Ireland’s GDP growth ‘clearly misleading’, Politico, Feb 2021. [Website](#).

45 Burke-Kennedy, Eoin, ‘We’re not as rich as we have been told to think we are,’ The Irish Times, Feb 2021. [Website](#).

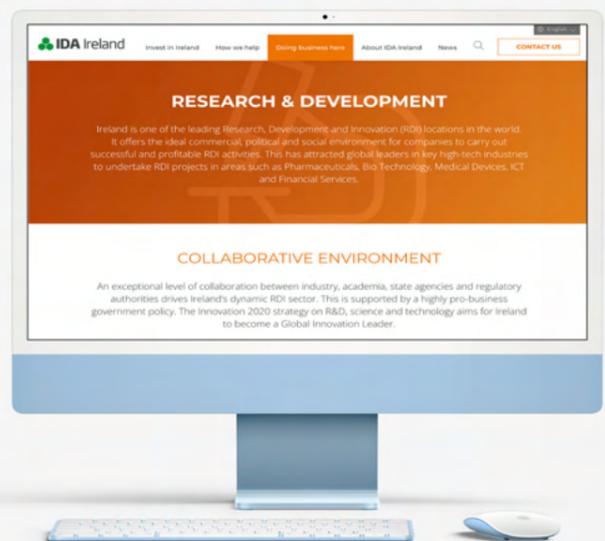
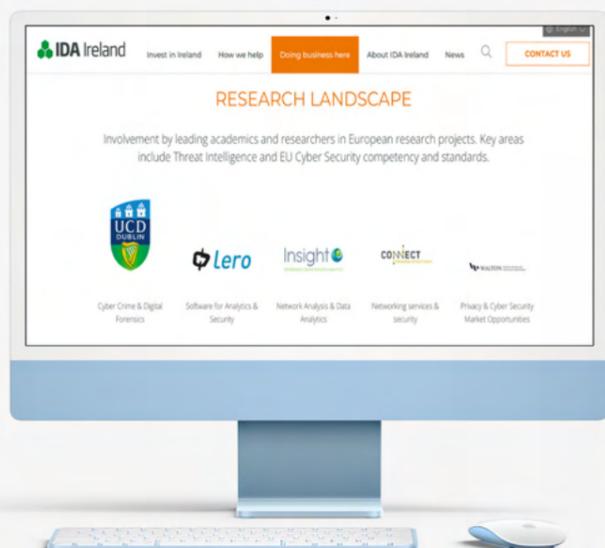
46 OCO Global Interview with IDA Ireland, 16 Nov 2021.

**Figure 20 - IDA Ireland maps skills by region, sector and activity**

**By Sector:**

IDA Ireland has 16 target sectors listed on their website and they breakdown their skills supply for each of these target/high opportunity sectors. Listing the number of employees available in each sector while pointing out courses that have been developed in line with the industries need, their talent ranking across Europe.

The sector related information provides varying levels of insight and is not consistent among all sectors.



**By Location:**

IDA Ireland's classifies its skills regionally through their 8 locations, the site maps each location's offer by giving a broad overview of the location's sector strengths, and companies that have set up in the region.

In most cases for each region there is a specific section on education and R&D that highlights the number of graduates and leading universities and their rankings.

Additional information about the various regions can be found through a downloadable pdf report on their website.



47 Department of Education and Skills, 'Ireland's National Skills Strategy 2025,' Jun 2021. **Website.**  
 48 Expert Group on Future Skills Needs, 'Home,' accessed Nov 2021. **Website.**  
 49 SOLAS, 'Home,' accessed Nov 2021. **Website.**

## By Activities:

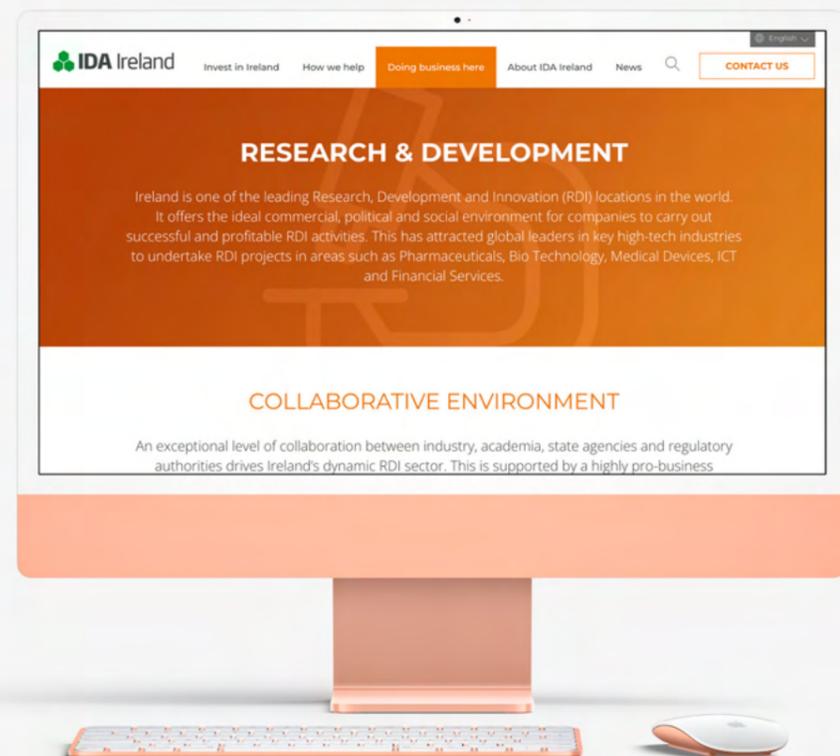
### IDA breaks down their skills availability by the project's activities the categories include:

advanced manufacturing, global business services, high growth and R&D.

This section groups multiple sectors under one theme to highlight the wider ecosystem rather than just focusing on the sector's offer in isolation.

For example the R&D activity page looks at pharmaceuticals, biotechnology, fintech and ICT among others and highlights the Irish government's total investment into science, tech and innovation. They also listed the many research centres located throughout Ireland. These range from ICT to nanotechnology and marine science.

Alternatively, the global business services activity highlights an important initiative that IDA Ireland funds and supports called GBS Skills Career Pathway, which is a structured learning and development program to support career progression in GBS.



It monitors the demand for skills through conversations its Client Managers have with investors over their current challenges, industry organisations, training associations and working groups, including one set up by IDA Ireland to address the future skills needs of 'Industry 5.0'

### 3.4.3 Notable policies or initiatives

To successfully assess its skills offer and identify actual and future investors' skills needs, the Irish government has put in place inclusive and efficient partnerships between stakeholders across the country.

The National Skills Council<sup>47</sup> (see Fig 24) involves various organisations from the public and private sector, at the national and regional level. Most of the studies around skills are conducted by Irish institutions or research groups such as the Expert Group on Future Skills Needs<sup>48</sup>.

#### A national skills council (NSC) to oversee research, advise on prioritisation of identified skills needs

The National Skills Strategy 2025 established a new National Skills Council (NSC) to be to oversee research, advise on prioritisation of identified skills needs and how to secure delivery of identified needs. Three members of the Council will be appointed from an enterprise/employer background one of whom will chair the Council.

The chief executives of the HEA, SOLAS, QQI, IDA, Enterprise Ireland and SFI will be members of the Council which will also include representatives of the Department of Education and Skills, the Department of Jobs Enterprise and Innovation, and the Department of Social Protection and the Department of Public Expenditure and Reform. The Chairs of the Council of Presidents of the universities and IoTs will also be invited to be members of the Council. A learner representative will also be appointed.

The Council publishes a **National Skills Bulletin**. This annual series of reports produced by the **Skills and Labour Market Research Unit** (SLMRU) in SOLAS presents an overview of the Irish labour market at occupational level.

The Bulletin aims to **assist policy formulation** in the areas of employment, education/training, and immigration (particularly the sourcing of skills which are in short supply in the Irish and EU labour market from the EEA); it also aims to **inform career guidance advisors, students** and other **individuals** making career and educational choices.

#### Figure 21: Ireland's National Skills Council

Key stakeholders also include **SOLAS** (see Fig11), the State agency tasked with building a world class **Further Education and Training** (FET) sector to fuel Ireland's future<sup>49</sup>; the Skills and Labour Market Research Unit (SLMRU), and the Central Statistics Office (CSO), which publishes the Irish Labour Force Survey.

47 Department of Education and Skills, 'Ireland's National Skills Strategy 2025,' Jun 2021. **Website.**

48 Expert Group on Future Skills Needs, 'Home,' accessed Nov 2021. **Website.**

49 SOLAS, 'Home,' accessed Nov 2021. **Website.**

A national body, Skillnet Ireland, is dedicated to advancing competitiveness and productivity of Irish businesses, including foreign investors, through enterprise-led workforce development. It supports over 21,000 businesses and 81,000 trainees<sup>50</sup>.

FIGURE 22: SOLAS

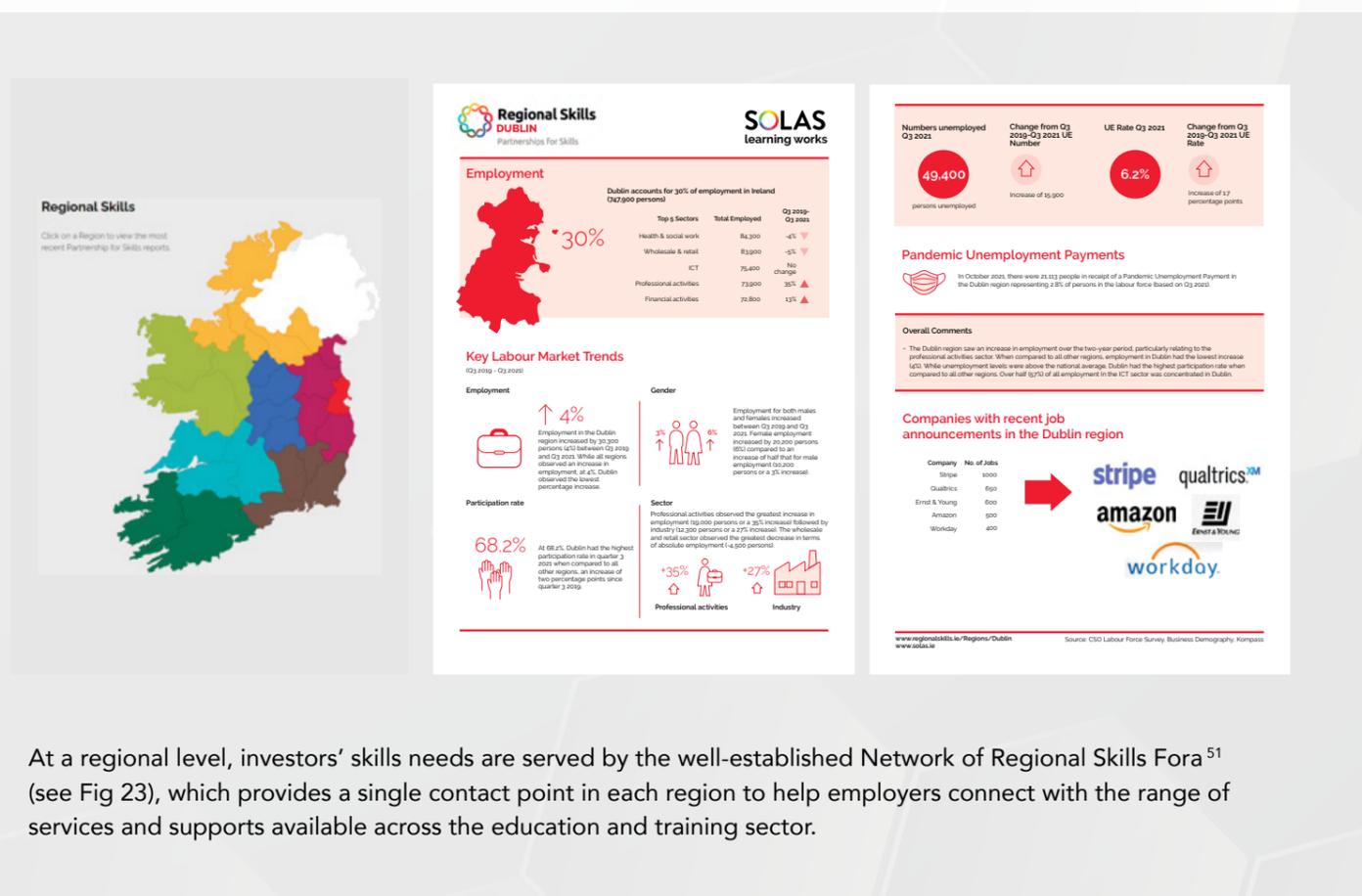
Mission is to fund, coordinate, and monitor further education and training provision in Ireland.

SOLAS was established in 2013 under the **Further Education and Training Act** as an agency of the **Department of Further and Higher Education, Research, Innovation and Science**.

Working closely with Regional Skills managers and our partners in Education and Training Boards nationally, SOLAS manages a range of Further Education and Training programmes which enable learners to succeed in the labour market and thrive in society. Programmes include apprenticeships, traineeships, skills to advance, eCollege and the European Globalisation Fund.

SOLAS also manages the **Safe Pass Health and Safety Awareness Training Programme, the Construction Skills Certification Scheme (CSCS)** and the **Quarrying Skills Certification Scheme (QSCS)**. Current courses can be found at [www.fetchcourses.ie](http://www.fetchcourses.ie) SOLAS manages the **National Skills Database** and provides research, data and analysis for the **Expert Group on Future Skills Needs**, and to inform our work.

In addition of the all the research, data, employment insights, as well as practical information around programmes and career guidance, SOLAS provides intel on **Regional Skills** with a two-page summary by regions, see below:



At a regional level, investors' skills needs are served by the well-established Network of Regional Skills Fora<sup>51</sup> (see Fig 23), which provides a single contact point in each region to help employers connect with the range of services and supports available across the education and training sector.



The Regional Skills Fora provides an opportunity for employers and the education and training system to work together to meet the emerging skills needs of their regions

The Regional Skills Fora has been created as part of the Ireland's National Skills Strategy 2025, it provides:

- a single contact point in each region to help employers connect with the range of services and supports available across the education and training system
- more robust labour market information and analysis of employer needs to inform programme development
- greater collaboration and utilisation of resources across the education and training system and enhancement of progression routes for learners
- a structure for employers to become more involved in promoting employment roles and opportunities for career progression in their sectors.

As of today, nine Regional Skills Fora have been established and a Regional Skills Manager has been appointed to lead the activities of each Forum



Figure 23 - Ireland's Regional Skill Fora

50 <https://www.skillnetireland.ie/about/>

51 Regional Skills, 'Home,' accessed Nov 2021. Website.

## IDA offers a range of grants and incentives to encourage inward investors to train their staff in technical and vocational skills (see Fig 27)

**Figure 24:** Skill/Talent grants and incentives available to foreign investors

**Training Grants:** are available to companies who want to expand capability and upskill their existing employees. Grants are focused on companies looking to achieve a step-change in productivity and /or diversification of the products or services delivered from their site. Depending on the company's training expenditure, grant aid is available to help them deliver bespoke training programmes.

**Sustaining Enterprise Fund (SEF):** is available to eligible manufacturing and internationally traded services companies, employing 10 or more employees which have been impacted by a 15% or more reduction in actual or projected turnover or profit, and/or a significant increase in costs as a result of the COVID-19 pandemic. SEF is open to companies who are clients of Enterprise Ireland, IDA.

**IDA RD&I Feasibility Study Grant:** This grant is designed to support the exploratory work required to develop and justify longer term and more sustainable RD&I programmes within client companies in the expectation that RD&I will become in time a core business function of the Irish subsidiary.

**Employment & Capital Grants:** These valuable grants are designed to incentivise employment creation in Ireland – or for the expansion of new activity. Under EU state aid law, these grants are available to large companies investing in specific regions of Ireland outside

of Dublin and Cork. SME sized companies can avail of these incentives once they meet the criteria for establishing their presence in Ireland. The IDA Board approves the grant packages on sign-off of the client company.

**IDA RD&I Grant Aid:** is open to all clients planning or engaging in RD&I activity. Companies submit proposals on potential investments in R&D in areas such as: the development of a new product, manufacturing process, or a service innovation. Because there are risks associated with R&D investment, companies may underinvest in R&D over time. IDA Ireland partners with companies to share some of the investment risk.

Ireland promotes itself to multinationals as providing access to a skilled workforce thanks to a technical education system responsive to investor's needs.

IDA Ireland primarily promotes its skills offer through the "Education and Skills" page on its website. It also has promotional material and statistics that highlight its focus on Diversity in STEM and the availability of Multilingual skills in Ireland's growing ecosystem.

It markets its skills offer through targeted campaigns in newspapers (such as the FT) and short videos on tv and social media. It focusses heavily on individual stories of a particular investor, the challenges they faced and how they were supported by IDA Ireland<sup>52</sup>.

## Republic of Ireland: Key Takeaways

### Institutional Alignment

IDA Ireland sits on the National Skills Council that: Oversees research; advises on prioritisation of identified skills needs

### Local Skills Support

Investors skills needs are served by the well established Network of Regional Skills Fora, which provides a single contact point for companies in each region for support in accessing educational needs

### Skills Mapping

IDA Ireland maps the supply of skills at both a regional, sector and activity level and makes this freely available to prospective investors

### Partnerships between Stakeholders

The National Skills Council involves various organisations from the public and private sector, at the national and regional level

<sup>52</sup><https://www.idaireland.com/how-we-help/case-studies>

## 3.5 THE AUSTRALIAN STATE OF VICTORIA

Victoria is Australia's second most populous state, after New South Wales (NSW) with a population of over 6 million. NSW and Victoria between them account for the majority of Australia's GDP, with shares of 32% and 23% of the total, respectively.



### 3.5.1 Background

With GDP per capita of just over \$51,000 USD, Victoria is an affluent state with sectoral strengths in construction, creative industries, defence and digital technologies<sup>53</sup>. It has enjoyed 26 years of unbroken economic growth in the period to 2020. Victoria captures 26% of all FDI into Australia and over the last five years has created more jobs from inward investment than any other Australian state.

### Victoria



Figure 25: GDP of Victoria

#### Victoria's TVET System

- 940,000+ student enrolments<sup>1</sup>
- 85.4% of graduates go on to work or further study<sup>2</sup>
- 24 countries delivered Victorian TVET programs<sup>3</sup>
- 11,000+ offshore Victorian TVET course enrolments<sup>4</sup>

### 3.5.2 How Invest Victoria promotes technical skills

Victoria has 13 public dedicated TVET institutions, four universities that offer technical education alongside academic courses and over a thousand registered vocational training organisations<sup>54</sup>.

### TAFE Victoria represents the 12 TVET institutions and offers:

- Training needs assessments
- Development and delivery of training
- Train the trainer
- Curriculum and standards development
- Curriculum licensing
- Qualifications frameworks
- Vocational Leadership and governance programs<sup>55</sup>

### Victoria Technical Training Programs

- Training technicians to meet the needs of the future economy: Higher Apprenticeships program aimed to address the skills gaps in Industry 4.0 as the demand for technology driven sectors grows. The program offers formal off-the-job training and paid hands-on skills application at work
- Training and Vocational training to upskill local talent: Victoria's Vocational Education and Training system is the leading training system in the State and includes over 1100 public and private providers. They deliver a variety of courses, that include entry level

The state's investment promotion agency, Invest Victoria (IV), considers technical skills a priority. Its main competitor for FDI is NSW and IV has identified its skills proposition as an area in which it can compete effectively. As Fig 30 illustrates, Victoria has been successful in increasing its share of skills-intensive FDI projects over the last decade, through heavy promotion of its technical skills offer.

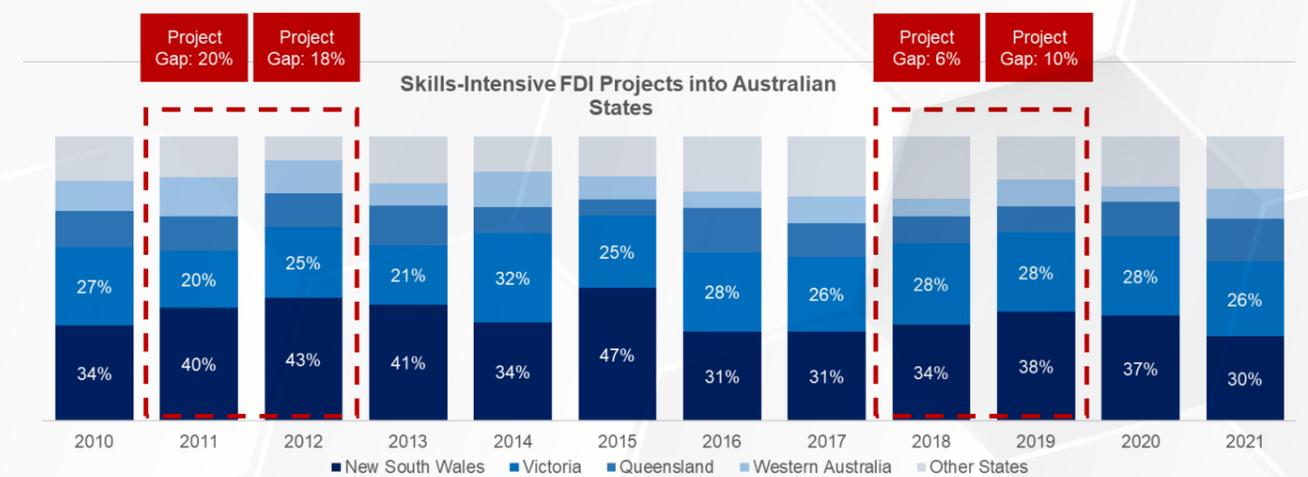


Fig 27 – Skills intensive FDI into Australian states. Source: FDI Markets

53 Invest Victoria, 'International Investment Strategy,' Jul 2021. Website.

54 Study Melbourne, 'Vocational Education and Training in Victoria,' Jan 2020. Website.

55 Invest Victoria, 'Vocational Education and Technical (VET),' accessed Nov 2021. Website.

It considers both technical skills and FDI to be central to its economic policy ambitions of Victoria's Big Build, their Priority Precincts, renewable energy and emissions reduction and the circular economy.

Investors in technology enabled fields benefit from the Victoria's strong digital infrastructure. The number of software developers and engineers in the state outnumbers those in both Singapore and Hong Kong and this field is also increasing faster than elsewhere across the country. Technology investors recognise the advantage Victoria has over other Australian states, with Victoria leading the nation in start-up and tech funding, with more than 65% of Australia's funding market share in 2018-19. Leading global tech giants have chosen to invest in Victoria including Google, Alibaba, Cognizant, Slack, Dataminr, KnowBe4, Square, and Zendesk. With the fast-paced nature of technology industry it is important to have a robust and agile skills infrastructure that is well placed to adapt and develop in line with the industry's rapid growth.

### 3.5.3 Notable policies or initiatives

Despite its strength in both TVET and university education, Victoria has been a victim of its own success in attracting successful businesses from overseas: it has run a persistent skills gap for much of the last twenty years – they have been unable to match investors' demand for skills with the local supply. To plug that gap, Victoria – like the rest of Australia - has relied upon the Skilled Migration Programme, which allows immigration on a points-based system dictated by the skills the country currently requires .

However, Australia's zero-COVID policy and the associated effective shutdown of immigration since the outbreak of the pandemic has meant the supply of skilled labour has become a possible bottleneck for the attraction of FDI. This, combined with the need to protect the employment of Victorians whose jobs have been affected by the pandemic has placed a renewed focus on the development of domestic technical skills and training programmes (see Fig 32)

When foreign investors land in Victoria, IV helps to partner them with appropriate institutions to deliver the training the investors will need (see Fig 31 for examples).



53 Invest Victoria, 'International Investment Strategy,' Jul 2021. [Website](#).

54 Study Melbourne, 'Vocational Education and Training in Victoria,' Jan 2020. [Website](#).

### 3.5.3 Notable policies or initiatives

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#### Siemens Case Study

Siemens partnered with Swinburne University to create Australia’s first demonstration and application centre – Mindshare - to be located at Swinburne’s Factory of the Future at its Hawthorne campus. MindSphere is a cloud based IoT operating system developed by Siemens. This partnership is an extension of Siemen’s \$135 million product lifecycle management industrial software grant to Swinburne University in 2017.

Eight industry partners have signed an agreement with Siemens to become MindSphere Foundation Partners in Australia. Students across the entire education and training continuum, from apprenticeships across bachelor and master programs and all the way to PhD research, will be developing and using this technology for different industrial applications as part of their learning in collaboration with industry.

#### Homage Case Study

Homage, a global health technology startup, has picked Melbourne for its Australian HQ, further strengthening the State’s thriving world class medical technologies sector. Homage worked with Invest Victoria to connect with the right partners such as carer and nurse training institutions as well as State Government representatives of Victoria, to explore ways Homage could partner and expand the local pool of trained and qualified care providers.

**FIGURE 31:** Partnerships between foreign investors and skills institutions in Victoria

<sup>56</sup> Website.

### CASE STUDY: Training Programs

- Supporting businesses with employee retention during Covid-19: Working for Victoria the \$500 million Working for Victoria initiative helped jobseekers find work and employers find workers. Including people who had lost their jobs and businesses who need workers due to the impacts of Covid-19 pandemic
- Jobs Victoria wage subsidies of up to \$20,000 are available to meet the costs associated with employing someone for 12 months
- Jobs Victoria Fund is providing \$250 million to assist Victorian businesses to employ at least 10,000 people who are looking for work
- A \$128 million Tech Schools Initiative that provides additional cutting-edge tech facilities to Victorian schools and continues to foster access to industry partners
- The STEM Centre of Excellence, hosted by Science Gallery Melbourne in Parkville, as part of the University of Melbourne’s new innovation precinct
- A thriving Victorian Innovation Hub in Melbourne’s Docklands CBD that brings together tech and industry
- A new digital hub in Cremorne to up-skill Victoria’s tech workforce, foster entrepreneurial startups and drive development partnerships

**Figure 28:** Training Programmes In The Pandemic

**When foreign investors land in Victoria, IV helps to partner them with appropriate institutions to deliver the training the investors will need (see Fig 31 for examples).**

## Victoria: Key Takeaways

### Technical Skills a Competitive Edge

Invest Victoria has identified technical skills a priority. Its main competitor for FDI is NSW and IV has identified its skills proposition as an area in which it can compete effectively

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### Historic Reliance on Skilled Immigration

Victoria has historically relied on skilled immigration. Pandemic has cut off the flow of skilled migrants, putting increased focus on local skills development

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### Partnering Investors with Education Institutions

Victoria helps investors partner with technical education institutions

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### Partnerships between Stakeholders

Victoria has 13 public dedicated TVET institutions, four universities that offer technical education alongside academic courses and over a thousand registered vocational training organisations

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### 3.6 THE STATE OF OHIO, USA

Ohio is a major manufacturing base in the north-east of the USA with a population of 11.78 million in 2021<sup>57</sup> and estimated GDP per capita of \$53,211<sup>58</sup> - approximately 16% lower than that of the USA as a whole. Its leading sectors are manufacturing, real estate, finance and insurance and healthcare and social assistance<sup>59</sup>.

<sup>57</sup> US Census Bureau, 'Table 2. Resident Population for the 50 States, The District of Columbia, and Puerto Rico: 2020 Census,' 2020. [Website](#).

<sup>58</sup> Open Data Network, 'Ohio: Economy', accessed Nov 2021. [Website](#).

<sup>59</sup> IBISWorld, 'Ohio - State Economic Profile,' accessed Dec 2021. [Website](#).

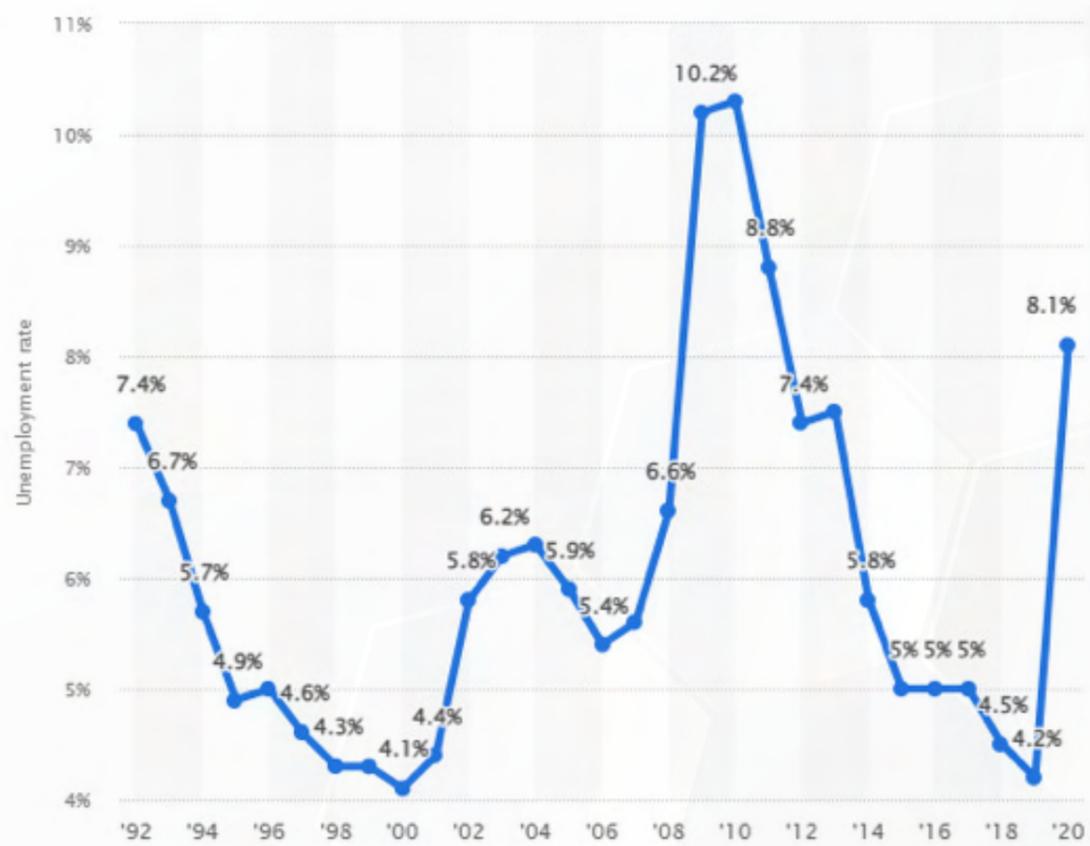
### 3.6.1 Background

In common with other northern and north-eastern US states, Ohio suffered a loss of manufacturing jobs during the final two decades of the twentieth century, both to southern US states and to foreign countries, particularly those in East Asia. Ohio suffered significant further employment shocks from the financial crisis in 2008-2010 and the COVID-19 pandemic (see Fig 8)

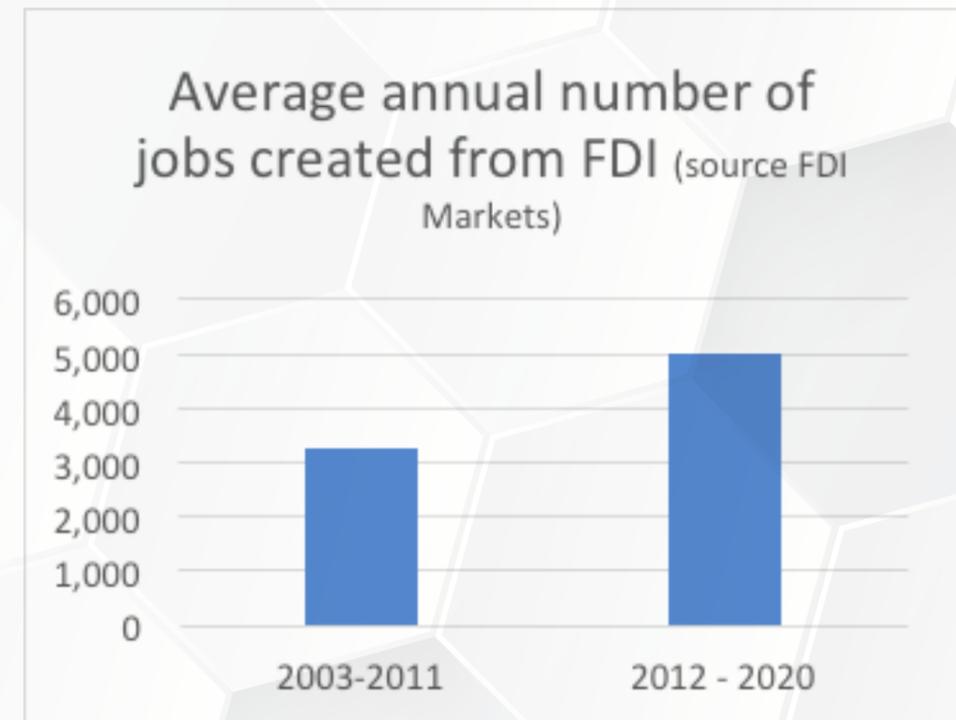
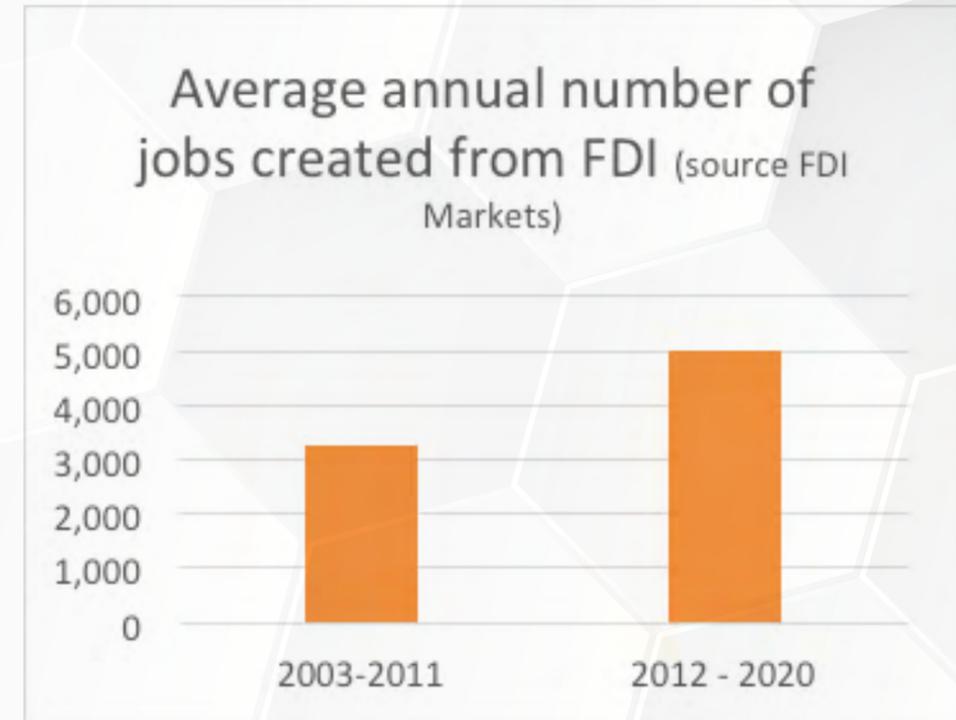
Ohio's recovery since the financial crisis has been led by increased foreign investment.

Since its creation in 2011, the state's investment promotion agency, JobsOhio, has overseen an increase in FDI from an average of 28.5 projects per year in the period 2003-2011 to an average of 47.6 projects per year in the period 2012-2020, according to FDI Markets.

**FIGURE 29:** Ohio unemployment 1992-2020 (source: Statista<sup>60</sup>)



60 Statista, 'Ohio - Unemployment rate 1992-2020,' Mar 2021. [Website](#).



**Figure 30:** Ohio FDI performance since 2011

Between 2014 and 2019 employment attributable to FDI in Ohio increased by 22.2% compared to an overall private sector employment increase of just 5.2% .

61 Global Business Alliance, 'Foreign Direct Investment Strengthens Ohio's Economy,' Aug 2021. [Website](#).

62 OCO Global Interview with JobsOhio, 10 Dec 2021.

### 3.6.2 JobsOhio's approach to technical skills promotion

JobsOhio's focus is not simply on creating jobs, but high skill jobs. It has focussed on 9 key sectors, identified as having the highest productivity and wages and the greatest indirect economic impact.

#### These are:

- Advanced Manufacturing
- Aerospace and Aviation
- Automotive
- Energy and Chemicals
- Financial Services
- Food and Agribusiness
- Healthcare
- Logistics and Distribution
- Technology

JobsOhio actively targets investors from these sectors and helps them attract the workers they need through a variety of 'Talent Solutions', such as the Talent Acquisition Services (TAS) Programme, which provides bespoke recruitment support for companies; Find Your Ohio, a portal containing screened resumes for positions requiring industry-recognised skills and qualifications; and Ohio To Work, which helps workers displaced by the pandemic to pursue reskilling for in-demand jobs.

In keeping with its remit to deliver jobs in Ohio and to provide employers with the talent they need, JobsOhio monitors the gap between skills demanded by employers and those offered by job-seekers.

This policy was initiated by a McKinsey strategy conducted five years ago but is now carried out in-house at JobsOhio using various sources of data including the Bureau of Labor Statistics and the Integrated Postsecondary Education Data System (IPEDS).

This is reinforced by conversations with companies themselves. This includes prospective foreign investors, through outsourced lead generation, and with existing foreign direct investors, through in-house account management. In common with much of the developed world, Ohio faces a skills shortage in STEM skills and this has been exacerbated by the accelerated shift to digital brought on by the pandemic. In particular, JobsOhio has identified four skills areas for their current focus:

- Industry 4.0
- Cyber security
- Technology
- Bio / life sciences

These are growth industries that deliver well paid jobs but where demand for technical skills currently outstrips supply.

### 3.6.3 Notable policies or initiatives

To support the development of vocational skills in these areas, JobsOhio takes a two-pronged approach: indirect financial incentives to companies in these high skills demand areas to train their employees and direct support to design and deliver training programmes. To assess eligibility for incentives, JobsOhio considers the following criteria:

- Is this the investor's first project in Ohio / USA?
- Is the investor involved in one of the occupations for which Ohio is trying to close a skills gap?
- Are the technical skills required by the company transferable to other companies?

Indirect financial support comes in the form of grants or loans. Although there are economic development grants for capital expenditure and job creation tax credits, the talent incentives are more focussed on skills development, i.e. investors are rewarded specifically for training their employees in transferable technical skills.

JobsOhio provides direct support to investors by helping them deliver training. This can be especially important for SMEs, who may not have an in-house training division nor the resources to navigate an unfamiliar regulatory environment. JobsOhio aims to convince them that training their employees will be worthwhile, assuaging any fear that trained employees might leave. They can then help them develop training and connect them with potential 'vendors' or partners to deliver this training.

JobsOhio has partnerships with multiple institutions, involved in the design, delivery or accreditation of technical training such as the Ohio Manufacturing Association (OMA) and the National Institute for Metalworking Skills (NIMS). They also partner with technical schools and the (state) Department of Higher Education.



JobsOhio does not typically deliver training programmes itself, but rather connects companies with vendors who do. Recent examples of innovative training programmes include an AR / VR initiative in partnership with Cincinnati State Technical and Community College and the University of Cincinnati.

It uses AR / VR equipment on the shop floor of the participant company so that employees can gain virtual experience of using production line equipment without interfering with production itself or risking damaging errors. JobsOhio has now worked with six universities on this programme with three having fully integrated AR /VR into their training.

## State of Ohio: Key Takeaways

### Focus on Quality Jobs

JobsOhio's focus is not simply on the number of jobs, but also their quality. Focus on 9 key sectors identified as having the highest productivity and wages and the greatest indirect economic impact

### Monitoring the gap between skills demand and supply

JobsOhio monitors the gap between skills demanded by employers and those offered by job seekers. This policy was initiated by a McKinsey strategy conducted five years ago but is now carried out in-house at JobsOhio

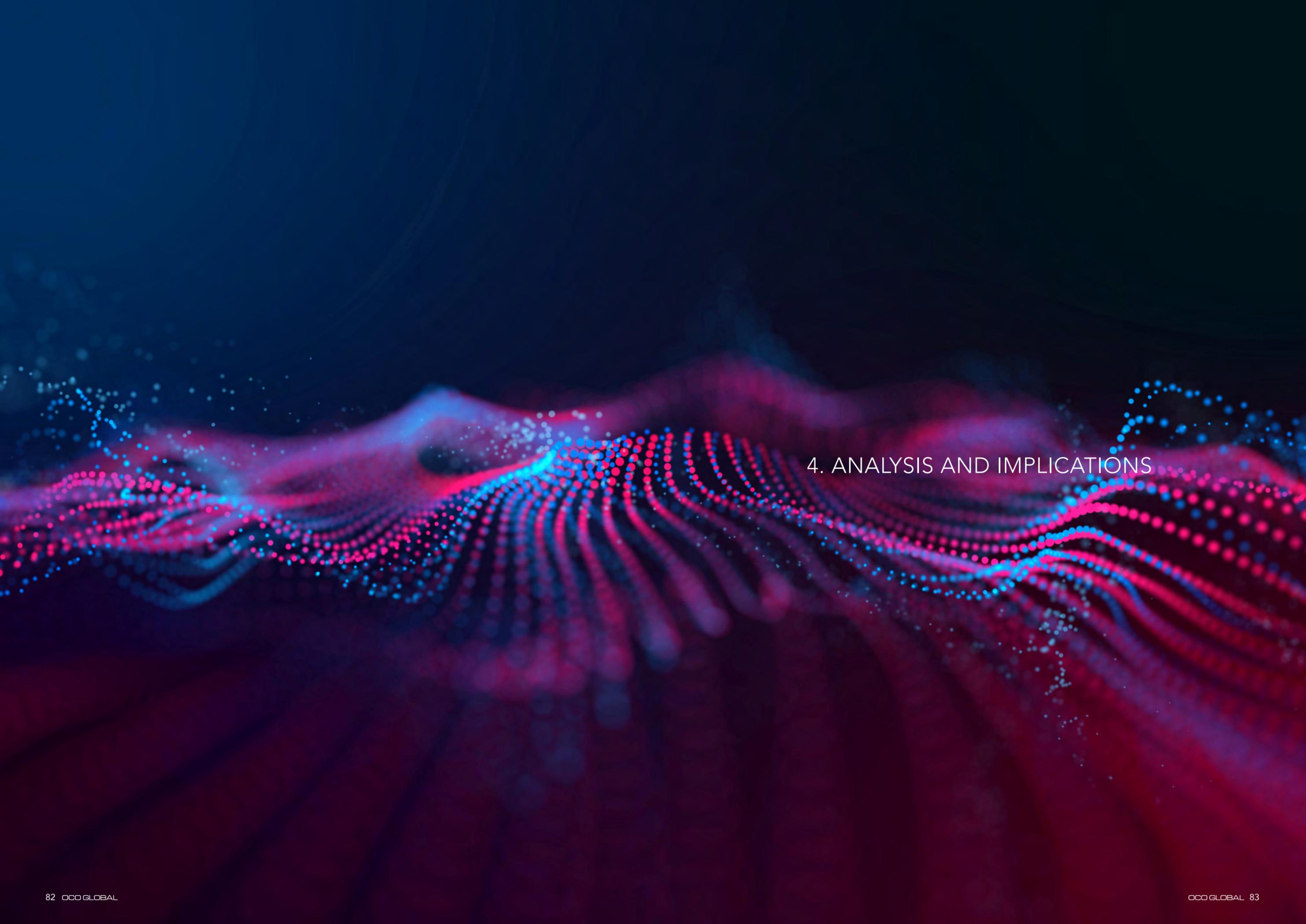
### Strategic Financial Incentives

When JobsOhio offers financial incentives and direct support to foreign investors to support their vocational skills training in key areas, they consider: Are the technical skills required by the company transferable to other companies?

### Strong Partnerships with Educational Organisations

JobsOhio has partnerships with multiple institutions, involved in the design, delivery or accreditation of vocational training, including technical schools and the (state) department of Higher Education





4. ANALYSIS AND IMPLICATIONS

## 4.1 INWARD INVESTMENT BOTH DEPENDS ON, AND DRIVES, SKILLS DEVELOPMENT

The relationship between FDI and skills is complex and symbiotic. Because access to skilled talent is a key determinant of where international companies choose to invest, a well-developed skills offer is an important plank of any successful investment promotion strategy.

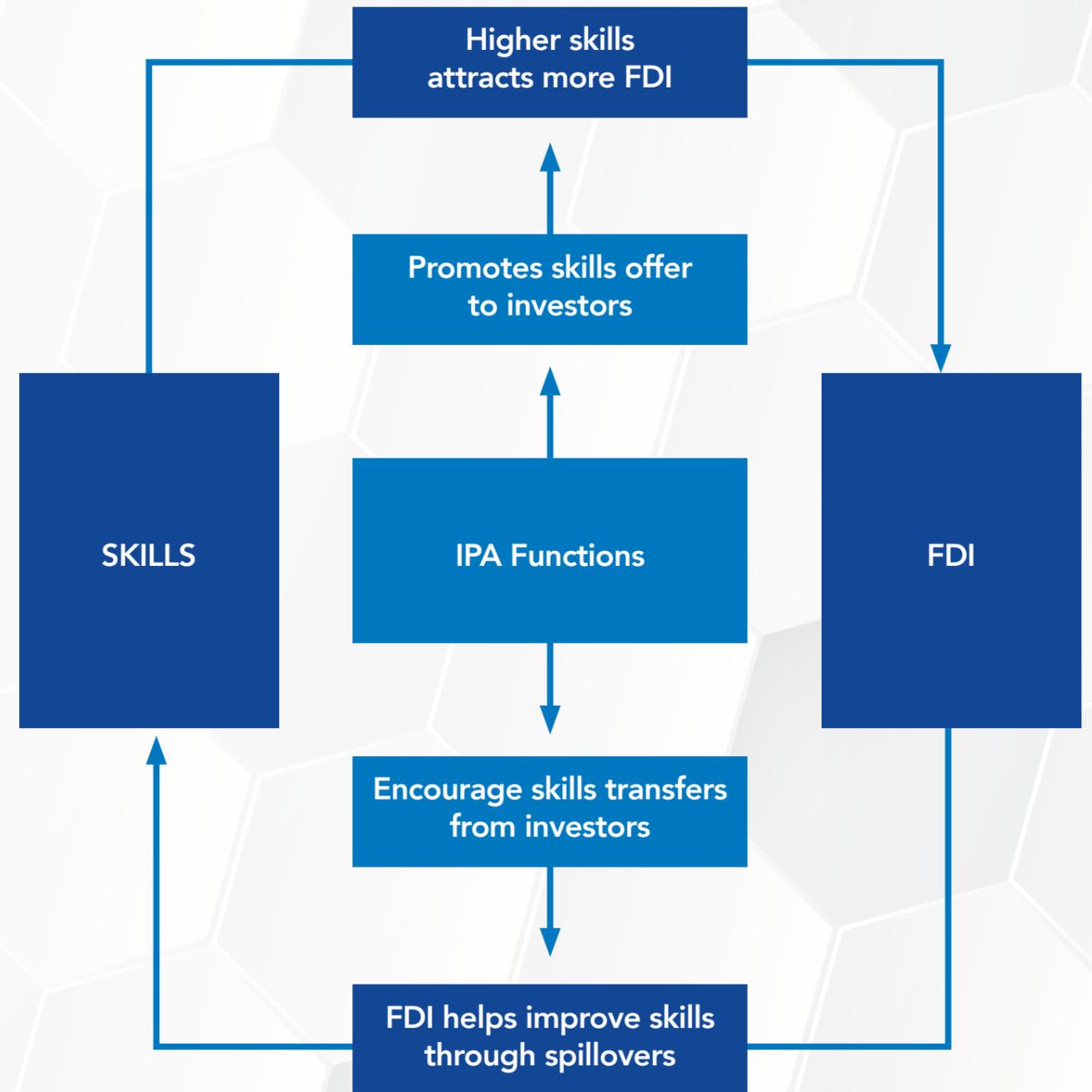
Simply put, the more confidence investors have that they will be able to access and / or train skilled labour, the greater will be the levels of inward investment.

However, FDI does not only rely upon skills, it can also be a key factor in developing them. The foremost justification for tax-payer funded foreign investment promotion and support is that foreign direct investors disproportionately benefit host economies with the spillovers of knowledge, technology, processes and management techniques they bring with them. The average foreign-owned firm in the UK is about 70% more productive than the average domestically-owned firm<sup>63</sup>.

This is partly explained by foreign direct investors operating in industries and sectors that are, already, more productive than the average. However, this does not fully explain the increase productivity, which is high enough, even in relation to domestic firms already operating in the same sector, to deliver higher wages. Research by Setzler and Tintelnot (conducted in the USA) suggests that the direct effect of a foreign multinational firm on its US workers is a 7% increase in wages. But, notably, this wage increase is not evenly spread – it is almost all accounted for by a much larger increase in the wages of the highly skilled, with little impact on the wages of the low skilled<sup>64</sup>.

Increasing levels of vocational skills, then, magnifies the direct benefits of FDI.

However, the indirect effects are greater still, with the arrival of a foreign direct investor typically influencing other firms in the sector in which it operates and indeed the wider economy. This impact is thought to be the result of both competition effects: existing firms improving to keep up and imitation effects: existing firms replicating the practices of the foreign investor. The latter effect, in particular, has an intimate relationship with skills, as higher skilled workers of the foreign investor are able to take their skills to other employers.



**Figure 32:**  
Relationship between FDI and skills

63 Office for National Statistics, 'UK foreign direct investment, trends and analysis: August 2020,' Aug 2020. [Website](#).

64 Setzler, Bradley and Felix Tintelnot, 'The Effects of Foreign Multinationals on Workers and Firms in the United States,' National Bureau of Economic Research, Mar 2021. [Website](#).

65 Department for International Trade, 'Understanding FDI and its impact in the United Kingdom for DIT's investment promotion activities and services,' Mar 2021. [Website](#).

66 Hidalgo, Cesar A. and Ricardo Hausmann, 'The building blocks of economic complexity,' Proceedings of the National Academy of Sciences of the United States of America, Jun 2009. [Website](#).

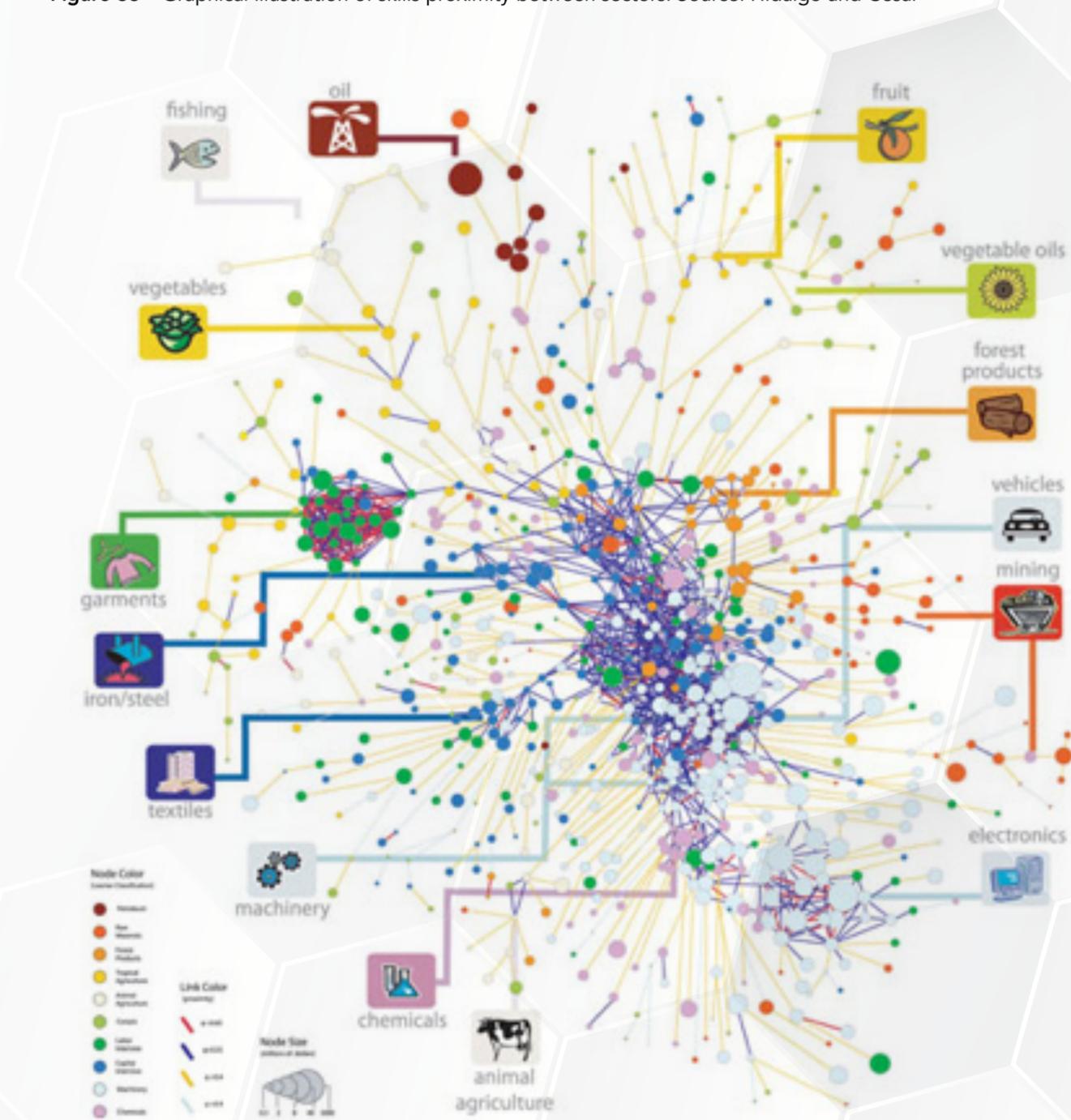
In fact, economists have attempted to estimate the general magnitude of this indirect effect: according to the Department for International Trade's own analysis, an increase in Great Britain's FDI stock of 1% leads, on average, to an economy-wide increase in labour productivity of 0.031%<sup>65</sup>.

But the link between FDI and skills runs deeper still. Evidence from economic complexity theory supports the proposition that an economy's growth prospects depend more on its capabilities than its institutions, taxes or business environment<sup>66</sup>. But developing those capabilities represents a conundrum: how does a location gain experience in something it cannot currently do? FDI can be an answer to that puzzle.

Foreign direct investors can bring experience and expertise that advances the capability frontier of a location. Yet they will not invest in a skills vacuum. For example, an AI developer will not expand into an agrarian economy but may well consider a location that currently has data analytics skills. In general, skills required in a sector will be most closely related to those sectors that are spatially close in the diagram in Fig 2.

Thus, the advancement of the skills frontier is incremental – it proceeds in small steps rather than giant leaps. And in an ever-shifting sectoral landscape, the directions the skills frontier needs to move in are constantly in flux. That makes it challenging for a centrally planned education authority to keep ahead of the curve. One of the best sources of real time information regarding the skills that will be demanded by the economy tomorrow are the demands of foreign investors today. Since disruptive technologies and practices often arrive from abroad, FDI is a lead indicator of skills demand.

Figure 33 – Graphical illustration of skills proximity between sectors. Source: Hidalgo and Cesar



63 Office for National Statistics, 'UK foreign direct investment, trends and analysis: August 2020,' Aug 2020. [Website](#).

64 Setzler, Bradley and Felix Tintelnot, 'The Effects of Foreign Multinationals on Workers and Firms in the United States,' National Bureau of Economic Research, Mar 2021. [Website](#).

65 Department for International Trade, 'Understanding FDI and its impact in the United Kingdom for DIT's investment promotion activities and services,' Mar 2021. [Website](#).

66 Hidalgo, Cesar A. and Ricardo Hausmann, 'The building blocks of economic complexity,' Proceedings of the National Academy of Sciences of the United States of America, Jun 2009. [Website](#).

## 4.2 THEMES IN SKILLS AND FDI INTERNATIONAL BEST PRACTICE

Across the six case studies, a number of commonalities emerged in how IPAs successfully approached the relationship between technical skills and FDI. We identified three major themes:

### 4.2.1 Integration of institutions in skills development and FDI

Given the complex interdependence between skills and FDI, the successful integration of FDI attraction strategy and skills policy requires the institutions that control each to work closely together.

The most successful examples of this, such as the Republic of Ireland's National Skills Council, achieve this alignment with councils or boards that bring together ministries of labour, education, and economic development to jointly address the supply of skills, given current and expected future demand. Institutional integration also facilitates the promotion of existing workforce skills and skills infrastructure to prospective investors. While mapping of those skills at a regional level gives foreign investors – who may lack detailed local knowledge – the ability to set up in the most suitable locations.

Access to talent is a leading motive for investors into the UK, and the UK's investment promotion activity reflects this with its strong higher education, research and MBA programmes featuring prominently in DIT's suite of promotional materials<sup>67</sup>. However, promotion of the UK's TVET offer is significantly less visible.

#### This represents a missed opportunity for two reasons:

- Investors with significant technical skills requirements may overlook the UK in favour of countries with a more developed TVET offer, e.g., Germany
- Investors that do still choose the UK may invest less in technical skills development than they might were they aware of the initiatives and incentives on offer

There are partnerships in the UK between educational institutions and foreign investors, but these tend to occur at a local level, through Local Enterprise Partnerships (LEPs)

#### A more comprehensive partnership could seek to address:

1. How to promote the skills and skills infrastructure demanded by foreign investors, including regional skills mapping
2. How the UK education system can deliver the skills required by foreign investors
3. How skills transfers from foreign investors can help to address UK skills requirements
4. How UK educational establishments can partner with foreign investors

<sup>67</sup> Department for International Trade, 'GREAT Asset Library,' accessed Dec 2021. [Website](#).

<sup>68</sup> E.g., Chinese telecoms equipment manufacturer Huawei.

### 4.2.2 Targeting of investors for their contribution to skills development

Several of the locations studied for this report have an explicit industrial strategy with skills development at its core. The State of Ohio's productive sector prioritisation, France's focus on tech and Singapore's multi-stage transition from low-cost manufacturing base to knowledge economy all exemplify this approach.

The UK has traditionally operated an investor-led model of investment attraction. That is, it has been open to a broad range of direct investment with limited exceptions<sup>68</sup>. Unlike many locations it has not relied heavily upon financial incentives to attract investors, depending instead on its business environment, its position as a gateway to Europe and its strong investment facilitation services to attract more inward investment than any other country in Europe.

However, this free market approach to investment attraction means the UK has limited control over which investors come. By contrast, countries such as Singapore and Ireland have actively courted FDI from companies they have identified as pivotal to their economic development plans.

#### There are signs that DIT is already moving away from this purely investor-led approach:

1. **Opportunity-based propositions** such as the High Potential Opportunities programme, which promotes investment in location and sector-specific opportunities that are less well known internationally
2. **A 'shift to value'**, with an increased emphasis on prioritising investment facilitation resources around those projects that can bring the most value to the UK
3. **The Office for Investment** – designed to 'unlock strategic investments aligned to the government's priorities'<sup>69</sup>

However, an explicit acknowledgement that the government's priorities include technical skills development could reap rewards

### 4.2.3 Encouragement of skills transfers from foreign investors

The impact of attracting foreign investors that bring new skills with them can be amplified by encouraging skills spillovers once the investors have arrived. This is a key objective of several IPAs studied in this report. For example, JobsOhio's Talent Services offers direct support with training to those companies deemed to offer skills of benefit to the wider economy, while EDB Singapore has a long history of working with key foreign investors to build training programmes available to those outside the organisation as well as the investor's own staff.

The UK has historically avoided widespread use of financial incentives to foreign investors, in part because it was bound by EU State Aid rules, which no longer apply - though the Trade and Cooperation Agreement continues to impose some related restrictions<sup>70</sup> - but also, perhaps, because of an aversion to 'picking winners'. In other parts of the world – such as the USA - financial inducements are more common and incentives competition between IPAs can mean much of the economic surplus from foreign investments is claimed by the investor rather than the location.

However, there can be a place for the judicious use of incentives, particularly where those incentives are specifically targeted at behaviours that produce positive externalities – benefits that accrue not to the investor but to the wider economy. Skills spillovers represent exactly such a case. Far from 'picking winners' such a subsidy can be properly described as correcting for market failure: the mirror image of a tax on pollution. Rather than granting companies indiscriminate incentives for setting up, they can be rewarded according to the extent to which they upskill local workers.

In fact, in many best practice examples, the assistance provided is operational rather than purely financial. This has the added benefit of eliminating leakage of the incentive to investors who would have trained their staff regardless.

### 4.3 The future of FDI and technical skills in the UK

EU exit and the pandemic have, between them, dramatically affected the investment outlook for the UK. Departure from the EU has reduced the attractiveness of the UK to investors in terms of its access to the EU market.

One motive that remains strong for investors into the UK is access to talent. But the pandemic has had profound effects on global FDI flows, particularly into Europe and North America. Some of these effects will reverse as travel restrictions ease but others may prove longer-lasting. In accelerating the shift to digital and demonstrating the viability of remote working, the pandemic has recast the importance of physical location for would-be investors. For jobs that are largely knowledge-based, there is no reason in principle why the employer-employee relationship cannot transcend national borders, thus diminishing the need for direct investment.

However, to avail itself of local technical and vocational skills, a multinational must invest directly, since, by assumption, physical equipment or technology is involved.

It is too early to predict confidently the magnitude of this effect, but the direction of the trend is already being corroborated by evidence on motives of investors<sup>71,72</sup>. The argument here is not that access to technical and vocational skills will be the sole or even necessarily the major motive for FDI in the future, but rather that its relative significance will increase. If the UK already underestimates its importance, that could become increasingly costly in the future.

67 Department for International Trade, 'GREAT Asset Library,' accessed Dec 2021. [Website](#).

68 E.g., Chinese telecoms equipment manufacturer Huawei.

69 UK Gov, 'Education Sector Advisory Group,' accessed Dec 2021. [Website](#).  
70 Forwood, Geneva, 'State aid and the Brexit Trade Agreement: what's new, what's not, and what's next,' White & Case, Feb 2021. [Website](#).  
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## APPENDICES

# APPENDIX A – PROJECT METHODOLOGY

Foreign direct investment (FDI) is a category of investment central to this report and is defined variously by different organisations. For example:

**IMF**  
A category of international investment that reflects the objective of a resident in one economy (the direct investor) obtaining a lasting interest in an enterprise resident in another economy (the direct investment enterprise).

**UNCTAD**  
FDI is defined as an investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the foreign direct investor (FDI enterprise or affiliate enterprise or foreign affiliate).

**OECD**  
FDI is capital invested for the purpose of acquiring a lasting interest in an enterprise and of exerting a degree of influence on that enterprise's operations.

Common to all three definitions is the principle of a 'lasting interest' and the International Monetary Fund (IMF) further defines this as requiring at least 10% ownership of an enterprise by the foreign investor, a criterion that is shared by the Department for International Trade. Whilst this ownership threshold may be arbitrary, the concept of lasting interest (and control) is critical to the analysis in this report: we are especially interested in FDI, as opposed to other types of inward investment, because it is the most dependent on skills and because it has the greatest impact on skills. The terms skills and technical skills are both used widely in this report and with different, but overlapping meanings.

By skills we mean the broad set of abilities required to perform any useful tasks in a commercial context. This could be technical skills (see below), or 'soft skills' such as critical thinking, language competencies or interpersonal skills.

We follow the World Bank in defining technical skills as referring 'to the acquired knowledge, expertise, and interactions needed to perform a specific task, including the mastery of required materials, tools, or technologies'. However, we implicitly assume the further criterion that they must be acquired by dedicated technical training or vocational experience, rather than, for example, as a part of a general education.

As with the definition of FDI there will be boundary cases, but the concept is straightforward: technical skills are those required to carry out specific vocational tasks above and beyond those possessed by the general population.

The main subject of interest for this report is technical skills, so, where possible, we distinguish between technical, and other, skills. However, where such a distinction is not helpful or not possible - for example, where investors or investment promotion agencies express an attitude or policy towards skills more generally - we do not contrive to exclude non-technical skills from the analysis.

## Approach

In developing the international case studies, the project has combined a variety of research techniques. The methodology for delivering the research is outlined in further detail below.



### Phase 1 – Competitor Location Selection:

Phase 1 focused on identifying the most suitable locations for case study development. The project team developed a framework and list of criteria which were used to identify a long list of potential locations. Data was collected on all potential locations, and then filtered using a data model to prioritise the most suitable list of countries for case study development. A total of 6 countries were selected in total, covering as many continents as possible, and incorporating both direct inward investment competitors to the UK, as well as examples of best-in-class IPAs, or those with similar geographic or economic structures to allow for read-across of ideas to the UK.

No.	Markets	Economic Outlook				FDI Performance				Labour Market Capital		Education Skills Priority		
		GDP	GDP per capita	GDP in Agriculture	GDP in Manufactures	FDI inflows	FDI outflows	FDI as % of GDP	FDI as % of GDP	Unemployment rate	Unemployment rate with education level	Level of education	Employed in tertiary	
11	Victoria, Australia	4	3	4	2	2	3	4	2	5	5	2	5	1
2	Ireland	2	1	5	1	1	5	3	3	4	5	4	1	1
1	France	5	5	4	5	5	3	2	4	2	1	2	5	5
3	Netherlands	4	3	4	5	4	4	4	2	5	3	5	3	1
6	Switzerland	3	1	5	2	5	4	3	5	3	4	4	3	1
13	Ohio, USA	3	4	5	3	5	4	2	3	1	4	3	4	1
13	Costa Rica	1	2	4	2	4	5	5	4	2	1	5	2	1
7	Singapore	1	2	4	2	4	5	5	4	2	1	5	2	1
10	South Korea	5	4	4	1	1	2	2	1	5	5	1	3	5
8	Hong Kong	1	5	4	3	3	5	4	1	3	1	1	1	1
4	Russia	5	2	1	4	1	1	1	2	4	3	4	5	5
5	Sweden	2	4	5	4	2	2	2	5	1	3	4	2	1

No.	Markets	Rank per pillar												
		Economic	FDI	Labour	Education	Priority	Overall	Rank	Overall	Rank	Overall	Rank		
11	Victoria, Australia	10	7	1	5	1	5	1	5	1	5	1	5	1
2	Ireland	14	3	3	10	3	10	1	1	1	1	2	2	2
1	France	1	9	11	2	2	2	1	1	1	1	2	2	2
3	Netherlands	2	5	4	8	7	7	10	10	10	10	4	4	4
6	Switzerland	4	4	4	7	4	7	7	7	7	7	3	3	3
13	Ohio, USA	3	10	4	10	1	1	1	1	1	1	2	2	2
13	Costa Rica	5	2	10	1	1	1	1	1	1	1	2	2	2
7	Singapore	12	2	11	10	3	3	3	3	3	3	3	3	3
10	South Korea	15	12	5	6	11	11	10	10	10	10	3	3	3
8	Hong Kong	7	6	9	12	7	7	7	7	7	7	3	3	3
4	Russia	11	14	4	1	1	1	1	1	1	1	2	2	2
5	Sweden	5	8	9	10	7	7	7	7	7	7	3	3	3

### The following 6 countries were selected for detailed analysis and case study development:

1. Singapore
2. Costa Rica
3. France
4. Ireland
5. Victoria, Australia
6. Ohio, USA

## **Phase 2 – Desk Research and Literature review:**

In phase 2, the project team completed a literature review and desk research exercise.

We have reviewed both quantitative and qualitative data sets in order to answer the key research questions:

- How IPAs map skills availability on a national, regional and sector basis (including how they establish partnerships with education organisations).
- How they benchmark skills quality and availability when pitching for internationally mobile investment.
- How IPAs analyse and record any skills gaps that are affecting investor decisions, and how this information is used to inform future policy.
- What aftercare is provided to investors in terms of information on skills and training in the locality.
- Examples of how information on skills and training has enabled IPAs to win specific investment projects

## **Phase 3 – Stakeholder Interviews with Investment promotion agencies:**

In phase 3, we interviewed representatives from the selected locations (with the exception of EDB Singapore, who, as a matter of policy do not take part in benchmarking studies).

We developed a detailed questionnaire and set of interview questions to guide the discussion with the IPA.

All IPAs were asked to share examples of best practice

## **Phase 4 – Case Study Development:**

Using the data gathered from the desk research, literature review and IPA interviews, the project team focused on developing a series of case studies. The case studies are focused on the countries selected in Phase 1 of the project. Examples have focused on where IPAs are using information from investors to inform skills development activities (both policies and programmes); where IPAs are using innovative approaches to match supply and demand; and where IPAs have used specific skills development initiatives to win new investment projects.

## **Phase 5 – Report Development, including analysis of lessons learnt from the case studies and the implications for the UK:**

In the final phase, the project team focused on developing this report, which brings together all of the key findings and analysis, as well the case studies. In addition, a workshop was held with members of the Skills Taskforce to share insights and discuss recommendations. Analysis is focused on how the Skills Taskforce may be able to increase awareness amongst stakeholders in the UK government and UK-based IPAs of the importance of the technical skills and vocational training offer to investors.



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