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The future of work and the ReRo revolution

More change certain

Contents

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In summary: Remote working (RW) was a remarkable feature of the pandemic and will persist, but we need to see it as just one component of a continuing process of workplace change. Debate on RW's merits has so far been fragmented and focused on disparate elements (e.g. cost reduction, staff retention). A broader and more integrated discussion is needed about the future of work, not least because remote working will be accompanied by other more radical robotics-driven (e.g. AI) changes to services and other sectors: together, this is the Remote working and Robotics (ReRo) revolution. ReRo will have multiple implications for corporates, workers and governments. Key issues for these groups will include management, development, fairness and financing. We summarise available data on these issues and identify stress points ahead.

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01 Introduction

Remote working was a remarkable feature of the coronavirus pandemic and is likely to continue in hybrid form. But remote working is just one component of a continuing process of workplace change. We need a broader debate about what we want this process to deliver - and to appreciate potential problems ahead.

Before the coronavirus pandemic, only 5% of U.S. companies reported that 40% or more of their workers worked predominantly from home (defined as three days or more per week). But by April 2020, just a few months into the crisis (and despite no real forward planning in terms of working practices or infrastructure), over two-thirds of U.S. companies reported that 40% or more of their employees were managing to do so. This share was even higher a year later[1]. Remote working (RW) had quickly become a way of life.

Two years into the pandemic, and as it becomes more manageable, many corporates are seeking to move workers back to the office. There has been much talk of "hybrid" (i.e. part in/ part out) working arrangements but this term has multiple potential meanings. We need a clearer understanding of what it means and the implications.

Assessments of RW so far have focused on the day-to-day practicalities. But this is not a stable situation and "hybrid" working is not the end of the story: instead, we are likely just at the start of a period of radical workplace change. RW may eventually be seen as a Trojan horse, smuggling in new and yet more radical workforce trends to the labour force, for example, around job development or offshoring.

With the viability of RW now proven (albeit by an accident of history), corporates could take the opportunity to accelerate change in other areas in the search for increased competitiveness. Enhanced remote working, combined with increased technological capability for job automation or replacement (through robotics, in the broadest sense) could now accelerate what we call the ReRo revolution.

Without RW, it is clear that the economic impact of the pandemic would have been much more severe. Partly as a consequence of this, the response to RW has so far generally been positive – in marked contrast to previous periods of labour market change. Government requirements during the pandemic meant that corporates were faced with a fait accompli on RW and many employees were quick to find some benefits in RW (e.g. in terms of work/life balance or cost savings).

Over time, however, attitudes to RW may become more conflicted. RW combined with the advance of robotics (our ReRo revolution) will result in structural change, including increased globalisation of hitherto localised service sectors. History suggests such changes pose major challenges not only for corporates and employees, but also for governments.

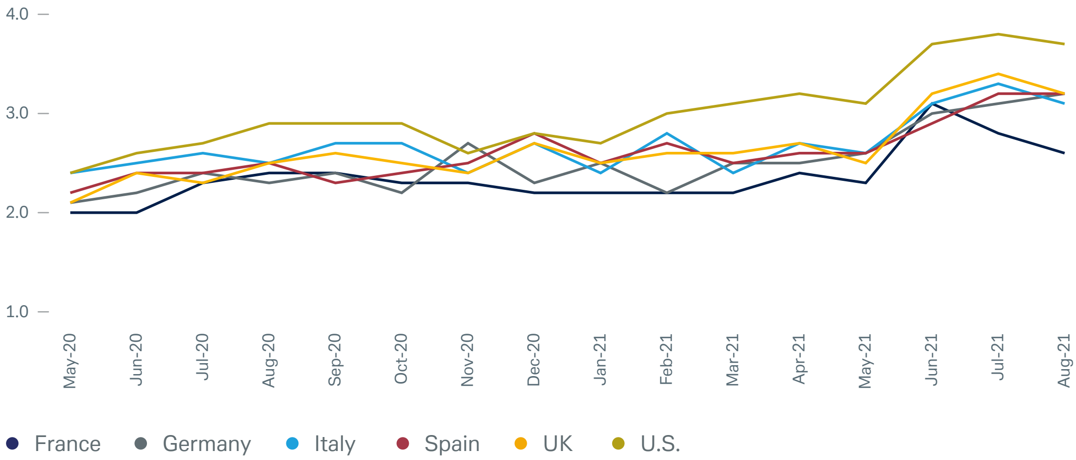
This report approaches these ReRo challenges by taking three different perspectives – those of corporates, workers, and governments. From each of these three perspectives we consider four aspects of the ReRo revolution: management of the immediate situation, development issues in future, perceived fairness (necessary for long-term sustainability) and financing (of particular importance for governments).

02 ReRo management

A wide range of numbers exist on the proportion of people using remote working (RW) during the pandemic. These have often been in the form of one-off estimates rather than regularly updated data sets. All this means that data should be treated with some caution, that full international comparisons are difficult and, of course, that individual and corporate attitudes to RW can change over time. This is illustrated by Figure 1 below, from a Deutsche Bank Research survey: workers' expectations of the proportion of their future working weeks to be spent working from home (once coronavirus is no longer deemed a threat) have varied over the course of the pandemic, but with an underlying upwards trend.

Figure 1: Average number of days per week that people want to work from home

Source: Deutsche Bank Research. Data as of September 2021.



Answers to the question: In order to address the coronavirus, many institutions implemented 'work-from-home' strategies. Once the Coronavirus is no longer deemed a threat, people may continue working in this manner. With this in mind, how many days a week are you going to work from home?

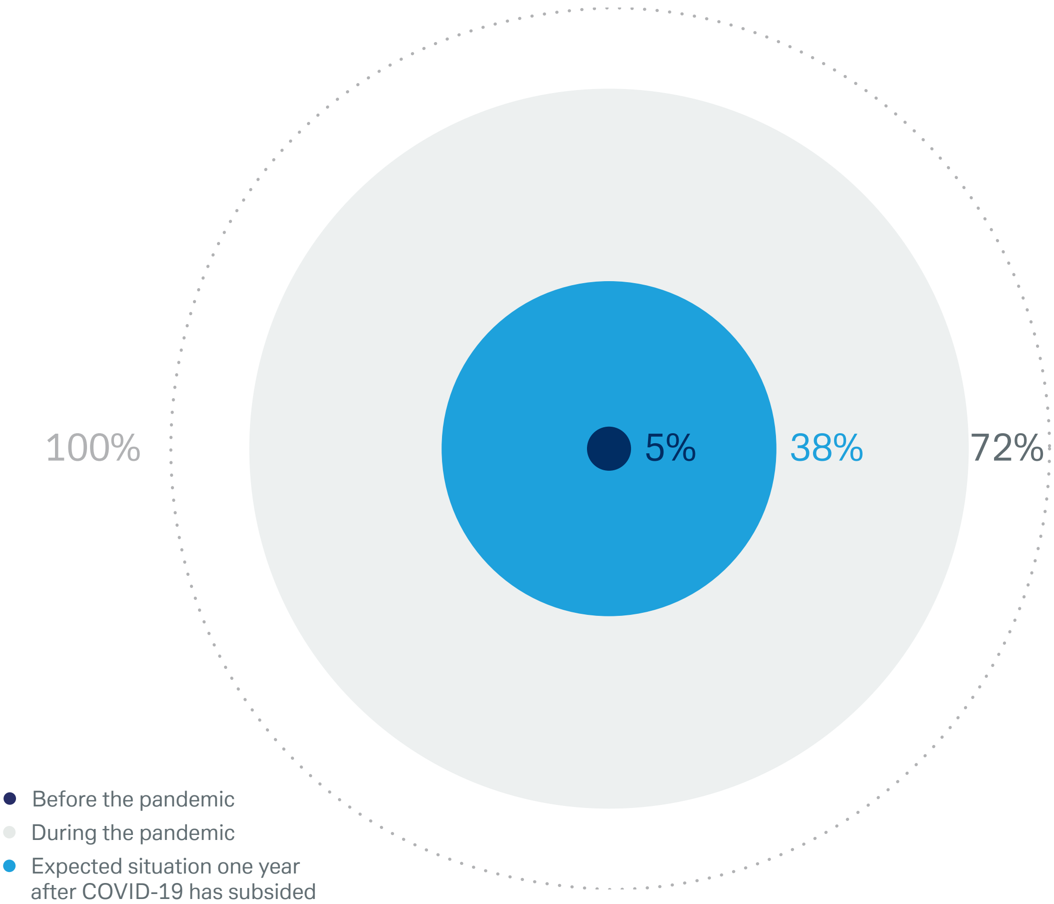
From a corporate perspective, the proportion of firms shifting to 100% RW appears to have been small. But many firms shifted quickly to systems where a large proportion of their workforce was working remotely much or most of the time. Figure 2, derived from a U.S. Conference Board survey taken in April 2021 (at time when vaccination was starting, but was not widespread), shows that at that point 72% of U.S. companies had at least 40% of their employees working three or more days at home[2]; in fact, as noted in the introduction, this share was already almost this high a year earlier, just a few months into the pandemic. Immediate management issues appear to have been dealt with effectively, although a large number of corporates were quick to voice some concerns about the negative long-term implications of RW.

Data needs to be treated with caution and, of course, individual and corporate attitudes to remote working can change over time.

From a government perspective too, RW managed to keep the ship afloat. Decision making continued via RW and services provision continued as government employees managed to work remotely too. Infrastructure – physical and electronic – also continued to function, if with some delays to services and some impact on issues such as the speed of tax collection[3].

Figure 2: Share of U.S. companies reporting that at least 40% of their employees worked three or more days each week from home

Source: Conference Board, The remote work boom is here to stay (conference-board.org). Data as of April 2021.

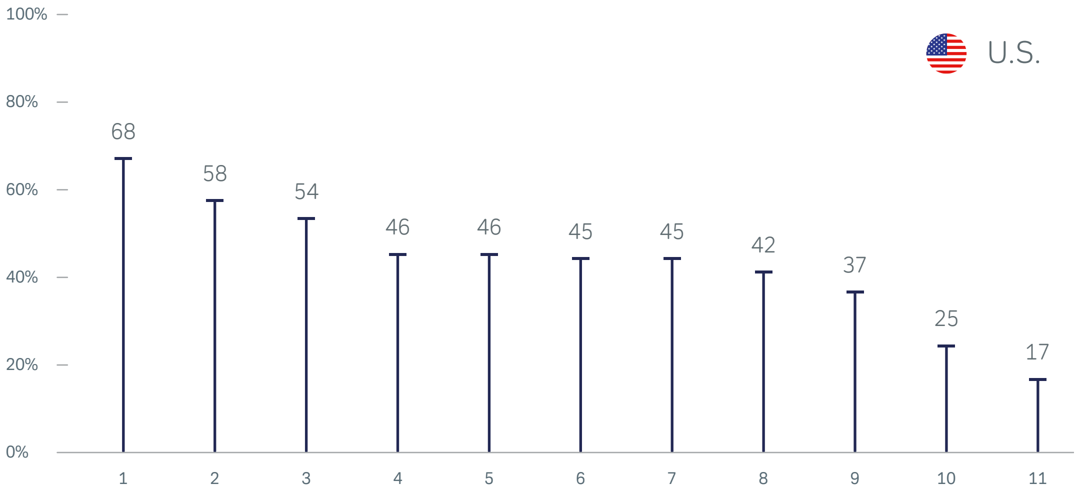


From a worker perspective, the immediate implications of RW have been complex. Comparisons may be made between sectors, or across different categories of workers (professional, administrative, etc.). These show that that large-scale RW has been possible in many services sectors but not all (hospitality being one obvious exception). One useful distinction can be made – between workers where a physical presence is required (PPR) – and those where a virtual presence is possible (VPP).

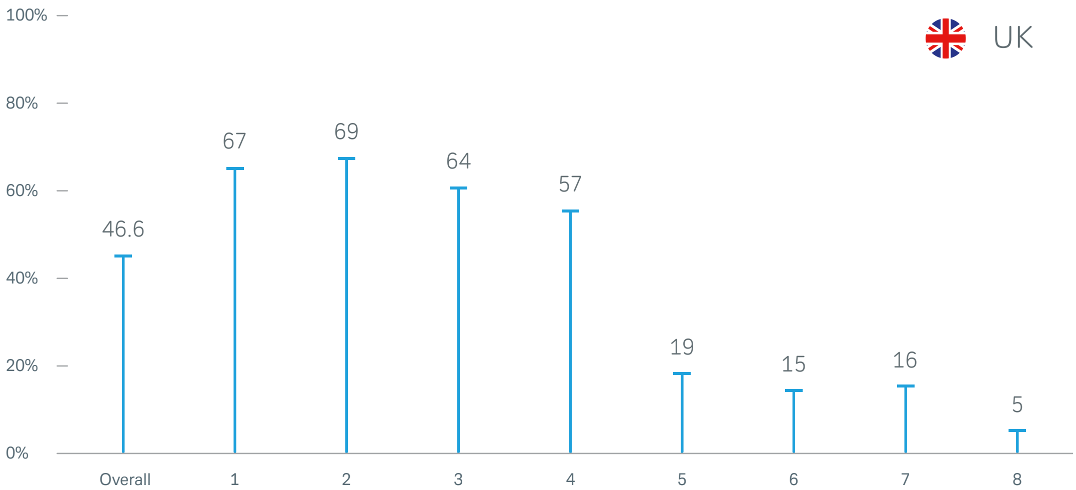
Managerial/administrative and higher-paid individuals appear to have found it easier to work remotely than those on lower pay. Figures 3 and 4 illustrate this using data from the UK but it is likely to be a general pattern across developed economies (if with some notable exceptions e.g. financial market traders) and has many potential social implications. U.S. data also suggests that many (but not all) professions with high rates of remote working during the pandemic had already begun a shift to remote working before coronavirus hit[4] – a reminder that this is not purely a coronavirus issue.

Figure 3: Remote working by type of worker (%, U.S. and UK)

Source: (U.S.) The Conference Board, U.S. Bureau of Labor Statistics. Data as of January 2021. Defined as the share of workers shifting to remote working at any time in the previous four weeks. (UK) Office for National Statistics, Coronavirus and Office Working in the UK. Data as of April 2020.



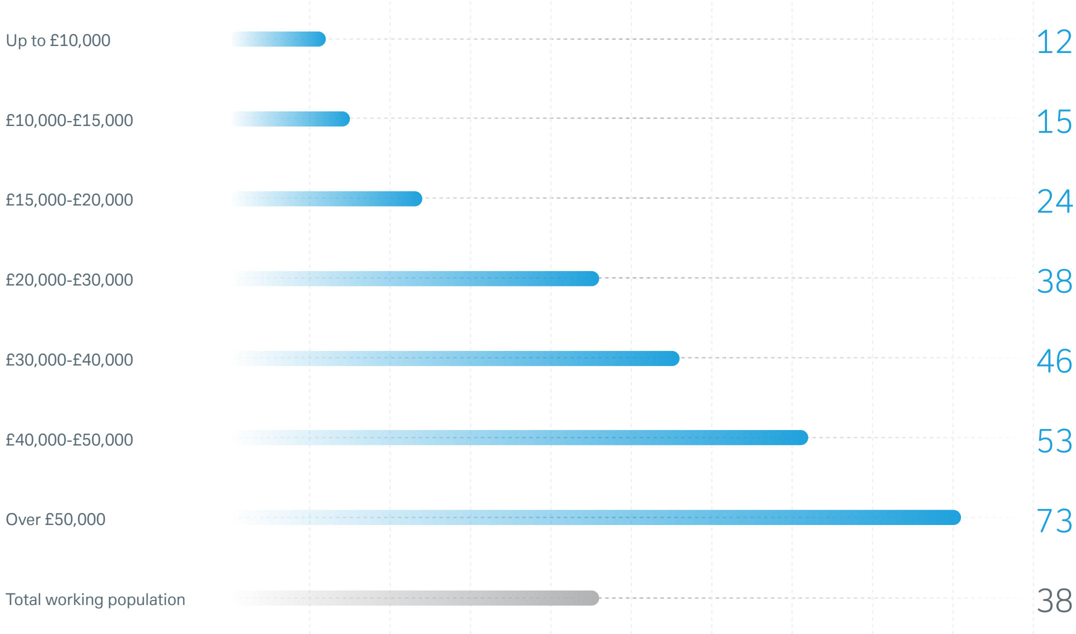
1. Computer and mathematical
2. Legal
3. Business and financial operations
4. Architecture and engineering
5. Life, physical, and social science
6. Community and social services
7. Education, training, and library
8. Arts, design, entertainment, sports and media
9. Management
10. Office and administrative support
11. Sales and related



1. Managers, directors and senior officials
2. Professional occupations
3. Associate professional and technical occupations
4. Administrative and secretarial occupations
5. Skilled trades occupations
6. Caring, leisure and other service occupations
7. Sales and customer service occupations
8. Process plant and machine operatives

Figure 4: Home working by income level, % of total working population (UK)

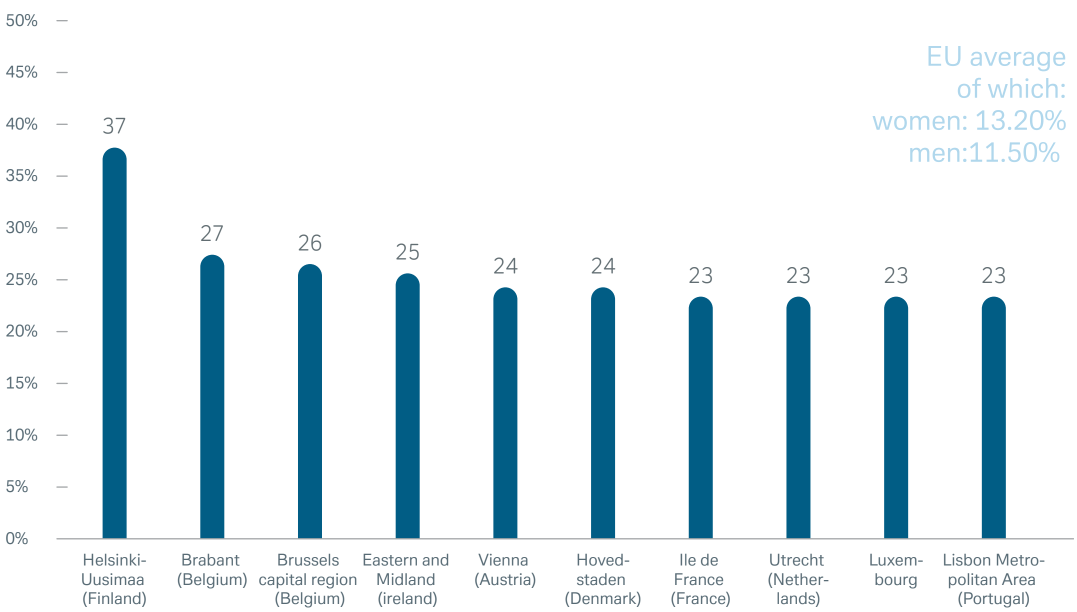
Source: UK Office for National Statistics, Coronavirus and attitudes to home working dataset. Data as of May 2021, accessed January 2022. Answers to the question: In the past seven days, have you worked from home because of the Coronavirus (COVID-19) pandemic? April 21 - May 16, 2021.



This income and occupational distinction will have implications for perceptions around RW development and fairness, as we discuss below. One risk is that it encourages a belief that RW is in some sense a "privilege" for favoured workers or professions, possibly compounding divisions within firms and societies.[5] Concerns about fairness may be exacerbated by clear regional variations in populations' abilities to remote work. Figure 5 shows some European hot-spots vs. the EU average. All these issues are relevant to longer-term considerations of the implications of remote working and robotics combined (ReRo).

Figure 5: Top ten EU regions for remote working (% working from home, 2020)

Source: Eurostat, EU Labour Force Survey. Data as September 2021.

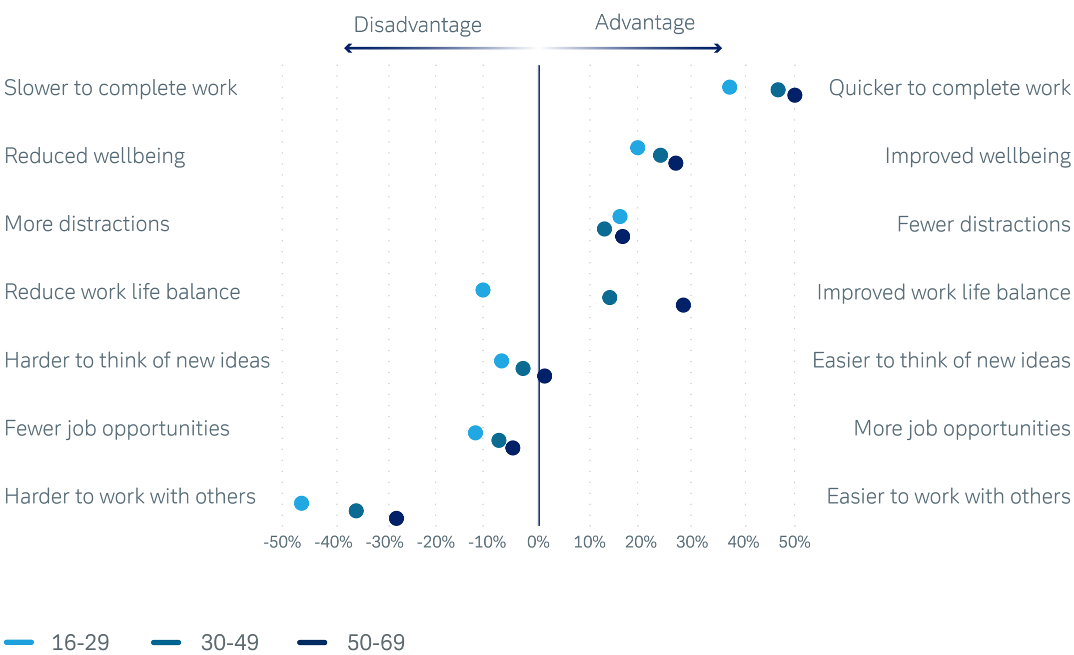


Workers appear to have managed some aspects of RW to their own advantage, using it to make the mechanics of daily life easier and to reduce some commuting and other costs. One estimate puts the average savings per U.S. worker at around USD3,000 a year[6]. However, there have also been some negatives for workers from remote working. One European study[7] highlights job losses, fewer hours worked and increased job insecurity - with implications for both households' finances and individuals' feelings on wellbeing. This study suggests that the full impact of the crisis is yet to come, also pointing to possible reversals of several decades of progress on gender equality. Corporates and managers have a role to play in underpinning workers in a situation of technological change: research[8] suggests that a more structured management approach could help create trust and help workers through this transition.

One survey "snapshot" from the UK is useful in highlighting some of the issues in employee self-management (Figure 6). This survey (of employees, not employers) holds out the possibility that improved work-life balance and wellbeing scores (on a net basis) can coexist with improved productivity (in a narrow sense), given all age groups thought they were "quicker to complete work". But the survey does also flag up some warning signs about team and individual management, with all age groups saying (on a net basis) that they find it "harder to work with others" and a younger age group also reporting "more distractions". Overall, the 16-29 age group reported lower (i.e. less positive) scores across almost all categories and this age distinction may be one to watch. Other studies also suggest gender imbalances in attitudes towards remote working and any future return to the office[9].

Figure 6: Employee attitudes to remote working by age group (UK)

Source: UK Office for National Statistics, Opinions and Lifestyle Survey (COVID-19 module). Data as of May 2021.



Surveys suggest that an improved work-life balance can coexist with increased productivity but there are warning signs.

03 ReRo development

The focus of RW management has already shifted from coping with an immediate crisis situation to developing a management approach that can deal with sustained RW challenges. Many corporates still appear keen on RW in some form (e.g. a hybrid solution) but the degree of corporate support for continuing with RW has been quite volatile over the last two years, depending on the development of the pandemic. As noted in Figure 2 above, in April 2021 38% of U.S. companies were expecting 40% or more of their workers to be working primarily from home one year after the pandemic had subsided. A further 26% of U.S. companies were expecting 20-40% of their employees to be working primarily from home. In other words, “hybrid” working in some form appears to be here to stay.

Nonetheless, many corporates remain concerned about possible negative implications of long-term RW, even on a hybrid basis.

One worry for many corporates is how the lack of face-to-face contact and team working will impact their corporate culture, in terms of the overall workforce and also the behaviour (and selection) of new recruits.

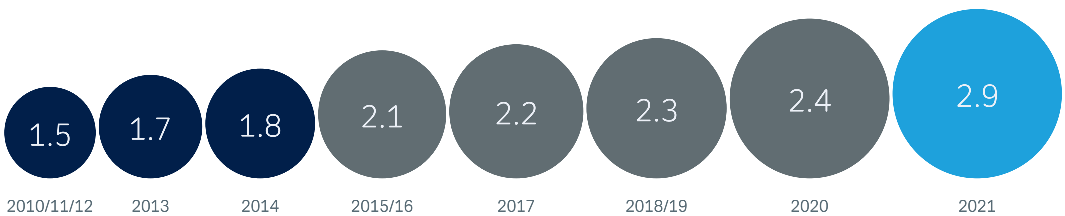
A related issue is how to ensure continued staff development within a company – in terms of gaining skills, matching these skills with opportunities, and making sure that the right people are promoted. At present the focus of many surveys here is on staff retention and whether new employees will demand RW but these surveys should be seen in the context of very strong current demand for labour given the ongoing global economic recovery in 2021/2022. Staff development issues need to be considered in a longer-term context, with attention paid to their broader social implications, e.g. the access of different social groups to the world of work.

UK Chancellor Rishi Sunak crystallised general corporate concerns as follows: “I think for young people, especially, that ability to be in your office, be in your workplace and learn from others more directly, is something that’s really important and I look forward to us slowly getting back to that”[10].

If RW prejudices development and career progression within individual companies, this could have broad implications for the labour market as whole. For example, it implies that individuals will have to rely instead on switching jobs (and firms) to achieve new salary objectives or needs. To some extent, this seems to have been happening pre-pandemic (Figure 7 shows U.S. jobs turnover), possibly due to the rise of the so-called “gig economy” (discussed below).

Figure 7: U.S. jobs turnover was already rising (quits rate in %)

Source: U.S. Bureau of Labor Statistics. Data as of December 2021. "Quits" are generally voluntary rather than compulsory separations.



As well as concerns around corporate management, there are additional behavioural reasons to be cautious around exclusive RW. There are numerous pre-pandemic studies about why face-to-face working is important. These range from the observational (how teams with face-to-face interaction are better at feedback and purpose clarification[11] and achieve better results[12]) to the physically fundamental (how face-to-face interaction allows better neural synchronisation of the brains of two people).[13] Post-pandemic studies on the impact of remote working on these issues may take time to emerge.

Despite these concerns, it seems reasonable to assume that RW will continue for many (often in a hybrid form) and individuals, corporates and governments will need to plan on this basis.

Much ongoing discussion around RW development sees the essential management shift in RW as from managing flow (process) to managing output. Under RW, it is argued, firms are less concerned about the details of how individual remote workers produce their work – but they do care that it is produced on time, at high quality and at a reasonable implied price.

The way this discussion is phrased, and the (rather misleading) distinction between flow and output, owes much to pre-pandemic interest in the growing "gig economy" – most visible through major new technology platforms allowing subcontractors or short-term employees to deliver a range of services to clients, but with possible costs for social welfare.

The implicit question is how much conventional firms can learn from these technology platforms, and whether RW will provide an opening for conventional firms to move faster in adopting "gig economy" practices in terms of labour changes or use of technology. (In other words, will RW be a Trojan horse for more radical change?)

Some issues here are obviously highly relevant for RW. In particular, "gig economy" platforms have generally much reduced the need for direct personal management of employees – instead, for example, relying on algorithms to match individuals with tasks (enabling a better and more productive service). Continued widespread RW, and a search for the best way of managing RW, will make corporates interested in whether such practices have a broader application – and how ever-improving technology can help.

One focus has been on whether a salary-based approach could be replaced for yet more workers by a "pay per service" and "pay per hour" model. This is also not an issue confined to lower paid workers: high-end lawyers also bill clients on a per hour (or per minute) approach, although other factors will play a part in their final compensation.

But there are even bigger issues here around the nature of firms themselves and why they should exist at all. This problem has long concerned economists: Ronald Coase wrote a widely-cited paper in 1937 and discussions on how corporates function date back at least to the roots of classical economics in the late 18th century.

The Coase paper[14] explained the need for firms, even in a market-based environment, in terms of transaction costs (defined in the broadest sense). The costs (and difficulty) of negotiating individual contracts for all the multiple stages involved in creating and supplying a good or service are seen as prohibitive in a network of subcontractors; instead, it is argued, it is more effective for firms to exist and just offer a single contract (a conventional employment contract) to employees repeatedly involved in supplying a function.

As we have noted above, technology appears to offer a way to reduce transaction costs and as technology advances further, we are likely to see further changes. (In addition to reducing transaction costs, "gig economy" platforms have also prospered through offering clear pricing and ratings of services and providers.) Robotics may not only provide specific services, displacing specific worker skills. Further use of smart contracts – contracts that can execute and vary, dependent on specific conditions and without a central arbiter – could reduce the need for intermediate corporate and government staff to monitor the process.

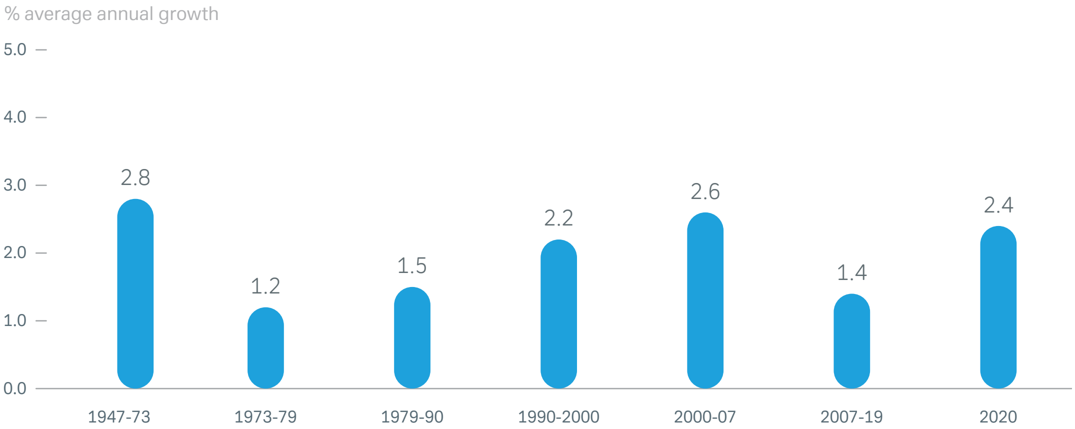
This opens up the prospect of a highly disruptive ReRo revolution. Of course, we do not know how fast technology will evolve (or in which directions) but it makes sense to try and work out which areas could be most affected. One way to do this is to take the transactions costs argument for the existence of the firm and work out areas where this rationale is still important[15]. Possible areas where traditional management could still have edge include where there is uncertainty about how to assess employee performance, where workers are needed for the longer term for a repeated task and where the skill or task is not easily transferable to another firm (asset specificity). In other words, there is an argument that firms will still have a function in managing certain sorts of work tasks.

If ReRo proves highly disruptive, individuals, corporates and governments will need to manage it. Redefining traditional labour relationships and associated legal obligations is one way of doing this. The assumption of workers and governments so far has been that the growth of the "gig economy" needs to be met with increasing levels of regulation to protect the existing rights of workers in specific jobs. But should legislation instead be focused on making it easier for workers to operate within a more fluid labour environment, for example through further decoupling a worker's benefits from individual firms?

In the Greek myth, the opening of Pandora's box is followed by an outflow of problems but then, finally, hope. There remains a hope that ReRo could help resolve the developed economies' persistent problem of low productivity (Figure 8 illustrates for the U.S.). The current association of ReRo with relatively low paid jobs is difficult to square with the ideal of a high skilled, highly productive economy. Some initial studies have questioned the productivity of remote working during the initial phases of the pandemic, possibly due to management issues[16], although others take a longer-term view and argue that remote working now provides a unique opportunity to boost productivity[17].

Figure 8: U.S. productivity growth over the last 75 years (non-farm business sector, output per hour)

Source: U.S. Bureau of Labor Statistics. Data as of February 2021.



ReRo and ESG

Remote working and labour market changes in general need to be seen in the context of ESG (environmental, social and governance) issues. One focus so far has been on how widespread remote working could reduce transportation needs, and thus ease pollution. Remote working may however generate environmental costs for example through increased domestic energy usage and will likely also result in a duplication of office equipment (e.g. computers) as part of establishing home office (and home fitness) environments leading to future waste disposal/recycling stresses[18]. Hybrid working could also make workers willing to endure much longer commutes on the days they do travel, reducing any energy and savings and environmental gains. Social issues resulting from ReRo could be as or more important as environmental outcomes, with multiple direct and indirect outcomes for societies and individuals. Initial concerns over the impact of individuals' mental and physical health could be compounded if ReRo results in large-scale job and occupation changes. ReRo could also have a broadening impact on the corporate governance aspect of ESG: an initial focus on aspects such as the cybersecurity implications of remote working will be joined by a focus on governance implications of effective and fair management of the remote working labour force.

04 ReRo fairness

Fairness might seem to be a rather abstract issue, but it will shape the public discussion around ReRo development, most obviously regarding contracts and regulation, but also of government finance. ReRo will also pose even more fundamental questions, for example around the relationship between public and private goods, and the philosophical links between fairness and justice.

As we noted above, it is remarkable how easily RW has been accepted by most workers. However, there is room for disappointment here, both at a micro and a macro level. At some point, current recovery-led gains in wages and employment numbers could start to ease or reverse – reminding workers that RW may only conceal, rather than resolve, underlying problems in the labour market.

Concerns around RW fairness are therefore likely to increase. Within individual firms, workers' concerns about fairness could broaden out beyond headline renumeration to include the right to RW, particularly if it is seen as a privilege for better-paid or more senior workers. UK data (Figure 9) suggests high expectations of future hybrid working, including amongst lower income groups: these expectations may not be met.

Figure 9: UK workers' expectations of future remote working, by income group

Source: UK Office for National Statistics, Coronavirus and attitudes to home working dataset. Data as of May 2021.

By income level, % share	<£10k	<£10k-15k	<£15k-20k	£20k-30k	£30k-40k	£40k-50k	>£50k	Total
I will mostly work from my usual place of work and sometimes from home	27	26	24	31	29	26	26	28
I will split my time evenly between my usual place of work and home	14	24	24	23	22	27	31	25
I will mostly work from home and sometimes from my usual place of work	21	27	23	29	37	37	36	32
Aggregated expectations of some form of hybrid working arrangement	62	77	71	83	88	90	93	85
I will continue to work from home and not return to my usual place of work	3	8	8	5	3	3	1	4
I will work all my hours from my usual place of work	31	15	20	11	7	7	5	10
Other	5	-	2	2	1	<1	<1	1

Among those whose usual place of work before the pandemic was not at home.
Answers to the question: Where do you think you will work when you are able to return to your usual place of work?

Fairness questions may become more acute as corporate management catches up with the new reality and tries to use RW trends to reduce costs or boost output. Does RW mean that remote workers in cheaper locations within each country should automatically be paid less, for example? More radical developments e.g. increased recruiting from different labour groups (e.g. emerging markets) to match new needed skills, or to reduce costs, will add to fairness issues.

Some of these developments (e.g. offshoring of some back-office functions to emerging markets such as India) have been underway for decades but increased acceptance of RW suggests that it could be expanded to a broader range of activities. This could have major knock-on implications for some emerging markets, for example through reducing the physical "brain drain" of skilled workers overseas, and therefore, creating broader local emerging market labour markets for some skills.

This will also put the spotlight on countries' varying approaches to labour markets in general, particularly as regards flexibility, job contracts and the willingness of firms to outsource (and workers to be outsourced). So far, this flexibility has assisted change in the U.S. jobs market, with a comparison being made to more formalised European labour systems. However, attitudes and company and worker needs could change over time.

The underlying worry is that RW and ReRo changes then start to threaten overall long-term levels of employment or wages in developed markets, when combined with automation and a greater globalisation of the services sector. Accelerated globalisation of the manufacturing sector from the 1970s has already demonstrated how dramatic related labour market shifts can be at such times of structural change – the share of the manufacturing sector in U.S. employment had fallen from 27% in 1970 to only around 10% by 2010. Headline forecasts for employment changes due to advances in automation and artificial intelligence can be quite dramatic. One 2017 McKinsey report, for example, argued that 400-800 million workers could be displaced by automation and have to find new jobs by 2030[19]. Other studies[20] also present a worrying picture about what might lie ahead. The big question, of course, remains how much the boost to productivity and economic growth from automation creates new jobs – and in what areas.

The ability of both corporates and governments to respond to fairness issues in this scenario may be limited. Corporates will, at one level, be attempting to address their own concerns about fairness – relative to other (domestic and foreign) firms and governments in a period where legislation may be in flux. At another level, corporates will be looking to governments for fair treatment of their new working practices – both as regards taxation, and also as regards provision of services (transport/IT infrastructure) on which their output and their workers depend. Radical change could lead to radical suggestions, for example on support for sectors which are adversely affected by RW. But corporates also need to pay attention to how they manage their own workforce, as noted above.

Governments will also be under pressure from workers, who will look to governments to devise and enforce regulations to protect their interests, and to ensure RW delivers taxation/social benefits. In the event of major job dislocation, employers may also see long-term employment support as essential to fairness – as part of an effective social infrastructure. This will be at a time when government finances are already under great stress as a result of the pandemic – as we discuss below.

In some economies, the issue of central government financing vs. that of local (state and city) governments will also be a point of tension for fairness concerns if revenue flows change (e.g. if RW reduces spending in city centres and thus local taxation) or the need for subsidies increases (e.g. via RW reducing the use and therefore the revenue that accrues to public transportation networks) – see below.

Another problem may be that fairness is only addressed at a national level – although it is an international issue. Governments will fall out if many of their services sectors are outsourced to other economies with implications for employment and government finances.

One underlying worry is the possible impact of RW and ReRo on long-term levels of employment and wages

05 ReRo financing

From an employee's perspective, one appeal of RW has been the potential cost savings in terms of commuting and other related incidental costs.

However, if workers are to make a net financial gain from RW, the impact of reduced costs must not be overridden by reduced levels of income or benefits. The outlook here is more uncertain. The impact of RW on wages in many economies has so far been cushioned to some extent first by pandemic-related government subsidies and then by the subsequent strong demand for labour during the current recovery. Downward pressures on RW individuals' wages could re-emerge as companies seek to reduce costs through offshoring (RW taken one stage further) or through using robotics, the Ro part of ReRo) to reduce the overall demand for labour.

The impact of RW on corporate profitability may also be concealed by the pandemic. Renewed corporate profits growth in 2021 can only provide limited reassurance. Much more granularity is needed for meaningful interpretation of the real impact of the costs of RW on corporates' finances – and to distinguish between the short-term savings and long-term reductions. Higher rates of inflation – and their possible impact on wages growth – will make the data even more difficult to interpret.

Getting this clarity may take some time, as is shown by current views on the prospects for office property. Office space accounts for a significant amount of most corporates' costs and therefore (in theory) even a "hybrid lite" approach could yield substantial cost savings. But, with firms unclear about what proportion of workers will be RW in future, there may be good reasons for executives not to make too quick, too radical decisions on property use. Leases may also take time to expire. As a result, most forecasts around office property prices and rentals to do not yet show sharp declines.

The financial implications of RW for governments during the pandemic do already provide some indication of likely pressure points as ReRo gains momentum. Collecting direct taxation from remote workers or their employers proved generally not to be a problem during the pandemic although there were some delays and indirect taxation suffered due to lockdowns. The biggest hit to overall government finances turned out to be on the spending side – in the form of pandemic relief programmes.

RW however has also put in the spotlight the complex patterns of cross-financing within local and central governments. In many economies, RW reduced footfall in cities – reducing local government revenues from business rates/taxation (for example). Reduced travel also forced governments to provide financial help for local or national transportation systems. Hybrid working may alleviate these stresses but will not remove them.

In the long term, ReRo may result in major changes to overall tax take and the fiscal position – particularly if reduced numbers of service sector jobs, due to automation or offshoring, or related downwards pressures on wages, reduce the overall tax take while simultaneously boosting spending on support. But in the interim, the pandemic experience suggests that one big initial problem could be the upset balance between different fiscal areas (e.g. national vs. local government finance) – resulting in stresses that, history suggests, many governments may find difficult to fix and which could have important political implications.

06 Conclusion

Remote working (RW) is just one part of a process of workforce change. The process will not be smooth, particularly as remote working may help accelerate much bigger changes due to robotics: the ReRo revolution.

The evolution of RW and ReRo can be seen as having four interlinked and overlapping stages, with individuals, corporates and governments having to make difficult decisions at each stage.

First, comes the management of the immediate RW situation, with workers and firms faced with immediate technological and motivational challenges. Governments will also be getting a first taste of the policy issues ahead (e.g. on changed transportation use, and less-frequented city centres).

Second, comes the longer-term development of RW and ReRo as it becomes clear that we are not going back to normal. On one hand, corporates will have to deal with issues around team development, corporate culture etc. thrown up by RW; on the other, they will be planning for more radical ReRo change in future. "Gig economy" experiences are already defining the debate around radical changes to firms' structures and aspirations. These may have much bigger implications for wages and employment than RW itself. It is unclear how much ReRo is likely to boost flagging productivity growth in many economies.

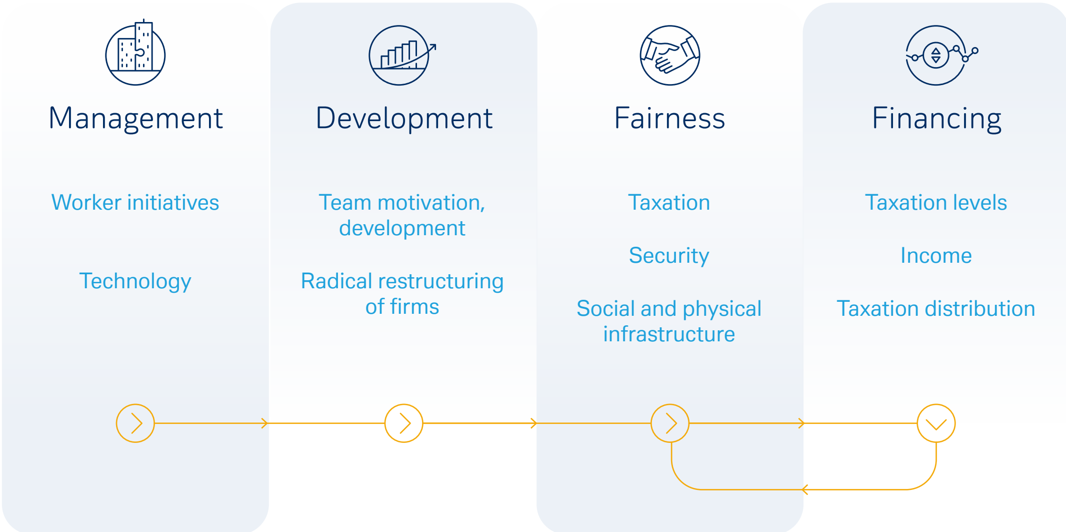
Radical change is likely to intensify the debate around fairness – the third stage of the process. Workers' may suffer as current recovery-linked wage growth peters out, and they realise how exposed they are to corporate efforts to reduce costs or boost output. Meanwhile, corporates will look to government for fairness in terms of new taxation regimes and infrastructure provision. Governments will be under pressure from workers on taxation and also job support arrangements (what could be called "social infrastructure") if unemployment increases.

Pressures on financing, the fourth stage of the ReRo revolution may appear sooner rather than later. It will take some time to get full clarity on how RW and ReRo will affect company finances, with current high levels of inflation making it yet more difficult to be sure of the strength of the underlying trends. But it is already possible to identify future stress points. Government direct taxation of individuals would suffer from RW offshoring or automation of jobs and related downwards pressures on wages; indirect taxation flows will also be affected and there could be particular stresses in central government vs. local government finance as employment and spending location patterns change. Taxation issues may also feed back into general political debate.

Most importantly, however, we always need to remember that RW and ReRo should not be seen as self-contained issues. Instead RW and ReRo need to be understood as tools that both reflect and enable structural change in the global economy. They therefore need to be carefully monitored to understand the threats to the global or social economic infrastructure. This makes a deeper debate about RW and ReRo even more urgent.

Figure 10: RW and the ReRo progression

Source: Deutsche Bank Private Bank. As of March 2022.



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Glossary

The Conference Board is a U.S.-based global corporate membership organization which publishes research on a range of issues.

ESG refers to environmental, social and corporate governance concerns and goals.

The Gig economy refers to sectors of the economy where freelance work or short-term contracts are the main form of employment.

Global Workplace Analytics is a research-based consulting firms focused on workplace issues.

McKinsey & Company is a firm of global management consultants.

The Organisation for Economic Co-operation and Development (OECD) has 35 member countries and has the objective of encouraging economic progress and world trade.

Remote working (RW) refers to individuals operating outside their normal workplace on a partial or full-time basis.

ReRo refers to the combined effects on employment of remote working and robotics (in a broad sense).

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