

Editorial

Digital Structural Change and the Welfare State in the 21st Century

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While digitalization promises significant additional prosperity, it also threatens to lead to higher inequality. 'Digitalization pessimists' fear that it might have a significant negative impact on the demand for labor. A major automation wave or increasingly capital-intensive production might push numerous people into poverty and, hence, would reduce the overall wage share and raise corporate and capital income. In such a polarized society, the majority of the population would have to rely on welfare benefits and need to be content with low and at best stagnating real income and only a small number of technology-interested people would be able to work their way upwards in society. At the same time, capital owners would reap large gains from digitalization. Increasing imbalances might lead to significant social and political disruptions, as the welfare states would probably be hard pressed to offset inequalities against the background of global coordination problems, e.g., in the

area of corporate taxation ("profit shifting" and "tax avoidance").

However, digitalization does not only imply risks but also offers large opportunities for the society and the welfare state. 'Digitalization optimists' point out that technological progress has led to a significant increase in income and prosperity in the past. In a goldilocks scenario, a digitalization-related boost to sluggish productivity growth might create room for wage increases. Indeed, if policymakers remain in control and succeed in raising adequate taxes on digitalization profits as well as help mitigating any adverse effects on the labor market (e.g., through a high quality of education), the digital structural change might make government finances more sustainable. In particular, the additional revenues might help to fund the ageing-related fiscal burdens, which are already looming in many countries. If, however, labor is broadly replaced by capital and technological progress leads to structural mass



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unemployment, the government will need to rethink the financial basis of the welfare state. This unfavorable scenario might result in great budget gaps, as – assuming that effective corporate tax rates stay low – additional corporate tax revenues will not be sufficient to offset the drop in revenues from wage taxes and social security contributions and to fund higher welfare spending at the same time. This is because corporate profits are today taxed at considerably lower rates than income from labor. Furthermore digitalization could make it more difficult to tax corporations, effectively resulting in an erosion of tax revenues.

According to our scenario analysis, the EU countries would – on average – have to deal with a huge annual fiscal deficit of circa 7% of GDP if automation reduced employment to half its current level. In Germany, the largest EU economy, the fiscal gap might even amount to almost 10% of GDP. And, even if employment declined less,

say by 25%, the average deficit in the EU countries would still come to a very high 3% of GDP. Even if the average wage level of the remaining employees rose on the grounds of increased productivity, the welfare states would nevertheless have major financing problems. Assuming that average wages rose by 30% and employment was halved, the deficit would still amount to a very high 6% of GDP.

At this junction, it is uncertain how digitalization will affect the demand for labor and the public finances. As long as there are no clear, definite signs that machines and robots are replacing human labor, it is probably better not to make dramatic changes to current tax and social security systems. Nevertheless, governments should try and prepare their countries for the future, for example, by paying more attention to education policy and adapting the international tax system to the realities of the 21st century, e.g., in the field of corporate taxation.