Teleworking: how will it affect productivity?

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Teleworking has increased sharply with the Covid-19 crisis and is likely to remain widespread in the future. This could have favourable effects on firms' productivity, notably through the accelerated diffusion of technologies. However, the academic literature stresses that adequate preparation will be needed in order to reap the full benefits of this favourable impact.

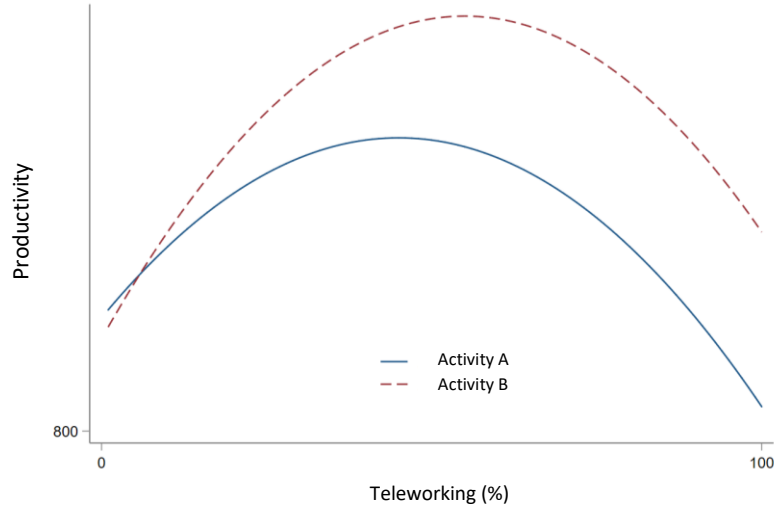

Chart 1: Inverted-U relationship between teleworking intensity (as a proportion of working time) and productivity for two different activities
Inspired by the OECD (2020)

The use of teleworking increased suddenly and massively in the spring of 2020 with the introduction of social distancing measures to combat Covid-19. In numerous countries, the practice faced cultural, technical and sometimes regulatory barriers. In France, more than a quarter of workers resorted to teleworking, whereas in 2017, according to DARES (the French Labour Ministry's Directorate of Research, Economic Studies and Statistics), less than 3% worked from home at least one day a week. Qualitative studies conducted among firms and employees suggest that once the lockdown measures are completely and definitively lifted, use of teleworking is likely to remain higher than before the crisis.

Teleworking raises numerous questions about issues such as worker well-being (reduced commuting times, greater autonomy in organising the work-life balance, but also a greater risk of isolation) or the emergence of a new type of inequality

(eligibility for teleworking varies according to job-type). But another important aspect for the future of teleworking is the productivity gains it implies for firms, and more broadly for the economy as a whole. This issue, which drew limited discussion before the Covid-19 crisis, is attracting renewed interest; there are now more studies focusing on the economic effects of teleworking and in particular its impact on productivity (on France, for example, see Cette (2020), OECD (2020), Porat (2020), or Batut and Tabet (2020).

Contrasting effects on productivity

Available assessments of the productivity effects of teleworking find contrasting results. By way of illustration, Bloom et al. (2015) studied a group of Chinese call-centre workers who volunteered to work from home at a firm that was both equipped and prepared for this type of arrangement. The authors found that the teleworkers were considerably more productive – with productivity gains of around 20% − happier and less likely to leave the company (although they also had less chance of being promoted than other workers with a comparable level of performance). On the other hand, Morikawa (2020) examines the case of a Japanese research institute that switched to teleworking abruptly and without preparation during the lockdown, and finds that productivity fell by an average of around 40%. There are multiple explanatory factors for this: lack of preparation, inadequate technical resources, lack of communication between colleagues and unsuitability of the home-working environment, especially where young children were present. These two opposing assessments are not really comparable (different contexts, activities, skills and countries), but they still allow us to draw a first conclusion that is confirmed by other analyses on the subject: teleworking will have a more positive impact on productivity if the workers and managers concerned are engaged, if all actors are adequately prepared and trained for this type of arrangement, and if workers have appropriate equipment and a suitable working environment at home.

In many cases, the slowdown in communications between colleagues hinders the circulation of information within a professional environment. Thus, full-time teleworking by 100% of eligible staff can harm productivity. In a recent analysis, the OECD (2020) suggests that the relationship between performance and intensity of teleworking follows an inverted U shaped trajectory, with the optimal level of teleworking varying according to the type of activity (see Chart 1).

The impact of teleworking on productivity may also depend on factors such as firm size or the type of tasks carried out: the effect can vary depending on whether the tasks are creative or repetitive (see Dutcher, 2012). However, it is difficult to evaluate the effect of teleworking on productivity due, for example, to selection biases linked to the fact that employees who are willing to work from home are frequently more motivated, put more effort into their work and are higher performers.

The switch to teleworking during the 2020 lockdowns generally took place under unfavourable conditions, thereby limiting the potential productivity gains. Often the switch was made without concertation or suitable equipment, and without prior preparation or training for either staff or managers. In some cases, moreover, the home working environment was not conducive to working effectively – for example, when schools were closed for health reasons. The unique nature of this experience therefore makes it difficult to draw general conclusions on the potential impact of teleworking on productivity.

Several mechanisms may explain the positive effects

The literature describes several channels whereby teleworking can positively affect productivity. Among the effects cited, we have chosen to focus on the following.

A first channel is the increased motivation felt by teleworkers when they are given more flexibility and autonomy in choosing their work location and organising their work-life balance. This mechanism is reinforced by the reduction in fatigue that comes from the saving in commuting times. Part of the time saved is also sometimes reallocated to labour, which in turn raises teleworkers' apparent productivity (see, for example, Arntz et al., 2020). The fall in the number of non-essential meetings and unwanted distractions is also cited as a main reason why teleworkers are more efficient (after the reduction in commuting times; see, for example, Ozimek, 2020).

A second channel is linked to the decline in the need for real estate capital resulting from increased teleworking (see Bergeaud and Ray (2020) for a summary). The greater the amount of office space saved through teleworking and the higher the level of property prices, the greater the potential gain. For a given level of labour productivity, this translates into a rise in total factor productivity.

A third channel often cited in the literature is the acceleration in the digitalisation of the economy and in the use of digital technologies caused by teleworking (see, for example, di Mauro and Syverson, 2020). This is one of the positive consequences of the Covid-19 crisis, and is causing the productivity gains linked to the digital revolution to be felt sooner than expected. This favourable effect is likely to be gradual and should only become significant over the medium term.

By accelerating the use of teleworking, the Covid-19 crisis could lead over the long term to an acceleration in productivity and hence to a lasting increase in potential growth. This is one of the fundamental ways in which it differs from previous economic crises, which were generally accompanied by a slowdown in trend productivity and hence a decline in potential growth.