

## Technology and progress

Technological change lies at the root of the economic and social progress we have experienced since the first industrial revolution. Yet despite this, the current technological revolution, in addition to fascination, does not cease to generate anxiety. Joseph Schumpeter stated that «in a capitalist society, economic progress implies disorder», and we know that disorder, among humans, leads to unrest. This is why the progress of the past few centuries has been accompanied by the development of public institutions and policies that, to a certain extent, have allowed this disorder to be redirected or governed. The great challenge lies in adapting these institutions and policies to the changes that are currently taking place.

One of the key elements for ensuring that technological change can bring prosperity for the vast majority of the population is the educational system. Besides reaching specific technical knowledge, above all this system must teach people how to learn. To this end, skills such as critical thinking, communication skills and teamwork are important, as are values such as hard work, creativity, rigour, collaboration, honesty and diversity. It is good that various teaching models currently coexist that are moving in this direction, in order to learn best practices from them and extend them across the system as a whole.

Public policies must also take into consideration the effects of technological change on employment and wages. Change produces winners, but also losers. The challenge lies in compensating the latter so that the differences between one and the other are not too marked and so that no groups of the population are excluded from the train of progress.

In this context, active labour market policies, which facilitate the reallocation of labour, must play an increasingly important role. For those workers on the lowest incomes, an optimal mix must be found between a minimum wage policy, a negative tax rate on low incomes (to supplement their income) and a housing policy that facilitates access at a reasonable cost. In the labour market, it is also necessary to clarify the status of new forms of labour relations, such as between technology platforms and those who offer their services through them. Legal security is an essential ingredient for promoting new technologies and new business models.

Other policies can also help to promote the adoption of new technologies and, in this way, increase the productivity of the economy as a whole. For companies, for example, the degree of flexibility to reorganise their operations and to redefine their different job positions is particularly important, and these are aspects that depend, in part, on the legal framework. There are also regulations that penalise companies that reach a certain size, which ends up preventing many of them from acquiring an adequate scale to invest in new technologies and to get the most out of them. Finally, policies that encourage competition can also serve as a catalyst for innovation, both in terms of reducing the number of sectors protected by regulations and through measures that prevent technology giants from abusing positions of dominance.

The nature of the progress generated by technological change will also depend on whether we use it responsibly. In this regard, the legal framework that we define will constrain certain uses which, as a society, we consider undesirable. But beyond what these formal standards might dictate, business ethics – the conduct of business owners, managers and employees – will be of even greater importance. In the field of data, for instance, there will be companies that adopt business models based on responsible and transparent use of their clients' data, while others will not. Corporate social responsibility is therefore key for combining technological change and economic progress.

Given the date of this edition, I will sign off by wishing you all the best for the holiday season and hoping that you enjoy a good read. When you do so, remember Gutenberg, the father of one of the most influential technologies for the history of mankind.

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