

Teleworking and productivity: a complex binomial

COVID-19 and the social distancing measures imposed to curb its spread have forced a large number of people to telework. This is a practice which has been somewhat uncommon in our society to date, but which will no doubt persist long beyond the current pandemic. The shift from going to the office – where a large number of tasks are carried out that could easily be performed remotely – to teleworking has ramifications in many areas, ranging from the purely economic to the social. In this article, we focus on the economic sphere, and particularly on the impact of teleworking on productivity.

The pros and cons of teleworking: concentration versus collaboration

Nicholas Bloom, professor of economics at Stanford University, published an empirical analysis in 2015 on the benefits of teleworking in terms of labour productivity.¹ The study, based on the results of an experiment conducted over a nine-month period in one of the world's largest tourism service companies, concluded that remote working boosted workers' performance by 13%. This improvement is attributed to them having both fewer distractions and fewer breaks per shift worked.²

A significant insight from the study is that adapting to employees' preferences is a key factor. Thus, the increase in workers' performance goes from 13% to 22% when teleworking is voluntary rather than imposed. After all, while it offers a potentially excellent way to boost concentration levels, teleworking also leads to social and professional isolation, which can have a negative impact on worker productivity.

In addition to boosting performance, two additional elements favoured further increases in the company's productivity. Firstly, there was a lower staff turnover rate among the employees who worked remotely, which substantially reduces the costs associated with selecting and training new employees. Secondly, the lower maintenance costs of office buildings more than offsets the digital investment made in the homes of employees working remotely. These three elements (performance, staff turnover and maintenance cost savings), when taken together, represented an improvement in the productivity of the company analysed by Bloom of 20%-30%. But is creative work also more productive in a teleworking situation? Are there types of creativity that may particularly benefit from a shared working environment?

Open, flexible and versatile office environments facilitate creativity and innovation. In particular, an important element for innovation is knowledge sharing, a process that occurs more frequently and easily when face-to-face interactions occur between colleagues.³ The reason for this is none other than the climate of trust that this kind of face-to-face interaction generates. In fact, Silicon Valley's big technology companies had not opted for teleworking prior to the pandemic precisely because worker interaction and collaboration is essential to their constant innovation in products and services.

At this juncture, however, it is important to make two clarifications. Firstly, the use of advanced technologies that enable frequent and relatively personal contact with workers remotely can also foster a climate of trust and, therefore, knowledge sharing. Secondly, new generations of workers (digital natives) may require less face-to-face contact in order to establish the links of trust needed to collaborate among colleagues.

Finally, remote working is not exempt from other problems. For instance, it has been documented that working remotely still carries a certain «stigma», as the amount of time a worker spends in the office is often associated with their commitment to the company.⁴ Bloom's study, for example, identifies a negative relationship between teleworking and professional progress: if we consider two equally productive employees, the one working from the office was more likely to be promoted than the one working remotely.

1. See N. Bloom, J. Liang, J. Roberts and Z.J. Ying (2015). «Does working from home work? Evidence from a Chinese experiment». *The Quarterly Journal of Economics*, 130(1), 165-218.

2. Working overtime was not allowed during the experiment. The people working remotely used the time that they previously spent commuting to deal with personal matters, such that by the time they started their shift they did not need to take breaks to do so.

3. See T.D. Golden and S. Raghuram (2010). «Teleworker knowledge sharing and the role of altered relational and technological interactions». *Journal of Organizational Behavior*, 31(8), 1061-1085.

4. For example, J.C. Williams, M. Blair-Loy and J.L. Berdahl (2013). «Cultural Schemas, social class, and the flexibility stigma». *Journal of Social Issues*, 69(2), 209-234.

The case of Spain: how much are we talking about?

The work of Bloom and co-authors offers us a starting point for making a first approximation of the impact of teleworking on productivity in Spain. To perform this calculation, we will take as a starting point this study's estimates on the impact of teleworking on workers' productivity. We will then use the percentage of employees in Spain who could potentially work remotely (our estimates place this figure at around 33%).⁵ Finally, we will apply the so-called «translation rate»: as Bloom and co-authors warn, in order to make the most of teleworking, it is not enough merely for it to be possible to perform the work in question remotely; it is also necessary that the person wishes to do so and that they have the right conditions at home to perform their work (e.g. a separate room for working or a broadband internet connection).

In the table we show the results in two possible scenarios. In a first, more favourable scenario, we consider the upper bracket of the productivity increase range reported by Bloom and co-authors (30%). We also consider a high translation rate of 75%, which means that most workers whose jobs can be performed remotely actually wish to work from home and have the conditions in which to do so. In a second, much less favourable scenario, we consider the lower bracket of the productivity increase range (20%) and a low translation rate of 25%. As can be seen in the table, the widespread adoption of teleworking could boost Spain's productivity by between 1.4% and 6.2%.

Macroeconomic impact of teleworking: scenarios

	Increase in productivity due to teleworking	Teleworking potential *	Translation rate **	Aggregate increase in productivity
More favourable scenario	30%	32.6%	75%	6.2%
Less favourable scenario	20%	32.6%	25%	1.4%

Notes: * The calculations take into account that, in Spain, 4.9% of workers already worked remotely on a regular basis prior to the COVID-19 crisis.

** Percentage of workers (as a proportion of the total number of workers with the potential to telework) who are able to telework properly.

Source: CaixaBank Research.

At first glance, this may seem like a significant amount, especially given that the average growth in Spanish productivity between 2000 and 2018 was a modest 0.3% per year.^{6,7} However, when visualising a paradigm shift like the one we are proposing, we must picture a progressive change that could take several years. The arrival of computers in the 1970s and 1980s can serve as an example: their introduction led to substantial productivity gains, but these were gradual given that their introduction brought with them new ways of working and new products and services that are still having an impact on productivity growth to this day.

Conclusions

Teleworking increases productivity. This increase is due to the fact that remote working creates an environment that favours concentration, reduces the number of breaks taken per shift worked, and offers savings for the company in terms of the cost of space and a lower staff turnover.

Nevertheless, in order to realise its full potential, a change in business culture is also required in order to adapt each occupation's tasks to the working methods that are best suited to performing them. If the office remains the best space for innovation, then it may be interesting to explore ways of working that alternate remote working – a form that allows for higher concentration levels – with working face-to-face, so as to continue to drive innovation.

Similarly, the benefits of teleworking can only be realised if the worker can choose whether to work remotely or not, and if the space they have set aside for doing so and the other circumstances in which it is done are guaranteed to be suitable. Otherwise, the experience can prove counterproductive. As Nicholas Bloom, co-author of the article in favour of teleworking we mentioned earlier, said in a recent interview on the rise in teleworking during the COVID-19 crisis: «We are home working alongside our kids, in unsuitable spaces, with no choice and no in-office days... This will create a productivity disaster for firms.»⁸

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5. See the Focus «[The COVID-19 outbreak boosts remote working](#)» in the MR06/2020.

6. Source: Bank of Spain.

7. At a growth rate of 0.3% per year, it takes 19 years to achieve 6% growth.

8. Adam Gorlick. «Productivity pitfalls of working from home in the age of COVID-19». SIEPR, 30 March 2020.