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# The Coronavirus Pandemic and the Increase of Teleworking in Eight Countries

- From Telework to Flexplace Systems -

Takeshi Mori, Senior Researcher

Center for Strategic Management & Innovation, Nomura Research Institute, Ltd.

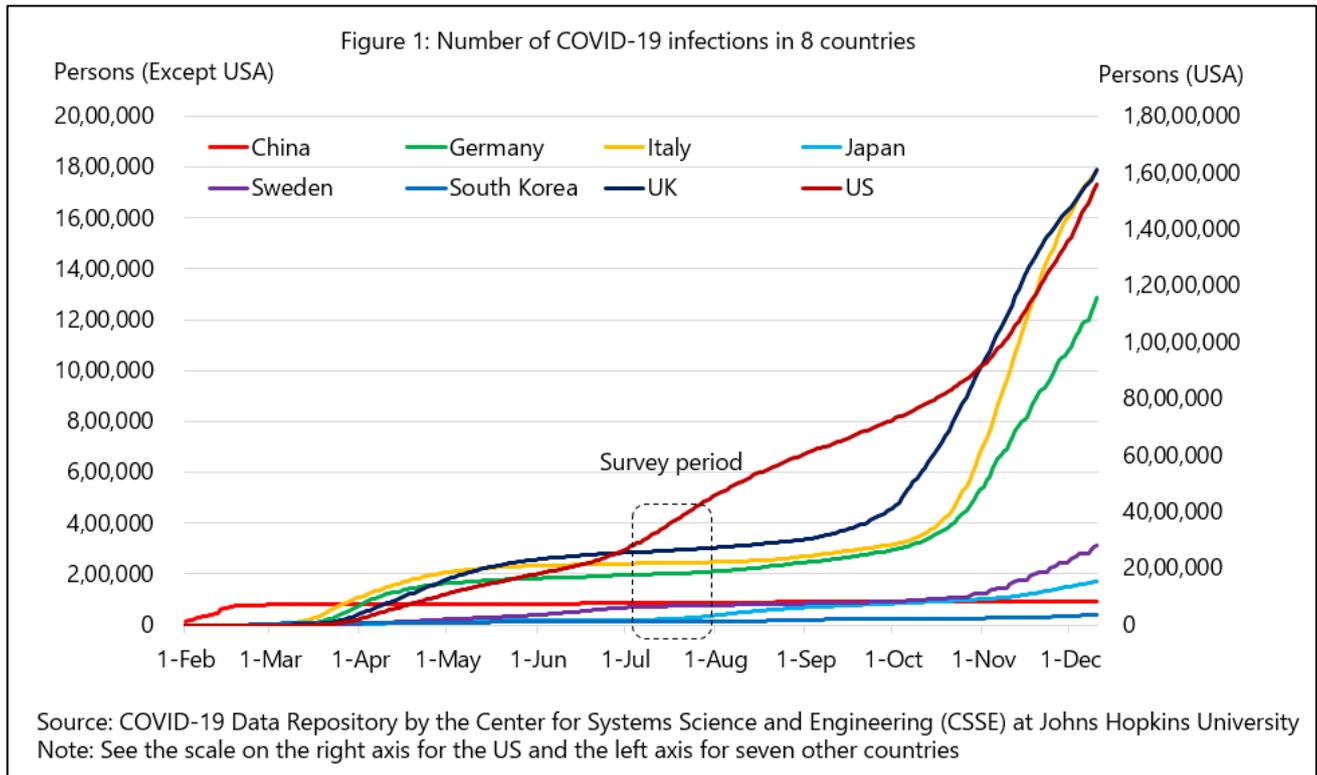
## Overview

The global outbreak of the novel coronavirus (COVID-19) pandemic that began in January 2020 was accompanied by lockdowns and restrictions in countries across the world. The constraints placed on the movement of people had a major impact on working styles. The most striking example of this is the increase in teleworking. In July 2020, Nomura Research Institute (NRI) conducted a large-scale survey of consumers in the following eight countries: Japan, USA, UK, Germany, Italy, Sweden, China, and South Korea. It showed that there was significant growth in the number of workers teleworking in all eight countries, with urban China leading the way at 75%. Moreover, the extent of this growth was highly correlated with the respective national lockdowns. Regarding the relationship between telework and productivity, although 26-48% of people felt that their productivity declined with telework, there was a certain percentage of respondents who said that productivity had actually increased. Common hurdles in the shift to telework in all countries were related to communication; psychological issues such as stress and loneliness varied widely by country. When asked about their desire to continue teleworking in the future, in most countries, the number of respondents who wanted to continue was greater than that of those who did not. We can thus expect that telework will continue to be around as a workstyle in the future.

While workstyle changes largely depend on decision by management, it is true that many countries have added flexible working options for their employees. This will make teleworking the new normal. "Remote working" will no longer be the exception. Rather, this development foreshadows a future in which "flexplace systems", where employees can choose where to work from, will become widespread globally.

### **Overview of the consumer survey conducted by NRI in eight countries**

In July 2020, NRI conducted a large-scale consumer survey (questionnaire) in the eight countries of Japan, US, UK, Germany, Italy, Sweden, China, and South Korea. It was an extensive survey of everyday life, including working styles, shopping, and so on. This report is a summary of the findings of this survey related to telework. In July 2020, when all of the countries except the US were between their first and second wave of infections, the number of infections was largely stable (in contrast, the number of infections in the US rose sharply in July: refer to Figure 1).



The survey “International comparative survey of living conditions amid the COVID-19 pandemic” was conducted over the internet, with 2,060 respondents from each country. We attempted to accurately reflect the demographics (such as age and regional distribution) of each country in our survey sample. However, because internet access is concentrated in urban areas for China and South Korea, 80% of the survey respondents ended up being city-dwellers. As a result, the figures for China and South Korea may be taken to reflect the attitudes of urban China and urban South Korea, rather than that of the entire country.

Government bodies and research institutions in each country have conducted their own surveys about the spread of telework in their respective countries. However, our survey is the only one, at least to date, that was carried out simultaneously in several countries, making its data globally valuable.

**Rates of telework were higher in countries that had more stringent lockdowns**

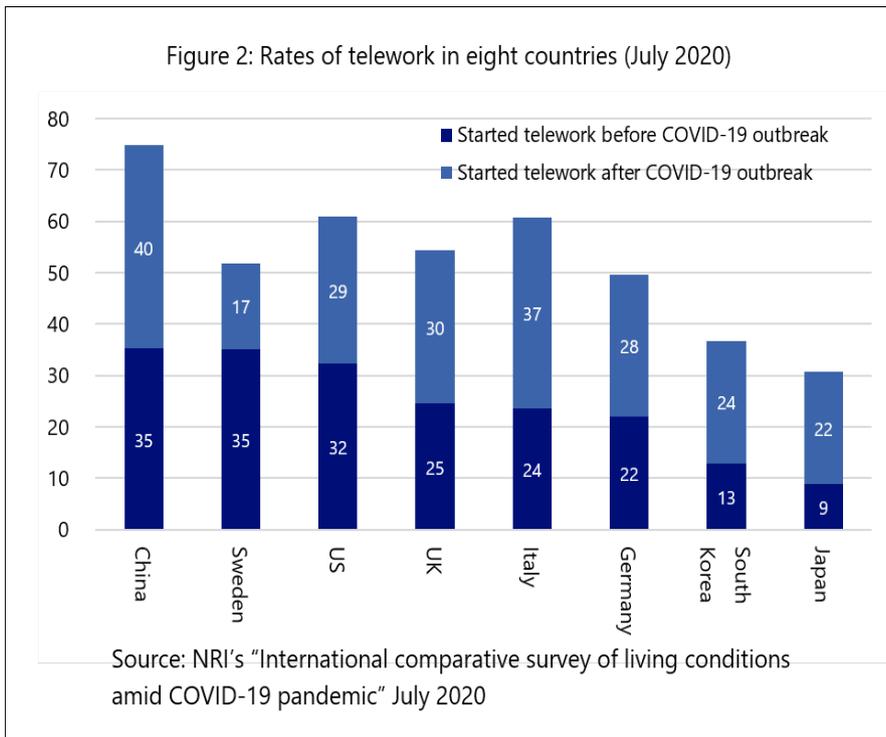
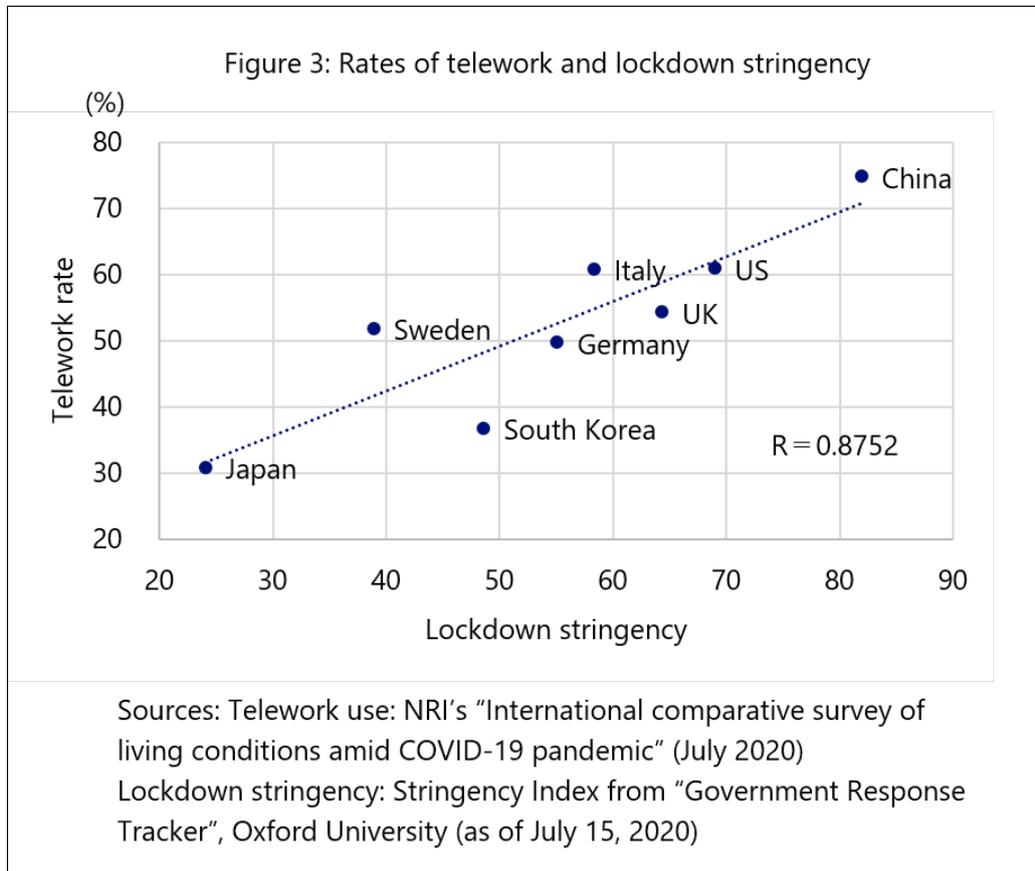


Figure 2 shows the rates of teleworking in eight countries. Specifically, it indicates the ratio of people who responded that they teleworked even before COVID-19 and those who began teleworking after the COVID-19 outbreak. 75%

of people in urban China, and more than 60% of people in the US and Italy, answered that they were working remotely. On the other hand, the same figure for Japan was the lowest among all the eight countries at 31%. The data on when telework began (before or after the pandemic) also differs from country to country. In most places, the number of people who started teleworking after the COVID-19 outbreak was greater than the number of people who were already working remotely, but in the case of Sweden, only 17% of people started teleworking after the pandemic.

We believe that the variation in rates of telework across these eight countries and the small proportion of people who started teleworking after the coronavirus outbreak in Sweden can be explained by the stringency of lockdown policies in each country. In Figure 3, the lockdown stringency of each country (calculated by Oxford University) is plotted on the X-axis and the overall telework rate on the Y-axis. The graph makes it clear that the telework rate is higher in countries that had stricter lockdowns, with lockdown stringency and telework rate highly

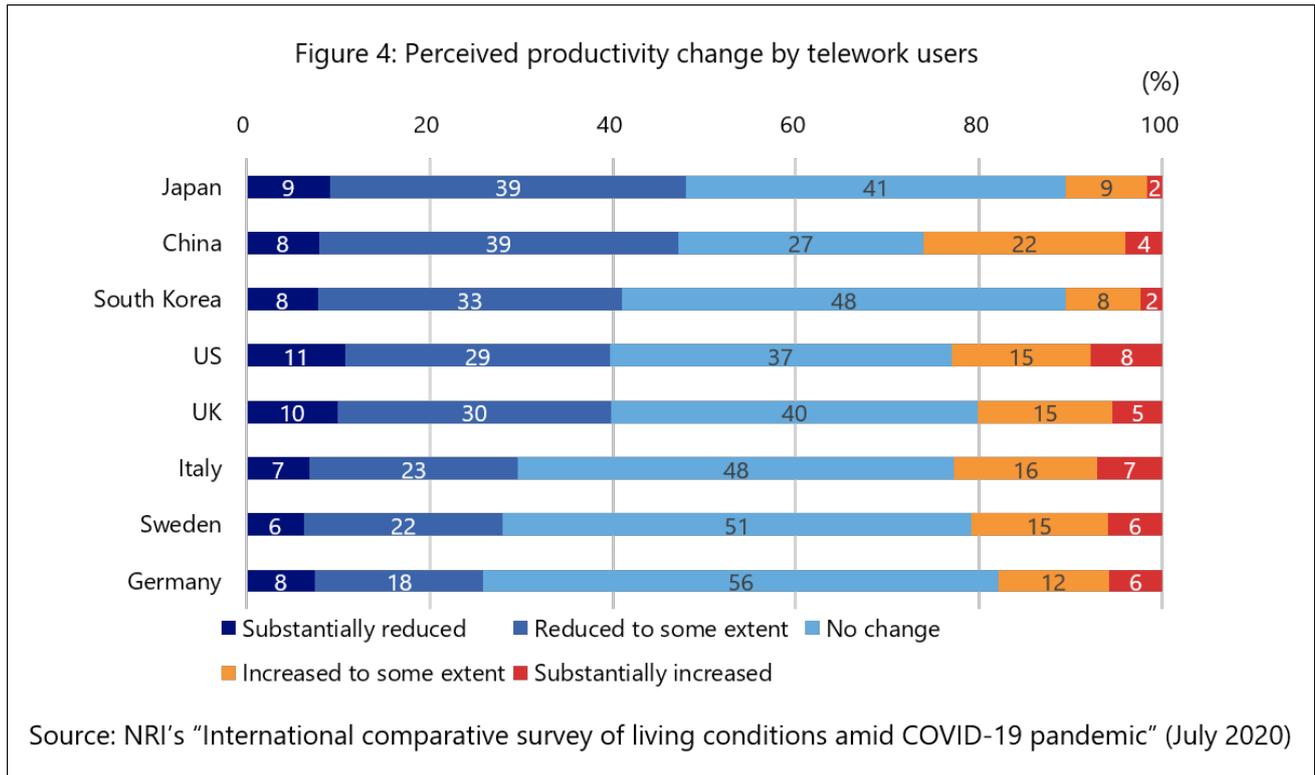
correlated at a coefficient of 0.87. The fact that Sweden had a high proportion of people who were working remotely even before the pandemic (35%), combined with lenient lockdown policies, similar to Japan, meant that the rate of telework did not increase very much after the virus outbreak.



**Factors that affect the impact of teleworking on productivity include country, type of job, and telework start date**

All over the world, teleworking has expanded dramatically in a short period. How has it impacted productivity? Figure 4 shows this impact on each country. In the survey, we asked people working remotely to give their subjective opinion on how their productivity has been affected by teleworking. Although there are considerable variations in the answers across countries, overall, more people felt that their productivity decreased rather than increased.

With sudden lockdowns and emergency declarations due to the rapid spread of the coronavirus, many companies and individuals were likely forced to shift to telework without adequate preparation. On the other hand, we would like to emphasize that except for (urban) China, the highest percentage of responses were people who said that there was no change in their productivity. In this sense, you could say remote workers have



fared quite well in all eight countries, as the majority of people felt that their productivity did not decrease (it either remained the same or increased).

Another interesting point illustrated by Figure 4 is that in East Asian countries like Japan, China, and South Korea, there were relatively more people whose productivity decreased, while this proportion was small in continental European countries like Germany, Italy, and Sweden. This might be related to the timing when people started working remotely. As seen in Figure 2, telework was prevalent in Sweden even before the pandemic. As these people would have already been accustomed to working remotely, it seems safe to assume that is

why productivity did not decline for them. However, the results are very different in the case of (urban) China, which also had similarly high rates of telework pre-pandemic. From this, we can infer that there may be also cultural or policy factors at play that cannot be explained simply by an overall increase in teleworking.

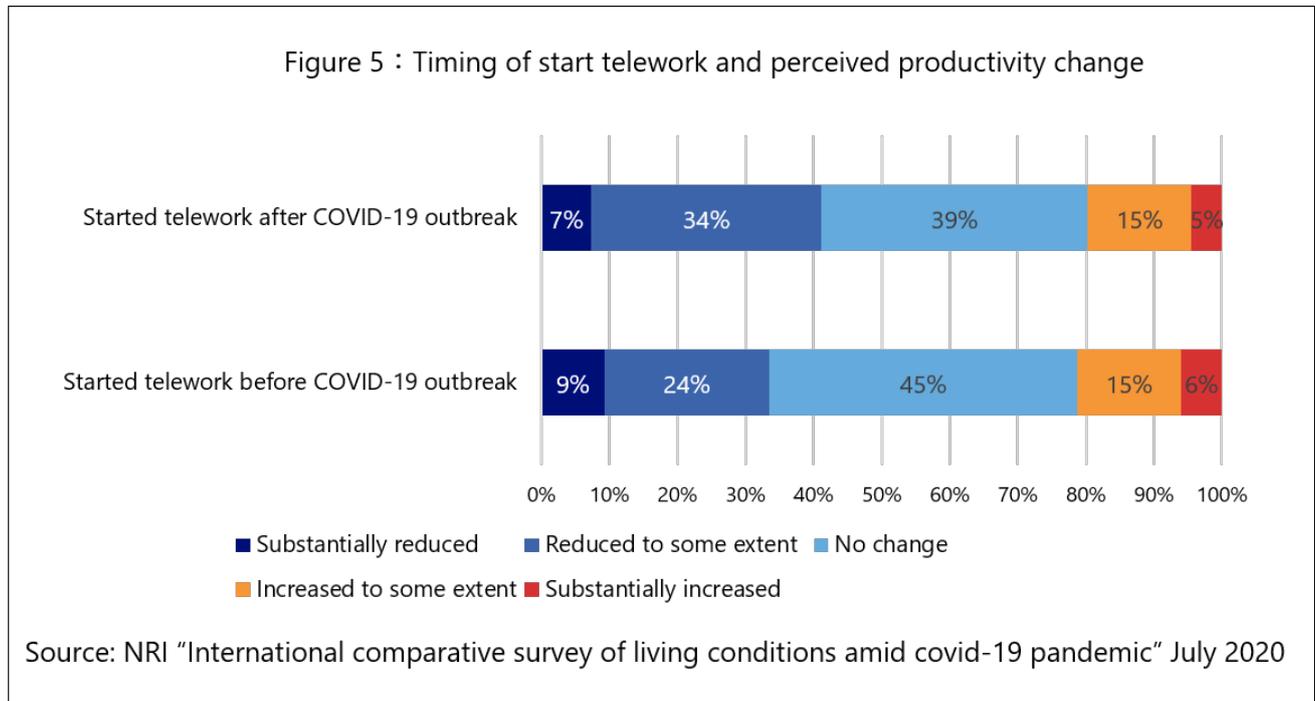


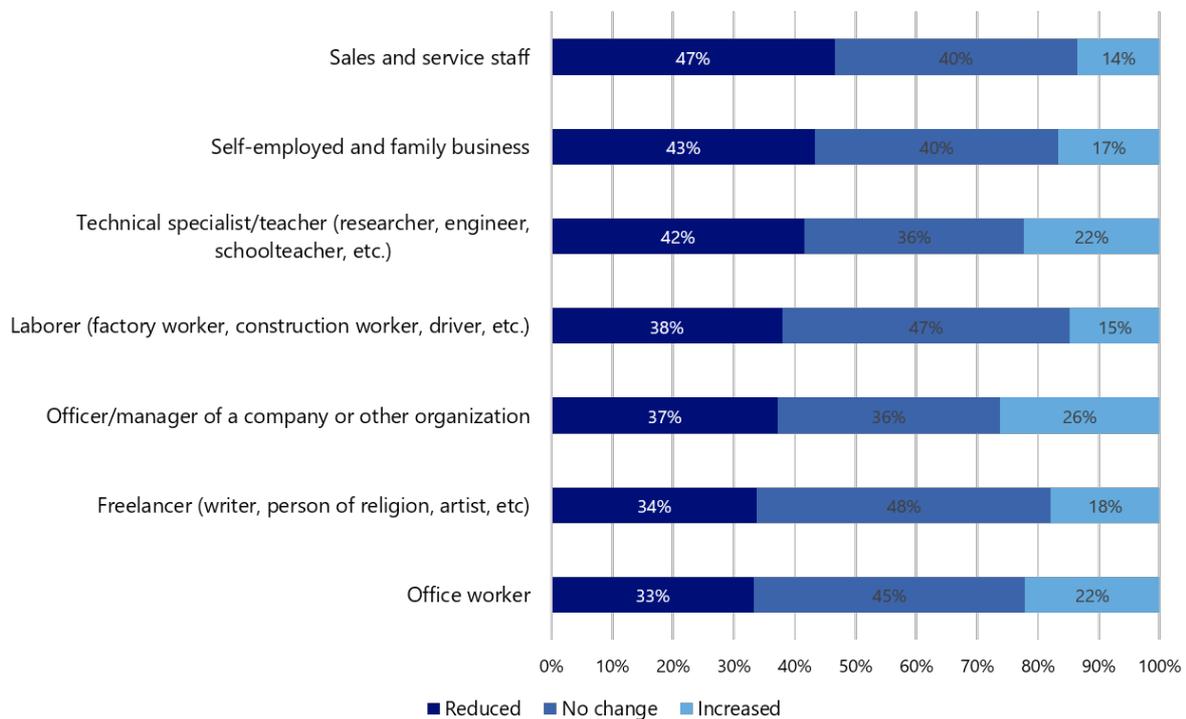
Figure 5 shows the relationship between the timing of starting telework and the change in productivity. We can see that among people who started teleworking after the pandemic, the number of those who felt that their productivity declined to some extent was about 10% higher than among those who were teleworking earlier. However, upon taking a closer look at the data, it becomes clear that there is almost no correlation between the timing of starting telework and perceived change in productivity. On the contrary, 20% of people who started telework after the pandemic felt that their productivity went up.

The factor that does have a strong correlation with productivity is the nature of work (Figure 6). The highest proportion of people who answered that their productivity declined worked in the sales and service sectors (47%), followed by self-employed and family business (43%),

and specialists/teachers (42%). On the other hand, freelancers and office workers had a much smaller proportion who felt that their productivity went down. These results seem to make sense. Sales and service jobs have mostly been carried out in person or in shops, etc., so the obstacles to working remotely would naturally be higher. In contrast, office jobs typically do not involve much interaction with clients; as long as one has a laptop, they can easily perform these duties from home. As for technical specialists/teachers, we can see that 22% of them answered that their productivity went up. A possible explanation for this is that this category contains a good proportion of people such as non-laboratory researchers who can easily work from home.

The results of the officers/managers category are interesting. While 37% of them said that their productivity declined due to telework, 26% said that it went up, and this proportion is, in fact, the highest across all categories of jobs. This is largely conjectural, but if we assume that the productivity of officers and managers is measured by the quality and quantity of their decision-making, then we can see how both these outcomes are possible. On the one hand, teleworking may have reduced productivity by making it more complicated to manage subordinates who are not present in the workplace (particularly for middle managers), but on the other hand, it may have also slashed or eliminated the time spent on inessential matters, such as routine meetings and minor dinner engagements (particularly for top executives).

Figure 6: Jobs and perceived productivity change



Source: NRI's "International comparative survey of living conditions amid COVID-19 pandemic" (July 2020)

### Challenges of telework vary from country to country

In our survey, we asked the respondents about the challenges of telework from three perspectives: communication, psychological, and technological (Figures 7-1 to 7-3). Looking at communication, we can see that 20-30% of respondents could not communicate as well as they wished with coworkers, this proportion being particularly high in Sweden and the three Asian countries. In China and South Korea, about the same number of people face challenges in communicating with customers and partners, while Japan seems to face far less trouble in this aspect. China also has the highest rate of poor-quality online meetings among the eight countries, suggesting that teleworking negatively affects communication in China more than in other countries. As researchers such as Hofstede and Inglehart have pointed out, the culture of East Asia tends toward collectivism, placing importance on agreement with others.

Figure 7-1 : Challenges of telework (communication)

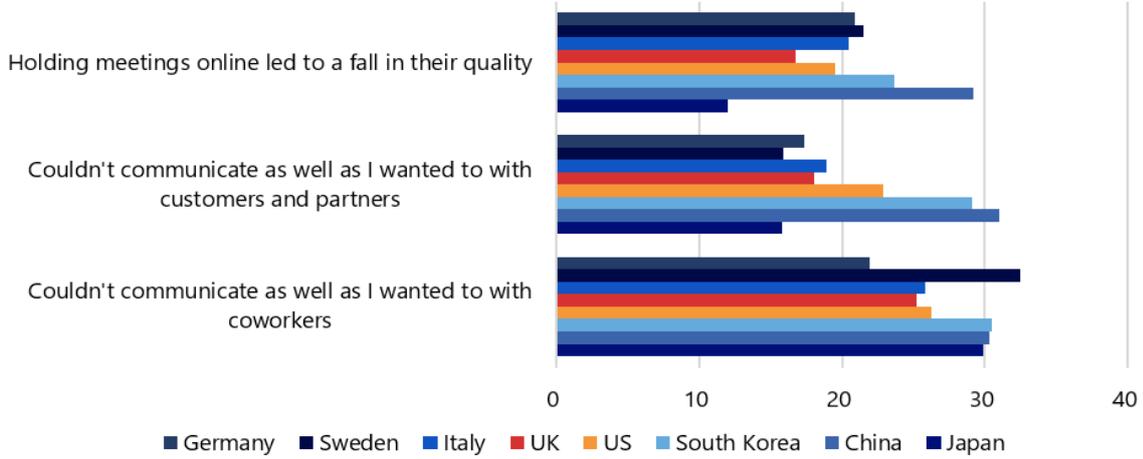


Figure 7-2 : Challenges of telework (mental impacts)

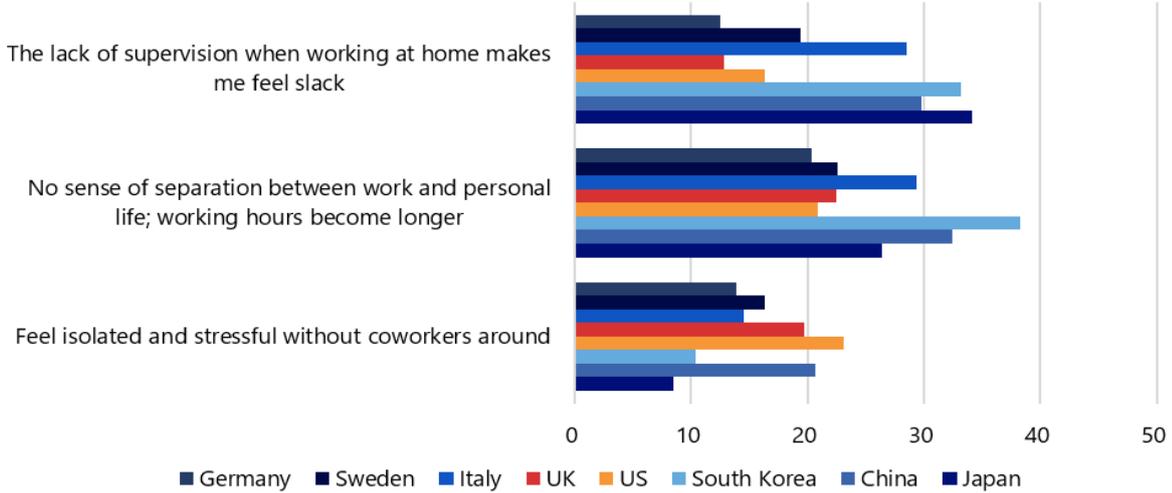
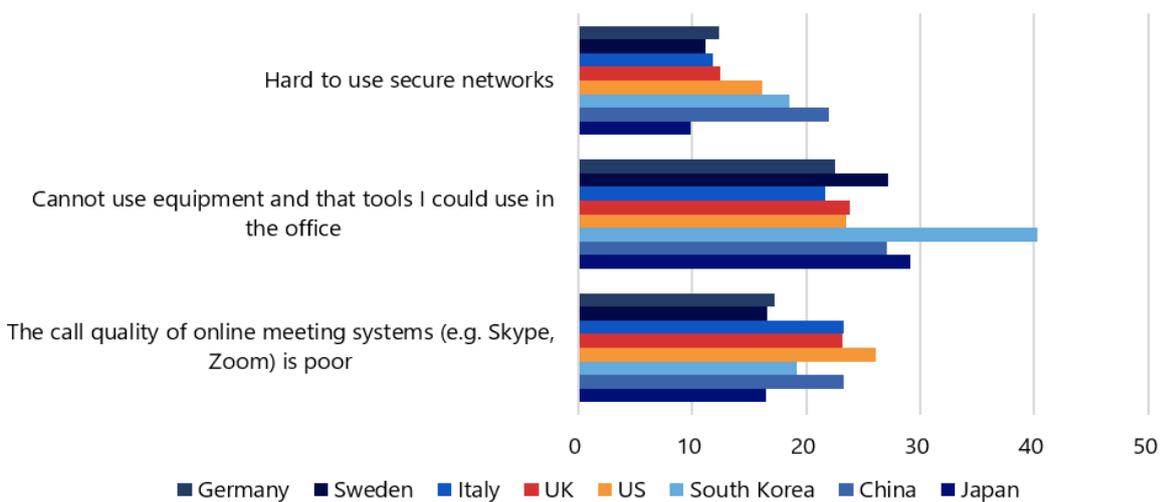


Figure 7-3 : Challenges of telework (technology)



Context and tacit knowledge are also important in this culture, as is building relationships with coworkers and customers. In short, there is a greater emphasis on “close communication” and “sharing space” with colleagues, putting higher importance on face-to-face communication than in Western cultures.

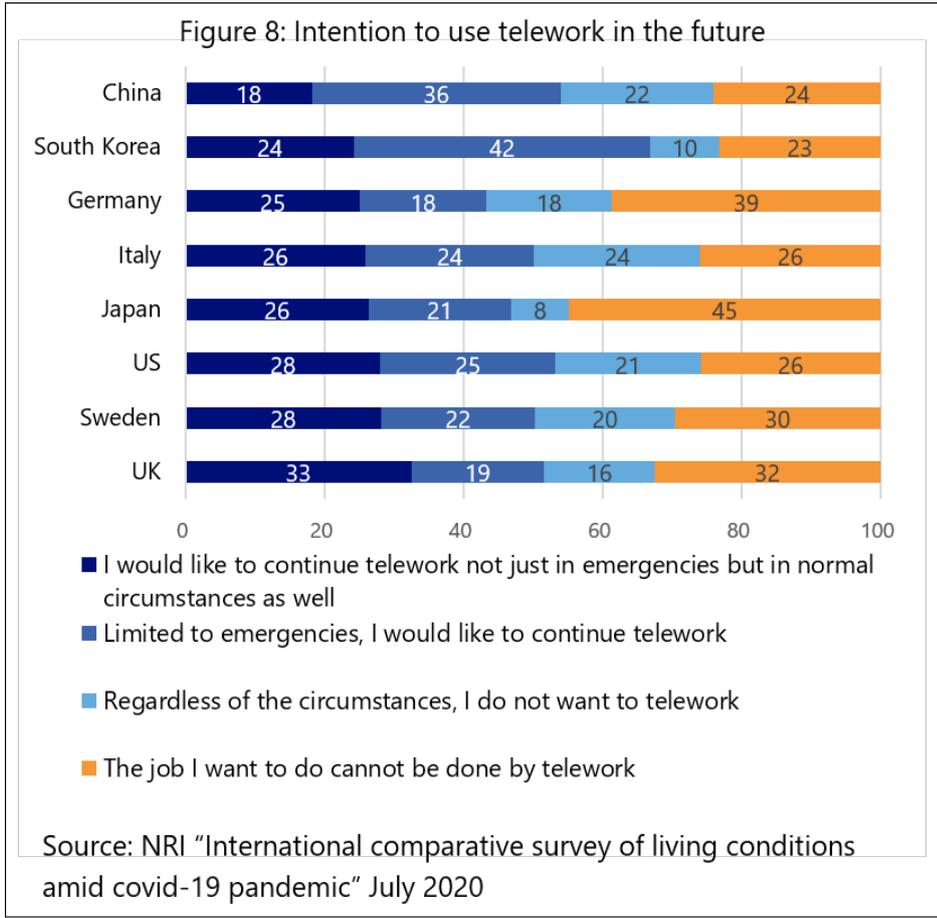
Next, looking at the psychological impact of teleworking, we can see that respondents who felt that “the lack of supervision when working at home makes me feel slack” was high in Italy and the three Asian countries. Moreover, a large proportion of respondents from the three Asian countries also felt that there was “no sense of separation between work and private life and working hours became longer”. From this, we can infer that Westerners are self-disciplined while Asians find it challenging when left unsupervised. However, this does not mean that Asians also feel lonelier and more stressed than Westerners. For instance, while we can see that Chinese people certainly felt isolated and stressed, it is respondents in the US and UK who had the highest rates of isolation and stress, while Japan had the lowest rates across all the eight countries. Perhaps this is because most people in Japan felt more relaxed without their bosses or colleagues keeping an eye on them. As for the US and UK, the working environment there is different from Asia or continental European countries in that employees are liable to be dismissed at any time. Combined with telework, this may have caused increased anxiety about the loss of jobs. Further research is needed in this area to understand this phenomenon properly.

Finally, turning to the technological challenges, we can see that being “unable to use equipment and tools used in the office” was the most common obstacle faced in all eight countries. This refers to issues such as not having a PC at home or not having the software that was installed on work devices. As many as 40% of South Koreans were inconvenienced by this. Regarding the quality of online calls, many respondents in the US, UK, and China felt

that it was a problem, while the corresponding proportion in Germany, Sweden, South Korea, and Japan was smaller. This almost certainly reflects the state of high-speed network infrastructure in each country. To conclude, this survey made it clear that the obstacles to telework in each country or region are very different.

### **The future of telework**

I would like to speculate on the future of telework. Until the end of 2019, telework was an exceptional working style that was adopted only by a few workers. However, with the global spread of COVID-19, most workers were forced to embrace this style - the complete opposite of what the workstyle to which they had become accustomed, regardless of personal preference. As a result, while there were many difficulties with communication and other aspects, people also came to recognize some unexpected advantages, such as saving on commuting time and simplification of cumbersome business processes. As for the impact on productivity, as mentioned earlier, a good proportion of people feel that it has declined; at the same time, however, about 10-20% of respondents in each country feel that productivity has improved.



In our survey, we also asked people about their desire to continue teleworking in the future (Figure 8: Includes responses of people who are not currently teleworking, when asked about whether they would like to telework going forward). The results showed that the

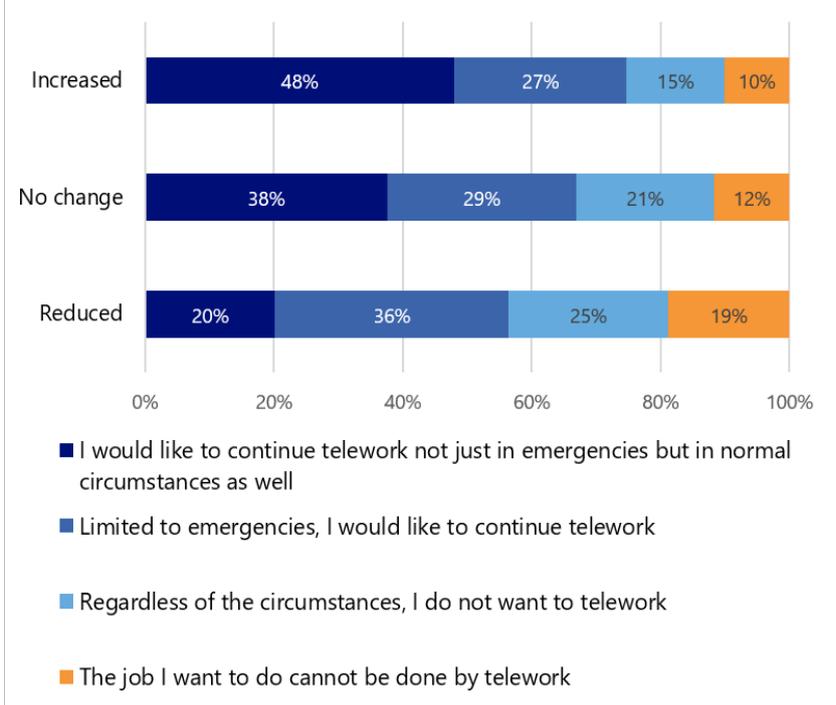
proportion of people who would like to continue telework, not just in an emergency but as a regular workstyle, ranged from 18% in China to 33% in the UK. On average across all countries, about 1 in 4 people would like to actively continue to telework. The ratio of people who would like to continue teleworking during emergencies alone also varies widely from 20% to 40% across countries.

If we lump these two categories together as those accepting of telework, the ratio of people in this group ranges from 43% in Germany to 66% in South Korea. On the other hand, the proportion of those rejecting telework, i.e., people who answered that they "do not want to telework regardless of the circumstances", is the lowest in Japan (8%), while it is greater than 20% in Italy (24%), China (22%), US (21%), and Sweden (20%). From this, we can infer that although the rate of telework will drastically go down once the coronavirus pandemic is under

control, a significant proportion of people in each country will continue to work remotely. For instance, at the end of 2019, only 9% of people in Japan were teleworking. However, Figure 8 shows that 26% of Japanese people would embrace telework not only during emergencies but also in normal life. It is therefore possible that after the pandemic is brought under control, the rate of telework could end up at about three times previous. Of course, the ability of people to telework as they wish depends on a company's management policies. Some companies may declare teleworking to have been a temporary measure and discontinue it. However, a good number of workers have realized the benefits of teleworking in the wake of the coronavirus pandemic and want it to continue.

But who all strongly want to continue teleworking? About half of those who were already teleworking before the pandemic (43% overall for all eight countries) want to continue doing the same in the future as well. This result makes sense as most of these respondents would be people who had taken up remote work because they wished to do so, and not because they were forced to as a result of lockdowns. Let us analyze these answers by age as well. The age groups of respondents ranged from people in their teens to their 60s. The proportion of people who answered that they would like to telework not only during emergencies but also in regular times was lower among people in their teens and 20s (about 20%) and at a more or less similar level for people ranging from their 30s to 60s (about 27%). The possible reasons why teleworking is less popular among young people could be that they do not want to be holed up at home, or that having just started their career, they are not very confident about their workstyle and would rather learn in a hands-on manner at the workplace.

Figure 9: Intention to use telework by perceived productivity change



Source: NRI "International comparative survey of living conditions amid covid-19 pandemic" July 2020

The most striking differences in the intention to use telework can be seen when laid out by the change in productivity (Figure 9). 48% of people who answered that their productivity improved with telework would like to continue with it in the future, while only 20% of people whose productivity

declined felt the same (or, to look at it another way, the perceived benefits of teleworking outweighed the loss of productivity for 20% of respondents).

In short, the future of telework will depend on how it affects people’s productivity. The author believes that productivity will gradually start to increase, particularly in countries like Japan, where telework has been largely unheard of. This is because people will get used to this style of working and the facilities will improve. Furthermore, from the management’s perspective as well, it would make sense to give employees the option of teleworking if their productivity is at least the same as in their workplace. It would mean that they would be able to save on rent for large offices in the expensive business district, as well as attract talented people to the company.

Although the COVID-19 pandemic restricted people’s physical mobility, in a sense, many of them were able to “escape from spatial constraints” thanks to the use of various digital

services. This opened possibilities to accomplish a variety of things regardless of physical location. Telework is a prime example of this, and this trend seems set to continue in the future. As it becomes more widely accepted, a mix of working from home, office, and remote workplaces will become the norm. For some people, the home may become their main workspace. As this happens, the distinctions between the actual workplace and the remote workplace will start to blur, and the term “telework” will gradually become obsolete. There is a term called “flexplace” in English. While many companies have already adopted a flextime system, where workers are free to set their own working hours, the spread of telework will popularize the flexplace system, in which employees have a greater say on where they will work from. This is how telework will evolve in the near-future.