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## **Offshoring, Reshoring, and the Evolving Geography of Jobs: A Scoping Paper**

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# Abstract

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While the second half of the 20<sup>th</sup> century was characterised by a growing integration of the global economy, in recent years there have been growing calls for protectionism and reshoring. At the same time, COVID-19 resulted in higher levels of remote working, which showed that many jobs could be done from anywhere and could, in theory, be offshored. The future of offshoring and reshoring is therefore highly uncertain. This document summarises some of the key issues and trends with regards to offshoring and reshoring. It then sets out a research agenda which would result in a better understanding the future of offshoring and reshoring and their impact on domestic labour markets, which would help policy makers in OECD countries plan for the changes that lie ahead.

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# Offshoring, Reshoring, and the Evolving Geography of Jobs: A Scoping Paper

## Introduction

The second half of the 20th century was characterised by a growing integration of the global economy. As part of this globalisation, firms restructured their operations internationally through the outsourcing and offshoring of their activities. Consequently, international production became increasingly organised within so-called global value chains (GVCs) where the different stages of the production process are located across different countries.

On the whole, globalisation has been a force for good (e.g. in terms of economic growth and poverty reduction) and offshoring has not been a major cause of job loss. However, not everybody has benefitted equally (OECD, 2017<sup>[1]</sup>). Trade can be costly to local communities and adjustments in local labour markets can be slow and leave affected workers with reduced lifetime incomes (see (Autor, Dorn and Hanson, 2016<sup>[2]</sup>) on the “China Shock”). Some sectors (e.g. textiles, apparel, footwear) lost more jobs to offshoring than others (OECD, 2007<sup>[3]</sup>). The unequal impact of globalisation and offshoring have made them major issues of concern to voters and policy makers. When a local firm moves production abroad, voters punish incumbent government parties (Rickard, 2021<sup>[4]</sup>).

In recent years, there have been growing calls for protectionism and reshoring. As Goldberg and Reed (2023<sup>[5]</sup>) point out, there have been profound changes in the policy environment and public sentiment, building on the already existent anxiety about the labour market effects of import competition from low-wage countries. Even prior to the COVID-19 crisis, some countries like the United States introduced a series of tariffs that covered virtually all imports from China (Alfaro and Chor, 2023<sup>[6]</sup>) while at the same time luring companies and jobs back by reducing corporate tax rates and regulations. The pandemic and subsequent geopolitical tensions further kindled calls to reshore as they seemed to highlight supply chain risks and the over-dependence on certain countries. The emergence of new technologies such as robotics, 3D printing and advanced automation facilitates such moves.

At the same time, COVID-19 set in motion another, parallel trend which could lead to increased, rather than decreased offshoring. With lockdowns, many people were forced to work from home and this experiment showed that remote working, thanks to advances in digital technologies, is not only possible but in many cases also brings benefits to both workers and employers. As a result, levels of remote work remained high after the pandemic. However, if jobs can be done from home, they could in theory be done from anywhere, providing employers with access to a global talent pool and an opportunity to offshore jobs at a fraction of the cost.

The future of globalisation and offshoring is therefore highly uncertain (Goldberg and Reed, 2023<sup>[5]</sup>), with both challenges and opportunities presenting themselves. Some believe that the world economy is heading towards a “great reallocation” in supply chain activity (Alfaro and Chor, 2023<sup>[6]</sup>) and it is not clear what impact these trends will have on domestic labour markets. New directions in offshoring are likely to upend the geography of jobs, creating uncertainty for workers and policymakers alike. Without pretending to offer an exhaustive literature review, this document summarises some of the key issues and trends with regards to offshoring and reshoring. It then sets out a research agenda which would result in a better understanding the future of offshoring and reshoring, and their impact on domestic labour markets, which would help policy makers plan for the changes that lie ahead.

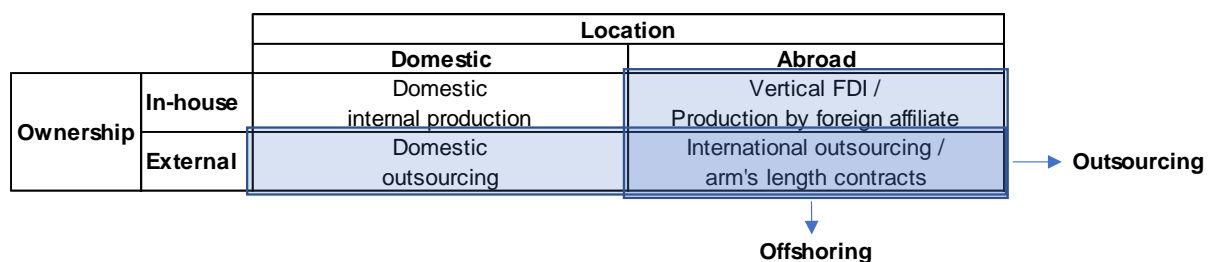
## Definitions

Offshoring refers to the total or partial transfer of an industrial activity (manufacturing or services) abroad, either to an existing or new affiliate, or through subcontracting to non-affiliated companies. The portion of the activity sent offshore that had been intended for the domestic market is then imported (OECD, 2007<sup>[3]</sup>).

Offshoring is sometimes confused with outsourcing, but these are not the same thing. Outsourcing refers to contracting out a specific part of business operations to a third party (Sytsma, 2022<sup>[7]</sup>). This third party may or may not be located in a foreign country.

A distinction can be made between outsourcing and offshoring on the basis of two criteria: the location where a task is performed (domestic or abroad) and the ownership of the unit where the task is performed (in-house or external). “Outsourcing” refers to situations where tasks are carried out by external suppliers rather than in-house, while “offshoring” refers to situations where tasks that used to be performed at home are relocated abroad. While the concepts are different, they do overlap and they both include international outsourcing (Figure 1).

**Figure 1. The relationship between offshoring and outsourcing**



Source: Bottini, Ernst and Luebker (2007<sup>[8]</sup>)

In addition to these concepts, Sytsma (2022<sup>[7]</sup>) introduces “digital outsourcing”—a company replacing in-person workers with remote workers domestically—and “digital offshoring”—a company replacing domestic workers with remote workers in another country.

Finally, in recent years, many companies have been thinking about “reshoring”, which refers to the transfer of activities back to the home country (backshoring) or closer to a neighbouring country (near-shoring).

## A brief history of offshoring

Offshoring is not new. It started over half a century ago and has gone through a number of different phases (Mukherjee et al., 2023<sup>[9]</sup>):

- The first wave was associated with the offshoring of manufacturing plants, which started in the 1960s, when firms in the consumer electronics industry began to relocate production to low-cost countries.
- During the second wave, in the late 1990s, firms also offshored information technology (IT) activities. This was made possible by the fact that IT activities typically consisted of routine-tasks such as simple coding, testing or data entry and because they were often considered to be outside the core business functions of client-based firms.
- During the third wave (2005 to 2015), offshoring of knowledge-intensive business functions and high-value activities (e.g. R&D, product design, and engineering) became increasingly popular, even though these had previously been considered core functions of firms. In addition, during this period, falling costs due to technological advancements and globalisation allowed firms to start offshoring their service functions.
- The fourth wave, which began after 2015, was characterised by a decline in offshoring activities, potentially as a result of societal backlash or the rise of nationalistic policies. Simultaneously, a rising number of companies started to reshore their manufacturing and services operations.

The COVID-19 crisis and geopolitical tensions have reinforced protectionist tendencies and a move towards reshoring, so the fourth wave is still very much ongoing and potentially growing in magnitude.

## The future: digital offshoring

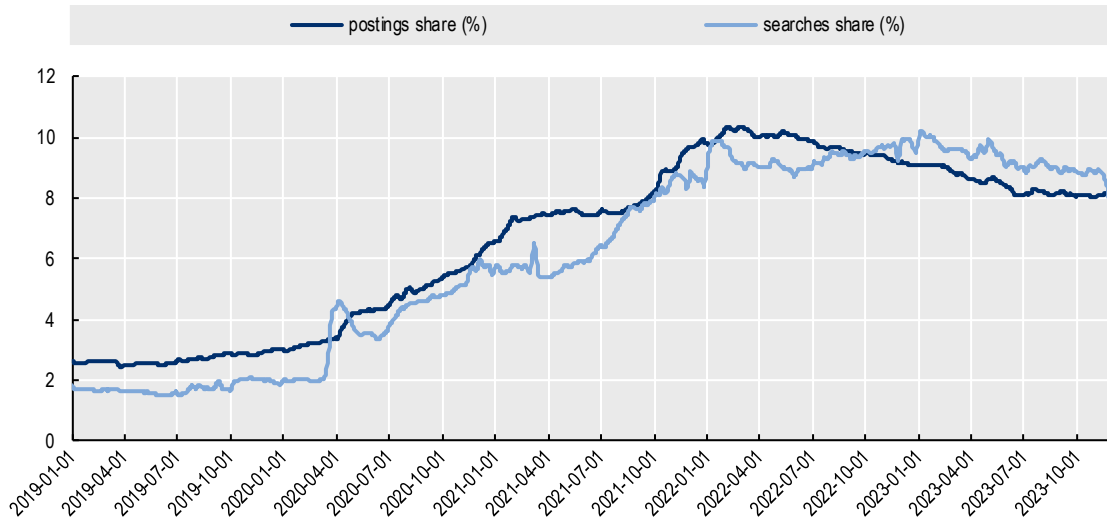
Some commentators are now talking about a potential fifth wave of “digital” offshoring (also referred to as “virtual offshoring” or “telemigration” - (Carias and Louis, 2021<sup>[10]</sup>)), fueled by the shift to remote work during the COVID-19 pandemic and the rapid growth in digital technologies.

The COVID-19 pandemic led to a level shift in the share of remote work. In January 2022, nearly two years after the start of the pandemic, 59% of workers with jobs that could be done from home were still teleworking (Parker and Menasce Horowitz, 2022<sup>[11]</sup>). Barrero, Bloom and Davis (2023<sup>[12]</sup>) showed that, in June 2023, 28% of paid workdays were from home, four times the estimated share for 2019. And Brynjolfsson et al. (2023<sup>[13]</sup>) showed that 21% of workers said that most of their work would be remote after the pandemic, while 9.5% said all their work would be remote. In June 2023, 9.4% of all searches on the US Indeed jobs platform contained terms related to remote work and 8.4% of job postings contained such terms. Although there has been a slight levelling off in the share of remote job postings (from a peak of 10.3% in February 2022), it still remains four times higher than before the pandemic (Culbertson, 2023<sup>[14]</sup>).



**Figure 2. Demand for, and offers of, remote work have risen substantially**

Share of job postings and searches in the US containing terms related to remote work



Source: Indeed.

The possibility of remote work has raised the specter of digital offshoring. Kuper (2021<sub>[15]</sub>) argued that: “if you can do your job from anywhere, someone anywhere can do your job” and Carias and Louis wrote: (2021<sub>[10]</sub>): “If it can be done from home, could it be done from abroad?”

Digital offshoring could offer new opportunities not only to companies that have traditionally offshored, but also to other firms and, in particular, small and medium-sized enterprises which previously faced bigger barriers to offshoring (Van Dam, 2022<sub>[16]</sub>). Combined with rising office-space costs and debt burdens, some commentators believe this will push companies to replace domestic workers with “telemigrants” (Baldwin, 2020<sub>[17]</sub>). A survey of human capital executives in the US found that the share of businesses willing to hire fully remote workers globally increased from 5% pre-pandemic to 10% in September 2020 (Steemers et al., 2020<sub>[18]</sub>), and these shares were higher for firms who primarily employed professionals and office workers, with 7% answering that they would be willing to hire fully remote global workers pre-pandemic, increasing to 14% in September 2020. Similarly, 7.3% of US senior managers said they were moving more jobs abroad as a result of remote work (Putzier, 2023<sub>[19]</sub>).

New technological developments may further boost such offshoring. For instance, growth in computer vision and virtual reality technologies could facilitate service-sector offshoring in new occupations (Sytsma, 2022<sub>[7]</sub>). Some studies have indicated that progress in artificial intelligence (AI) / automation and offshoring are related – although the direction is not always clear (Stapleton and Webb, 2020<sub>[20]</sub>; Nordås and Tang, 2022<sub>[21]</sub>). For example, Nordås and Tang (2022<sub>[21]</sub>) found that sectors with exposure to AI tended to offshore less of their core business functions and transport and logistics, but more of IT, management, R&D and other business functions. Stapleton and Webb (2020<sub>[20]</sub>) found that robot adoption was positively associated with offshoring in firms that had not offshored activities. However, this pattern was reversed for firms that started to offshore prior to robot adoption. Stapleton (2020<sub>[22]</sub>) further showed that machine learning use led to an increase in services offshoring, particularly to developing countries such as India and in ICT-related and business and professional services. Finally, Kinkel et al. (2023<sub>[23]</sub>) found that AI-intensity had a positive effect on both offshoring and backshoring decisions in the manufacturing sector. A

broad digitalisation-oriented use of AI tended to be relevant for both offshoring and backshoring decisions, while an automation-oriented use of AI tended to be especially relevant for backshoring decisions.

## The motivations of companies to offshore

One of the main reasons that prompts firms to offshore has been to reduce costs, but not labour costs alone. In the early waves of offshoring, firms sought to reduce wages and take advantage of reduced trade barriers and transportation (Bottini, Ernst and Luebker, 2007<sup>[8]</sup>; Aspelund and Butsko, 2010<sup>[24]</sup>; Dachs et al., 2012<sup>[25]</sup>; Johansson and Olhager, 2017<sup>[26]</sup>). For example, 80% of German manufacturing companies considered the reduction of personnel costs as a decisive motive for offshoring (Kinkel and Maloca, 2009<sup>[27]</sup>). Stringent labour market regulation can also add costs for firms and Weng and Peng (2018<sup>[28]</sup>) showed that high labour protection in the home country could be a motivation for companies to offshore. In addition, companies may wish to escape collective bargaining requirements in the home country (Grušić, 2023<sup>[29]</sup>).

Seeking lower labour costs remains an important motivation in the case of digital offshoring as well. Carias and Louis (2021<sup>[10]</sup>) estimated that firms in France and the United Kingdom could reduce labour costs by 7% and 9%, respectively, if 1 out of 4 teleworkable jobs were virtually offshored. They also showed that, on average, sectors with high potential teleworkability tended to be the ones with the highest labour costs per worker. According to Barrero, Bloom and Davis (2023<sup>[12]</sup>), in May 2022, 8% of employers who expanded opportunities to work from home had offshored more jobs, associated with a reduction in labour costs.

A second important reason to offshore is labour and skills shortages in domestic labour markets. Roza, Van den Bosch and Volberda (2011<sup>[30]</sup>) showed that finding qualified personnel was an important motivation for the offshoring decisions of medium-sized and large firms. Dachs et al. (2012<sup>[25]</sup>) used data from the European Manufacturing Survey and found that a lack of qualified personnel at the home location was the main driver for offshoring for around 13% of companies. Similarly, in the case of digital offshoring, it has been argued that remote work gives companies access to the global workforce and a deeper pool of talent (Tsipursky, 2023<sup>[31]</sup>).

## The barriers to offshoring

While cheaper labour costs and domestic labour shortages may incentivise firms to move part of their production overseas, these potential benefits have to be balanced against some of the costs/barriers to offshoring, which include: a lack of qualified personnel at the offshoring location, inefficiency and loss of communication due to language and culture barriers, as well as sustainability concerns and weak protection of intellectual property rights (Wehlack and Spang, 2017<sup>[32]</sup>; Morganti and De Giovanni, 2022<sup>[33]</sup>). In addition, the cost gap between offshore and domestic locations has narrowed in recent years due to rising wages and environmental rules in many offshore locations (Weinhandl, 2023<sup>[34]</sup>) which is one of the drivers behind the recent trend towards reshoring (see section on reshoring below).

As for digital offshoring, there are some new barriers that may prevent companies from offshoring jobs. One of these, is that many jobs that can be performed remotely still require soft skills that make domestic and foreign workers imperfect substitutes (Baldwin and Dingel, 2024<sup>[35]</sup>). Integrating remote offshore workers into company culture might be another difficulty (Sytsma, 2022<sup>[7]</sup>) and digital offshoring also increases concerns around data protection and cybersecurity (Sytsma, 2022<sup>[7]</sup>; Van Dam, 2022<sup>[16]</sup>). Finally, digital offshoring is linked to all sorts of regulatory barriers and uncertainties, including labour law issues, such as: which courts have jurisdiction over disputes arising out of the employment contracts of remote

workers? Which laws apply to such contracts? And can the rules of private international law deal adequately with these increasingly popular working patterns? (Grušić, 2023<sup>[29]</sup>).

That being said, challenges are not necessarily permanent and may be overcome through, for example, advances in technology. Presidente and Frey (2022<sup>[36]</sup>) study the case of remote collaborations in scientific research. They find that geographically distributed teams had steadily risen since the 1960s and that it had negatively impacted breakthrough discoveries at first. However, since 2010, this effect has reversed, likely due to improvements in technologies that support effective remote collaboration.

## The characteristics of offshorable jobs

Researchers have also looked at the characteristics of jobs that are offshorable. As offshoring has moved through its various waves over time, the characteristics of offshorable jobs have changed. However, there are features of offshorable jobs that have remained constant throughout the years and apply even to the more recent wave of digital offshoring.

In general, the most offshorable jobs have tended to be those that have: *i*) no or a low degree of face-to-face interaction (OECD, 2005<sup>[37]</sup>; Blinder, 2007<sup>[38]</sup>; Moncarz, Wolf and Wright, 2008<sup>[39]</sup>; Blinder and Krueger, 2013<sup>[40]</sup>; Püschel, 2014<sup>[41]</sup>; Citi, 2021<sup>[42]</sup>); *ii*) high use of ICT technologies (OECD, 2005<sup>[37]</sup>; Blinder, 2007<sup>[38]</sup>; Moncarz, Wolf and Wright, 2008<sup>[39]</sup>; Blinder and Krueger, 2013<sup>[40]</sup>; Püschel, 2014<sup>[41]</sup>; Citi, 2021<sup>[42]</sup>; Sytsma, 2022<sup>[7]</sup>); and *iii*) low degrees of required local, cultural or social knowledge (Moncarz, Wolf and Wright, 2008<sup>[39]</sup>; Blinder and Krueger, 2013<sup>[40]</sup>; Brändle and Koch, 2016<sup>[43]</sup>; Baldwin and Dingel, 2024<sup>[35]</sup>; Palmou et al., 2021<sup>[44]</sup>).

However, as the nature of offshoring has evolved, there has also been a change in the level of education of the jobs that are offshorable, as well as in their task content. At first, offshoring was more common in low-tech sectors that tended to employ relatively low-skilled labour (OECD, 2007<sup>[3]</sup>) carrying out routine tasks (Moncarz, Wolf and Wright, 2008<sup>[39]</sup>; Püschel, 2014<sup>[41]</sup>). Gradually, however, offshoring moved also towards sectors ranked as medium- or high-technology, especially in the case of services (software, computer services and other information technology services) (OECD, 2007<sup>[3]</sup>). Indeed, around this period, Blinder (2007<sup>[38]</sup>) found there was no longer a correlation between an occupation's offshorability and the skill level of its workers and Moncarz, Wolf and Wright (2008<sup>[39]</sup>) found the same for the services sector and Blinder and Krueger (2013<sup>[40]</sup>) concluded that more educated workers in fact held somewhat more offshorable jobs than less educated workers. Blinder and Krueger (2013<sup>[40]</sup>) also found that routine work was no more likely to be offshorable than other work and some have argued that a job's offshorability depends more on the task content of jobs than on the worker's skill level (Baumgarten, Irlacher and Koch, 2020<sup>[45]</sup>).

That being said, the remote revolution has further boosted the offshorability of high-skilled jobs. Citi (2021<sup>[42]</sup>) argued that offshorable occupations today tended to be relatively skilled, high-income jobs and Sytsma (2022<sup>[7]</sup>) concluded that the empirical research suggested that jobs that were relatively more skill-intensive were the most tradeable and, hence, the most offshorable. For the UK, Palmou et al. (2021<sup>[44]</sup>) estimated that 48% of those in "anywhere jobs" had a degree and that technological changes were putting highly-skilled workers in non-routine jobs at risk of being offshored. Some have argued that this could lead to a reversal of the earlier "China Shock", which had affected primarily less-educated factory workers. However, labour economist David Autor (one of the authors of the "China Shock" study) argues that the offshoring of white-collar workers is more likely to be a "little ripple or a little jolt rather than a shock" in comparison, since white-collar work is not a commodity that can be easily swapped across borders (Van Dam, 2022<sup>[16]</sup>). Similarly, Bick Bunker from jobs platform Indeed believes that it is too soon to tell, and that for now remote work tended to go local rather than global, and that many "remote" jobs, at least in the United States, were becoming hybrid (Van Dam, 2022<sup>[16]</sup>).

In terms of sector, while offshoring had in its first wave affected primarily manufacturing jobs, the shift towards remote work has made many professional services jobs increasingly offshorable (Citi, 2021<sup>[42]</sup>). In the UK, Palmou et al. (2021<sup>[44]</sup>) estimated that, of all “anywhere jobs”, 28% are in the finance, research and real-estate sectors, and 18% in transport and communication. In terms of occupation, Palmou et al. (2021<sup>[44]</sup>) believe that “anywhere” jobs are predominantly in professional (36%), technical (30%), and administrative (25%) occupations. Across sectors, IT, human resources, legal secretaries, and personal assistants are among the most common anywhere jobs. Economist Nicholas Bloom believes that this new wave of offshoring will set in an era of service sector globalisation (Putzier, 2023<sup>[19]</sup>).

## What share of jobs is offshorable?

A number of studies since the early 2000s have sought to define what types of jobs are offshorable (see previous section) and, based on this, estimate how many jobs have the potential to be offshored. The types of jobs that are offshorable have changed over time, depending on the phase of offshoring that the world was going through, and this will affect estimates of the share of jobs that can be offshored. At the same time, estimates are sensitive to assumptions made by researchers. Over time and across studies, the share of jobs that have been estimated to be offshorable has ranged from 11% to 38%.

Bardhan and Kroll (2003<sup>[46]</sup>) estimated that about 11% of all US jobs were offshorable. Their measure of offshorability was restricted to include only occupations where at least some offshore outsourcing had taken place or was being planned. A study that dates from around the same period (i.e. around the end of the second phase of offshoring) is OECD (2005<sup>[37]</sup>), which used the intensity of information and communication technologies by industry as the basis for estimating the share of offshorable jobs and the result is almost double at around 20% of total employment in OECD countries.

Studies that were completed slightly later during the third wave of automation—i.e. when not only manufacturing and IT activities, but also knowledge-intensive business functions and high-value activities were being offshored—unsurprisingly arrived at higher estimates of the share of offshorable jobs. For example, by focusing on how “tradeable” an occupation is and exploiting geographical concentration in the US, Jensen and Kletzer (2005<sup>[47]</sup>) reached an estimate of 38% of jobs. Blinder (2007<sup>[38]</sup>) used detailed information on the tasks associated with hundreds of US occupations and different cut-offs to find “conservative,” “moderate,” and “aggressive” estimates of the share of offshorable US jobs, at 22.2%, 25.6%, and 29.0%, respectively. As an extension to this study, and using worker-level data to capture heterogeneity within specific US occupation codes, Blinder and Krueger (2013<sup>[40]</sup>) found that a wide variety of indicators of offshorability, based on both self-reporting and professional coding, produced estimates of around 25%.

More studies from around this period focused solely on the services industry, since those were the new kinds of jobs that could be offshored. Farrell et al. (2005<sup>[48]</sup>) used eight “representative sectors” in rich countries around the world to estimate that around 11% of private-sector service jobs could be offshored. Moncarz et al. (2008<sup>[39]</sup>) reviewed occupation-level information from the US and classified 160 out of 515 service-providing occupations as offshorable, making up around 20% of total employment in 2007.

More recently, studies have looked at offshorability taking into account the possibility of remote work and digital offshoring—i.e. the fifth wave of offshoring. Indeed, several studies have indicated that an increase in digital offshoring in the future might be likely (Sytsma, 2022<sup>[7]</sup>; Stapleton and Webb, 2020<sup>[20]</sup>; Nordås and Tang, 2022<sup>[21]</sup>). Citi (2021<sup>[42]</sup>) argued that emerging markets now focus on attracting high-value added service jobs (such as accounting and banking) and not just manufacturing jobs, and they estimated that 26% of total employment in the US currently has the potential to be offshored. Another study for the UK focused only on “anywhere” jobs (i.e. non-routine service sector jobs that can be done from anywhere in the world, potentially for cheaper) and found that they represented 18% of jobs in the UK—or 5.9 million in total (Palmou et al., 2021<sup>[44]</sup>). Nicholas Bloom estimated that 10% to 20% of US service support jobs like

software developers, HR professionals and payroll administrators could move overseas in the next decade (Tsipursky, 2023<sup>[31]</sup>).

In closing this section, it is worth remembering Blinder's (2007<sup>[38]</sup>) warning that it is not because a job is theoretically offshorable that in practice it will be offshored. Blinder (2007<sup>[38]</sup>) argues that legislation, relative costs, etc. are factors that shape companies' decisions to offshore (see section on barriers to offshoring above). In addition, and in the case of digital offshoring, Brinatti et al. (2021<sup>[49]</sup>) showed that it is not because a job can be done remotely that it is necessarily offshorable. Using data on cross-border contracts from a large web-based job platform, they showed how less than a third of grant writer jobs and 24% of corporate law jobs are offshored, even though all of them were performed remotely.

## Reshoring (and the motivations to reshore)

In recent years, a host of factors have led some companies to reshore activity (or at least think about doing so) (Johansson and Olhager, 2017<sup>[26]</sup>; Pedroletti and Ciabuschi, 2023<sup>[50]</sup>; Bolter and Robey, 2020<sup>[51]</sup>).

In some cases, it is a decline in the original conditions that led to the offshoring decision that drove companies to reshore (Fratocchi et al., 2016<sup>[52]</sup>). The reduction in cost differentials between home and host countries has been one such motivating factor (Martínez-Mora and Merino, 2014<sup>[53]</sup>). Labour costs in China, for example, have surpassed those of Mexico in recent years, meaning China is no longer regarded as a cheap manufacturing hub for companies based in the US (Gur and Dilek, 2023<sup>[54]</sup>). Sometimes, the initial decision to offshore was a poor and hasty one (Wiesmann et al., 2017<sup>[55]</sup>) and reshoring is about reversing that decision because it revealed estimation errors and hidden costs (Larsen, Manning and Pedersen, 2012<sup>[56]</sup>). Other reasons for reshoring include: quality issues encountered offshore (Ancarani et al., 2015<sup>[57]</sup>), shortcomings in flexibility (Kinkel and Maloca, 2009<sup>[27]</sup>), or supply interruption risk (Ellram, Tate and Petersen, 2013<sup>[58]</sup>). Many companies who reshore find they can achieve higher quality, reduced lead-time and increased flexibility at the home location (Kinkel and Maloca, 2009<sup>[27]</sup>; Johansson and Olhager, 2017<sup>[26]</sup>). Several also cite a need to stay close to or co-locate R&D and production (Casadei and Iammarino, 2023<sup>[59]</sup>) or access skills and knowledge (Johansson and Olhager, 2017<sup>[26]</sup>). Technological progress and process innovation (e.g. automation) have made it cheaper to produce at home and have been another major factor in the reshoring decision (Di Mauro and Ancarani, 2022<sup>[60]</sup>). Ancarani et al. (2015<sup>[57]</sup>) showed that reshoring decisions also depend on industry, the home country, the host country, and the size of the firm.

When looking at decisions to reshore, Di Mauro et al. (2018<sup>[61]</sup>) distinguish between the "failure" of an earlier offshoring decision, on the one hand, and the evolution of the firm's competitive and location strategies, on the other. They point out that the motivations to reshore do not necessarily need to mirror, or be the opposite of, the motivations to offshore. Instead, they can "reflect a different set of relevant factors and, above all, a different set of strategic goals" (Di Mauro et al., 2018<sup>[61]</sup>). For example, some companies have reacted to their customers' preference for goods produced in the home country. As Di Mauro et al. put it: "while the predominant motivation for offshoring is cost reduction, backshoring follows from a strategic shift aimed at increasing the value perceived by the customer." In their review of the British textile industry, Casadei and Iammarino (2023<sup>[59]</sup>) also noted that the "Made in Britain" label seemed to be important for the companies that never offshored.

Much of the literature on reshoring has focused on the microeconomic, firm-level motivations for reshoring, and less attention has been paid to other factors such as macroeconomic crises or changes in economic policy (Raza et al., 2021<sup>[62]</sup>). However, COVID-19 and subsequent geopolitical tensions caused firms to worry about supply chain disruptions, which were a key motivating factor for recent reshoring activity (Barbieri et al., 2020<sup>[63]</sup>). Indeed, up to the COVID-19 crisis, there was no clear sign of a trend towards deglobalisation, although the growth of international trade, capital and labour flows did slow down (Jaax, Miroudot and van Lieshout, 2023<sup>[64]</sup>; Antràs, 2020<sup>[65]</sup>; Goldberg and Reed, 2023<sup>[5]</sup>). Post-COVID,



companies appeared to have become more serious about reshoring. For example, the Kearney reshoring index for the US showed that 2022 was the first year in which domestic manufacturing growth outpaced Asian low-cost country imports growth, resulting in a positive Reshoring Index (Van den Bossche et al., 2023<sup>[66]</sup>). The Kearney research also showed that Mexico had taken a larger share of the US manufacturing import market, a clear indication that nearshoring was growing too. In Europe, the 20th edition of the Business Confidence Survey of the European Union Chamber of Commerce in China (2023<sup>[67]</sup>) noted a significant deterioration of business sentiment. It argued that, faced with growing risks and a more volatile operating environment, European companies had started reviewing their investment and operational strategies, and ensuring their supply chains were fit for more uncertain conditions.

Just as there are barriers to offshore, there are barriers to reshore, although these have been less studied in the literature (partly because reshoring is a more recent phenomenon). Casadei and Iammarino (2023<sup>[59]</sup>) noted that many of the firms in their sample from the UK textile and apparel industry saw significant obstacles to backshoring, to the extent that they considered it a largely unfeasible option. The barriers they mentioned included: shortages of domestic manufacturing facilities and specialisations, skills and technical competences, machineries and equipment. Firms in the UK considered Brexit to be an additional layer of uncertainty and constraints on their backshoring opportunities. Barriers to reshore might also be greater in some sectors (e.g. manufacturing) than in others (e.g. services) (Barbieri et al., 2018<sup>[68]</sup>).

## The impact of offshoring on the domestic labour market

Offshoring can impact domestic employment in three ways. First, there is the direct, negative effect on the firm's employment linked to the substitution of domestic workers for foreign workers. Second, there may be an indirect, positive impact on the firm's employment due to productivity gains and cost savings which allow the firm to expand and hire more workers. Third, there may be indirect effects beyond the offshoring firm. For example, if firms expand as a result of offshoring, this could create additional growth throughout the economy. Consumers may also benefit from higher incomes because of lower import prices which could in turn stimulate demand and lead to employment growth.

The overall effect of offshoring on employment will depend on which of these effects dominates, but it is difficult to measure. This is primarily because the indirect effects of offshoring are less visible and they are also less immediate than the direct effects. Indeed, the dissonance between the public discourse and fear that surround offshoring, on the one hand, and the relatively small job losses, on the other, may be driven partially by the fact that the positive indirect employment effects of offshoring are underestimated.

Most studies that have looked at the overall employment effects of offshoring agree that they tend to be modest overall (Forte and Ribeiro, 2019<sup>[69]</sup>; Barbe and Riker, 2017<sup>[70]</sup>; Oldenski, Sly and Kovak, 2018<sup>[71]</sup>; Ferreira et al., 2022<sup>[72]</sup>; Works, 2018<sup>[73]</sup>; Bottini, Ernst and Luebker, 2007<sup>[8]</sup>; OECD, 2007<sup>[74]</sup>). Even the research that looks only at the direct employment effects of offshoring tends to conclude that jobs lost to offshoring account for only a small percentage of aggregate job losses, and far behind bankruptcies, shut-downs and restructuring (OECD, 2007<sup>[3]</sup>). Some studies have documented the indirect, positive spillover effects. For example, Amiti et al. (2020<sup>[75]</sup>) showed how low-priced inputs from China made US manufacturing firms more competitive and allowed for non-manufacturing employment growth that has more than outstripped job losses in manufacturing. In Japan, Kiyota, Nakajima and Takizawa (2022<sup>[76]</sup>) found a significantly positive impact of offshoring exposure on the employment of non-offshoring firms in the same local labour market. OECD (2007<sup>[74]</sup>) concluded that "while some jobs are lost when production activities are relocated abroad, offshoring also generates a similar number of new jobs because it tends to increase the scale of production by making firms more competitive."

That being said, there are important differences in the direct employment effect depending on the type of offshoring. The short-term employment effects of offshoring tend to be more important for manufacturing than for services. OECD (2007<sup>[3]</sup>) found that, for a 1% increase in the proportion of imported intermediate

manufactured goods, sectoral employment in the country of origin contracted by 0.15%, as opposed to 0.08% in the case of services. At the same time, the literature has consistently found that technological change has been responsible for more change in manufacturing employment than offshoring (Barbe and Riker, 2017<sup>[70]</sup>). Even within manufacturing, there are differences in the extent of job loss due to offshoring. Some sub-sectors, such as textiles, apparel and footwear, were among the sectors that offshored the most and recorded the steepest job losses (OECD, 2007<sup>[31]</sup>). Nordås (2019<sup>[77]</sup>) showed that the employment effects of offshoring in manufacturing depended crucially and in complex ways on the level of ICT-maturity in the sector, internet use, the complexity of the value chain and on policy. Similarly, within services, Eppinger (2019<sup>[78]</sup>) found that employment gains were stronger in firms that had previously offshored more services, compared to newly offshoring firms. More generally, Baumgarten, Irlacher and Koch (2020<sup>[45]</sup>) argued that the employment effects of offshoring depended on the offshorability of an industry itself, with offshoring reducing employment in (very) offshoring-intensive industries and in industries with little exposure to offshoring, while industries with an intermediate range of offshorability experienced employment increases.

Another important aspect of offshoring is that it affects different workers differently. There are winners and losers and the gains are often not distributed equally. Studies tend to find that low-skilled workers have been harmed by offshoring, while high-skilled workers benefited (Barbe and Riker, 2017<sup>[70]</sup>; Bottini, Ernst and Luebker, 2007<sup>[8]</sup>; Landesmann and Leitner, 2023<sup>[79]</sup>; Becker, Ekholm and Muendler, 2013<sup>[80]</sup>; Crinò, 2009<sup>[81]</sup>; Feenstra and Hanson, 1996<sup>[82]</sup>; Hijzen, Görg and Hine, 2005<sup>[83]</sup>). Once again, however, the impact may vary depending on the type of offshoring. OECD (2007<sup>[74]</sup>) found that, in manufacturing, offshoring had a considerably larger negative impact on low-skill workers than on medium- and high-skill workers, while in services, offshoring affected high-skill workers more negatively.

The impact of offshoring is felt not only in terms of employment, but also in terms of job quality and, in particular, wages. Once again, research often finds a skills divide with offshoring tending to increase wage inequality between low- and high-skilled workers (OECD, 2007<sup>[74]</sup>). Both Hummels et al (2014<sup>[84]</sup>) and Geishecker and Görg (2008<sup>[85]</sup>) found that offshoring increased the wages of high-skilled workers and reduced the wages of low-skilled workers, and a similar effect was found by Andersson, Karpaty, and Savsini (2016<sup>[86]</sup>). Other papers which come to similar conclusions include: Bottini, Ernst and Luebker (2007<sup>[8]</sup>) and Magli (2022<sup>[87]</sup>), although there are some exceptions too (Baumgarten, Geishecker and Görg, 2013<sup>[88]</sup>).

Some analysts have pointed out that the task content of the job may be more important than the skill level of the worker. For example, Hummels et al (2014<sup>[84]</sup>) found that offshoring led to wage decreases for workers performing routine tasks and wage increases for occupations characterised by the use of mathematics, social science, and languages. Baumgarten, Geishecker and Görg (2013<sup>[88]</sup>) showed that low-skilled workers performing tasks with a high degree of routine content experienced much stronger wage penalties from offshoring than low-skilled workers performing tasks with a high degree of non-routine content. The impact may also depend on the offshoring destination. Koerner (2022<sup>[89]</sup>) found that manufacturing offshoring from Germany to the EU15 reduced the wages of complex jobs while it increased the wages of simple jobs. Conversely, offshoring to Central and Eastern Europe increased the wages of complex jobs and decreased the wages of simple jobs. Offshoring may also impact other aspects of job quality such as, for example, job stability (Schmidpeter and Winter-Ebmer, 2019<sup>[90]</sup>; OECD, 2007<sup>[74]</sup>).

Looking forward, it is hard to predict what will happen to employment in domestic labour markets given the conflicting trends that are occurring simultaneously, and the uncertainty around their scale and/or the direction of their impact.

## The impact of reshoring on the domestic labour market

Despite arguments that reshoring could bring back quality jobs in manufacturing, most experts agree that the impact on employment is likely to be minimal, or could even be negative—partly because such processes remain limited in scale, partly because automation plays an important role in many reshoring practices (Raza et al., 2021<sup>[62]</sup>), or because relocation is only in regard to some product lines (Barbieri et al., 2018<sup>[68]</sup>). Other analysts believe that while such practices may provide insurance against supply chain disruptions, they come at a significant cost to growth (and jobs). For example, Javorcik et al (2022<sup>[91]</sup>) estimate that friend-shoring may lead to real GDP losses of up to 4.6% of global GDP.

Digital offshoring may raise fears of domestic jobs disappearing abroad. For example, Carias and Louis (2021<sup>[10]</sup>) argued that virtual offshoring could exert additional downward pressure on the earnings of high-skill workers in developed economies, in particular for entry-level positions. However, history suggests that the overall impact on domestic employment may be muted and a lot will depend on what new employment opportunities are created domestically (Sytsma, 2022<sup>[7]</sup>). Sytsma (2022<sup>[7]</sup>) discusses two possible mechanisms through which service offshoring could increase the demand for (high-skilled) service labour. One is that offshored activities complement domestic high-skilled labour (e.g. offshoring computer programming jobs creates a need for managers to oversee them); another is that offshoring allows companies to grow which tends to favour high-skilled workers.

## Government policy

Policies to prevent offshoring are not common in OECD countries. This could be because such measures counter international treaties, but also because the economic cost of not offshoring is likely to be greater than the cost of offshoring (OECD, 2007<sup>[3]</sup>). Failure to offshore could harm competitiveness which would prevent growth and job creation and, in a worst-case scenario, lead to firm closure resulting in job loss. Moreover, a focus only on the number of jobs would overlook the fact that offshoring often results in the creation of higher quality jobs in the domestic market. Finally, not offshoring may deny consumers the benefit of lower prices, reducing their disposable income and harming demand.

Instead, policy advice in the past has focused on providing an appropriate business environment for offshoring activities, and also to ease the transition of workers between jobs, and on containing rising inequality within the domestic economy (Bottini, Ernst and Luebker, 2007<sup>[8]</sup>; OECD, 2007<sup>[74]</sup>). As OECD (2007<sup>[3]</sup>) pointed out, it is important to help workers affected to train for other, more highly skilled jobs and to enhance the country's attractiveness in order to promote innovation and high value-added activities. The policy challenge is to facilitate reallocation so as to take advantage of new possibilities, while at the same time limiting adjustment costs for individuals, communities and society as a whole (OECD, 2007<sup>[74]</sup>). This highlights the importance of training, social protection and social dialogue in managing such transitions well (OECD, 2018<sup>[92]</sup>).

In recent years, the policy discourse has shifted towards reshoring. In some strategic areas (sometimes linked to national security concerns), a clear desire has been expressed by some countries to move production back home. During the COVID-19 pandemic, for example, the US lent money to US companies looking to build out supply chains for critical goods such as ventilators and generic drugs, and introduced time-limited tax incentives to build national self-reliance in key pharmaceuticals, medical supplies, and other critical goods (Fish and Spillane, 2020<sup>[93]</sup>). Another area where some countries have expressed a desire to reshore is semiconductors which are a critical input into a wide range of downstream industries, including the wider information communications technology (ICT) industry, electronics, and motor vehicles (Haramboure et al., 2023<sup>[94]</sup>). Other sectors where political will to reshore has been expressed include: medical products, chemicals, pharmaceuticals, aerospace, communication, electronics, automotive and



steel. In other areas, if not reshoring, at the very least there have been calls for more diverse supply chains (e.g. through friendshoring or nearshoring).

In most countries, policies that explicitly promote reshoring have been rare. Japan and Korea are two notable exceptions. Both countries have attempted to shift their economic dependence away from China for a number of reasons, including: concerns over resilience of supply chains intensified by the pandemic and growing US-China tensions (Katada, Lim and Wan, 2023<sup>[95]</sup>). Japan has used subsidies to incentivise firms to return their production to Japan since the 2011 earthquake and disaster (Katada, Lim and Wan, 2023<sup>[95]</sup>). The COVID-19 pandemic added further impetus to Japan's reshoring ambitions, with a series of subsidies aimed at supporting Japanese businesses to reshore or diversify their supply chains. Similarly, since the early 2010s, the Korean government has formulated and implemented several measures such as subsidies and tax benefits to encourage companies to reshore, which were further strengthened in the wake of the COVID-19 pandemic (Katada, Lim and Wan, 2023<sup>[95]</sup>).

What is observed in most countries is not so much policies to reshore, as policies to (re)industrialise (Raza et al., 2021<sup>[62]</sup>). For example, France launched a relocation plan in the summer of 2020 but an analysis of the initiatives financed through the plan revealed that most were targeting reindustrialisation and increased competitiveness rather than reshoring as such (Fel, 2022<sup>[96]</sup>). The European Commission has established a range of policies and initiatives to support the development of European value chains (Interreg Europe, 2023<sup>[97]</sup>) and, in the UK, the focus has been on innovation and industrial policies to support local manufacturing (Raza et al., 2021<sup>[62]</sup>). Even in Japan and Korea, many of the policies targeted reindustrialisation rather than reshoring. For example, in 2022, Japan introduced the Economic Security Promotion Law, which focused on four pillars: supply chain resilience; securing critical infrastructure; public-private partnerships in developing cutting-edge technology; and patent privacy (Katada, Lim and Wan, 2023<sup>[95]</sup>). In Korea, subsidies are granted not just for relocation, but also for new operations (Katada, Lim and Wan, 2023<sup>[95]</sup>).

In the United States, there has been a strong focus on reviving the manufacturing industry through: subsidies, incentives, anti-dumping policies, non-tariff barriers, and tariff hikes; as well as industrial policies and smart automation (Gur and Dilek, 2023<sup>[54]</sup>). Industrial policy experienced a revival in the wake of the global financial crisis, when the US put into effect the Recovery and Reinvestment Act, which included the Buy American Provision aimed at supporting domestic manufacturing. Later, the Obama administration formed the Advanced Manufacturing Partnership (AMP), a new industry move designed to improve domestic manufacturing capabilities in critical industries, amongst others. More recently, the Innovation and Competition Act was passed in June 2021 (with USD 250 billion allocated to technology, manufacturing and basic research) and the America COMPETES Act of 2022 expanded the amount and scope of support given to science, R&D and technology (Gur and Dilek, 2023<sup>[54]</sup>). A key aspect of the US strategy to revive manufacturing is to promote smart automation, in the hope that this will help erode China's competitive advantage of cheap labour. Funding for AI companies in the USA has experienced a substantial increase—from USD 282 million in 2011 to USD 16.5 billion in 2019 (Gur and Dilek, 2023<sup>[54]</sup>).

There is disagreement about the extent to which government policy can influence firm decisions to reshore. In practice, government policy is often a reflection of geopolitical and economic developments, to which firms also react, and so the two may be hard to disentangle. Some analysts argue that “the main challenge for the future of globalization is institutional and political in nature” (Antràs, 2020<sup>[65]</sup>) and also that “the ongoing shift in production and sourcing patterns is largely the result of intentional government policies” (Alfaro and Chor, 2023<sup>[61]</sup>). Others, however, question the ability of governments to influence firms and argue they should temper expectations regarding re-industrialisation (Wiesmann et al., 2017<sup>[55]</sup>) and that policy factors have been less important drivers of reshoring to date (Barbieri et al., 2018<sup>[68]</sup>). In practice, policies are likely to be only one among many factors affecting firms' decisions to reshore, with such policies appearing more enticing to firms when there are also other reasons to reshore. For example, Alfaro and Chor (2023<sup>[61]</sup>) argue that while US-based companies may initially have been hesitant to incur the costs of reconfiguring their global supply chains, the continued use of tariffs under the Biden administration

started to tip many companies out of a “wait-and-see” approach. Similarly, even though Katada, Lim and Wan (2023<sup>[95]</sup>) argue that Japan and Korea have only had limited success in motivating businesses to return home and that, in most cases, business decisions were driven by other factors and government reshoring policies only played a minor role, recent events might have made government policies more tempting. The US-China trade war and the COVID shock, for example, may have made the Japanese government’s reshoring policy more tempting for businesses (Katada, Lim and Wan, 2023<sup>[95]</sup>).

There is perhaps less disagreement about the ability (or rather: the inability) of such policies to be significant sources of job creation in the domestic labour market—even though many policy makers believe that they could, particularly in historically well-paying industries such as manufacturing (Fish and Spillane, 2020<sup>[93]</sup>). Some commentators have argued that reshoring policies are unlikely to bring back jobs and will, instead, slow global growth, innovation, and poverty reduction (Goldberg and Reed, 2023<sup>[5]</sup>). The OECD has previously argued that government intervention in global value chains “risks creating costly distortions without minimising economic volatility and improving national security” (OECD, 2023<sup>[98]</sup>) and the IMF warns it could “result in a significant drag on growth around the world” (Cerdeiro, Kothari and Muir, 2023<sup>[99]</sup>). Alfaro and Chor (2023<sup>[6]</sup>) argue that such costs should be carefully monitored and Gur and Dilek (2023<sup>[54]</sup>) further call on policymakers to pay attention to the direction of the technological development that they plan to encourage to promote reshoring and industrialisation. Furthermore, Gur and Dilek (2023<sup>[54]</sup>) warn against excessive automation in reshoring and trying “to maintain current supremacy on the technology warfront”, and argue that policymakers should instead provide incentives to innovate labour-augmenting technologies.

## Research roadmap

This last section sets out a research roadmap which would help policy makers better understand the nature and scale of current offshoring/reshoring trends, their consequences for the labour market, including jobs and skills demand, as well as the policy implications. The research questions are articulated in a broad sense, to cover both offshoring and reshoring, but they could be narrowed to focus on just one of these trends. In addition, some of the research proposals might benefit from concentrating on particular sectors (e.g. manufacturing in the case of reshoring, or the service industry in the case of digital offshoring).

### **Measurement**

In a first instance, better measurement of the phenomena of offshoring and reshoring are required to help improve policymakers’ understanding of the scale and nature of these trends. Good measures/indicators are also needed to study the impact of offshoring and reshoring on the labour market (see next section). A number of measurement activities could be undertaken:

1. **Take stock of, and develop, cross-country indicators of offshorability, offshoring, and reshoring.** Over the years, several such indicators have been developed, however they have reflected different assumptions over time as the nature of the trends they were trying to capture has evolved. Sometimes, they have also been calculated only for one or a handful of countries, limiting their usefulness for international comparative analysis. A stock-taking exercise to review existing measures and evaluate their continued relevance could lay the basis for updating them, extending their geographical coverage, and/or developing new ones.
2. **Analyse the overlap between offshoring and reshoring.** Most research has analysed offshoring and reshoring separately as if they were two separate concepts that did not interact. The reality is likely to be far more complex. One and the same occupation, for example, may experience both offshoring and reshoring simultaneously. If a job can be done elsewhere, it also means those jobs could, in theory, be attracted from abroad. Based on the indicators developed under activity 1, the

overlap between offshoring and reshoring would be studied, in terms of sectors and occupations affected, as well as the characteristics of workers in those sectors and occupations. In addition, new surveys (see point 3) could explore the similarities and differences between the two in terms of motivations.

3. **Collect new data on offshoring/reshoring intentions, practice, and the impact on workers.** There is no better way to find out about firms' offshoring/reshoring intentions than to ask them directly. Several such surveys have been carried out in the past, but few countries have instituted them regularly, and international surveys that allow for comparisons across countries are lacking. A stock-taking exercise of existing survey instruments is needed, followed by the design of a new one to collect information from companies across OECD countries on: reshoring/offshoring intentions; incentives, benefits and barriers; characteristics of firms and workers; impact on jobs, job quality and skills needs; the role of technology, policy etc.
4. **Carry out detailed case studies of offshoring/reshoring firms.** While surveys are useful to quantify certain phenomena and obtain representative data, they are limited in the kind and depth of information they can collect. It is useful, therefore, to complement such quantitative approaches with more qualitative ones, such as case studies, which allow for the detailed exploration of the motivations of companies to offshore/reshore, the various steps involved in the process, the impact on the company and workers, the barriers and difficulties they face, as well as what might be expected from policy makers. Firm-level case studies also allow the views of various stakeholders to be captured and compared.

### **Labour Market Impact**

Decision makers also need a better understanding of the labour market impact of reshoring and offshoring, which is partly about quantifying these phenomena (see above), but also about better understanding their impact on job loss and creation, skills needs, and the distributional effects, including the types of jobs and workers affected.

5. **The impact on jobs.** In addition to information gathered through surveys and case studies (see above), quantitative analysis of data on workers (e.g. Labour Force Surveys, EU-SILC, Current Population Survey) or firms (e.g. annual business surveys) combined with indicators of offshorability/offshoring/reshoring can provide insights on changes in jobs at occupation and/or sector level over time. In addition, analysis using linked employer-employee data might be possible to look at hires and separations, or job mobility between firms. While the statistical associations uncovered through such analysis cannot be interpreted as causal, they can provide useful insights complementary to information gathered through surveys and/or case studies (see above).
6. **The impact on skill requirements.** Offshoring and reshoring may not only have an impact on the number of jobs, but also on the nature and content of those jobs and the skills required. For example, while early offshoring may have resulted in the disappearance of many low-skilled jobs in the manufacturing sector of the domestic labour market, higher-skilled jobs were created instead. These changes in skill requirements entailed education and training needs which policy makers needed to prepare for. Current developments in offshoring and reshoring continue to affect skills demand, so understanding and quantifying these demands is crucial. Again, indicators of offshorability/offshoring/reshoring could be analysed in conjunction with vacancy data to map how skills demanded have changed in those occupations/sectors most exposed to those trends.
7. **The regional impact of digital offshoring.** The analyses outlined above would include an investigation of the types of workers most affected by these trends. In addition to those distributional impacts, however, offshoring and reshoring are likely to affect the geography of jobs within countries as well. Some regions are likely to gain from these trends, whereas others stand

to lose. A separate analysis could focus on these geographical implications of offshoring and reshoring. While not strictly within the scope of this research roadmap, the analysis could be extended to include the role that remote work could play in shifting labour demand within OECD countries to lower cost of living areas that are currently lacking in economic opportunity.

### ***The role of policy***

- 8. *Reindustrialisation and reshoring policies in OECD countries.*** Reindustrialisation and, sometimes more explicitly reshoring, policies are becoming increasingly popular within OECD countries. While on their own such policies may not necessarily encourage reshoring, they have been shown to play a facilitating role, particularly when other conditions align for companies to want to reshore. Through a combination of literature review and a policy questionnaire sent round to its member countries, the OECD could map the prevalence and nature of reindustrialisation and reshoring policies, and the extent to which they hope it will bring jobs back home.
- 9. *The role of technology in reshoring/offshoring decisions.*** Advanced technologies appear to play an important role in decisions to reshore/offshore economic activity. Recent advances in AI, for example, have been shown to interact with reshoring activity and some OECD governments heavily invest in such technologies to promote reindustrialisation. At the same time, AI and other advanced technologies have facilitated digital offshoring. Statistical analysis could shed light on the relationships between these two trends and a review of country policies (either through literature review or questionnaire – see previous bullet) could uncover the extent to which OECD governments rely on technology policies to bring economic activity and jobs back home.
- 10. *Reshoring and sustainability.*** The policies that OECD countries are adopting to achieve net zero greenhouse gas emissions by 2050 will have a significant impact on labour markets: jobs in high-emission industries will be reduced, new opportunities will emerge in climate-friendly sectors, and many existing occupations will be transformed. However, such policies may also have an effect on companies' reshoring decisions and the interaction between the two, and their impact on jobs, is in urgent need of study. This activity would analyse environmental policies in OECD countries and discuss the extent to which they are enablers or barriers for reshoring decisions.

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