Title: Four-Day Workweek Paid for Five: What to Think About It? By Bruno Van der Linden Bruno Van der Linden is a professor emeritus of economics at UCLouvain and a researcher at IRES/LIDAM (UCLouvain).

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The reduction of the weekly working hours has recently come to the forefront in Belgium. The goal is not to marginally reduce this duration but to experiment with a four-day workweek formula accompanied by a significantly reduced weekly working time, with the reference being the 32 -hour workweek (four times eight hours a day, for example). There have been numerous assessments of past implementations of working time reduction. The intention here is not to summarize these evaluations, which vary in quality. Faced with recent positions in Belgium regarding the "four-day week," this focus of Regards économiques aims to clarify the range of implications of such a formula. Too often, positions only highlight one or the other of these implications.

Moving to a "four-day workweek paid for five" (the most commonly heard formula and the only one considered here) means reducing the weekly working time by $20 \%$ while keeping the weekly pay unchanged. All else being equal, the hourly labor cost thus increases by $25 \%{ }^{1}$. This reduces the profit margins of both for-profit and non-profit enterprises. Furthermore, if the duration of a company's operation decreases as much as the working hours of its workforce, the level of production and associated revenues decrease. Increasing labor costs on one hand and reducing the volume of activity on the other generally lead, sooner or later, to a reduction in the quantity of labor desired by companies. In short, in the long run, employment suffers.

But we cannot stop at these direct effects because such a modification has indirect effects.

1. Up to a certain point, working fewer hours per week should increase workers' hourly productivity. However, this effect was more pronounced when working hours were very long (during the 19th and a good part of the 20th century) than it is now. Besides the effect of reducing worker fatigue, having an additional non-working day opens the way to a better balance between professional and private life. It is plausible that this beneficial implication will, in turn, lead to greater efficiency at work and/or a reduction in absenteeism at work.

How far can these initial induced effects go? A reasonable assumption is that the additional hourly productivity of workers, which has just been mentioned, reduces but does not eliminate the direct effect on production of a decrease in the number of weekly working hours. One might consider this assumption pessimistic by citing certain recent experiences called $100 / 80 / 100$. This means maintaining $100 \%$ pay while working $80 \%$ with the commitment of workers to maintain their contribution to production at $100 \%$. If workers actually produce the same level of effort in four days as they do in five, an

[^0]increase in workplace stress and fatigue is highly plausible. Therefore, one must question whether such a sudden and strong increase in productivity is achievable and, if so, whether it has any chance of being sustainable.
2. If the company wants to maintain the same production volume and there is no initial underutilization of labor (such as temporary unemployment, for example), it must hire more workers since each worker produces less (this is, in any case, the assumption made at the end of the previous point). This need for hiring also applies to companies that necessarily operate continuously seven days a week, twenty-four hours a day. This compensatory hiring is often referred to as the "sharing of work" effect. However, it is essential that the appropriate labor force is available and can be recruited and trained at a reasonable cost, depending on the type of labor considered. In the current context where the labor market is tight, this concern should be more frequent than in other times. If the recruitment of additional workers proves to be "too difficult" for certain professions, a contraction of the company's activity is likely, unless it relies more on overtime (which is more expensive for the employer). When the recruitment of additional workers is possible, it leads to an increase in business costs through recruitment and training expenses. In either case, the labor cost thus increases indirectly.

The (potential) compensatory hirings increase labor income in the economy. This results in, among other things, an increase in consumption, a significant portion of which is imported (referred to as "import leaks"). The effect of stimulating the national economy is therefore limited, often temporary, and even more so as the resulting stimulus quickly raises prices. This stimulus effect could also be offset by another consequence of reducing working hours. If, taking all effects into account, it leads to an increase in business costs, those companies that can set their selling prices will raise them. This will, in particular, reduce the purchasing power of households.

Furthermore, if the reduction of working hours is perceived by the population as a genuine improvement in working conditions (point 1 above), this should increase the number of people seeking employment and thus alleviate labor market tensions. This can manifest as an increase in applications for vacant positions or a decrease in resignations.
3. In the medium term, a profound reorganization of production can occur following the transition to a 32 -hour workweek. This reorganization may be accompanied by an increase of the capacity utilization rate (i.e. the extent to which the available capital premises, machinery, etc.- is actually used over, say, a week), for example, by having the company operate six days a week with full-time workers (working four days a week) and others part-time (working two days). Extending the use of capital has a favorable effect on total production costs and should be beneficial for employment. However, several conditions must be met for all of this to happen. An extension of the use of capital implies an increase in production. Therefore, the existence of a demand for this additional production is a necessary condition. Organizational innovation capacity within the company is also required. In addition, genuine social dialogue within the company is necessary because the implications of such reorganizations are manifold, especially for workers.

Given the complexity of these effects, simple and mechanical reasoning is erroneous. Absolute statements about the effects of working time reduction are often biased. It is not enough to
pinpoint case studies among willing companies to support one thesis or another. The fact that these companies wanted to implement such a profound change implies that conclusions about them cannot be naively extrapolated when considering the imposition of a generalized formula for weekly working time reduction. Only an independent analysis of a large, representative sample of companies observed over an extended period (not just a few months, as in some recent experiments) would identify the profiles of companies where the transition to 32 hours is beneficial.

Until now, the argument has given relatively little consideration to the effects of increased leisure time allowed by reduced working hours. Effects on health, continuous education, civic participation, child education, etc., could be beneficial, including from an economic perspective. However, these effects should be expressed conditionally, as increased leisure time can also be used for other purposes.

The impact of reduced working hours on greenhouse gas emissions is also a factor to consider. In itself, reducing the workweek from five to four days should significantly reduce commuting (assuming no change in telecommuting behavior). Yet, the relationship between working hours and greenhouse gas emissions in Western countries is less straightforward than it seems. A recent study of 55 countries (including 37 rich countries) concludes that in the 21st century, and in rich countries, the reduction in the annual working hours per worker has tended to increase emissions. One possible explanation is that increased leisure time can also be devoted to carbonintensive activities.

Finally, the speed of "technological progress," particularly recent developments in artificial intelligence, raises concerns about alarming job losses. In this case, is reducing working hours not an obvious solution, even in the long run? Throughout history, alarmist discourse about the impact of technological innovations on employment has proven to be incorrect because it underestimated their induced effects. The associated productivity gains have indeed lowered the costs and prices of existing goods and services, and these technological innovations have led to the emergence of new products and services (consider the introduction and widespread use of the telephone or the internet, for example). These induced effects have created as many or more jobs than the direct effects of these technological transformations have destroyed. However, this net neutral or positive balance should not obscure the fact that significant differences in the composition of jobs destroyed and created have involved sometimes painful adjustments, especially for certain groups within the population.

It is clear that the current and upcoming wave of technological innovations will destroy jobs and create new ones (including in functions not yet imagined and related to new products and services). However, with artificial intelligence, "it could be different" because the change is more profound: machines acquire unprecedented capabilities (cognitive abilities, judgment, and perception of emotions in human interlocutors, etc.). These technologies will, therefore, enable the replacement of humans in a wide range of tasks. We still lack perspective to measure the direct and induced effects of this current wave of innovations. If it turns out that indeed "this time, it's different," there will clearly be reason to consider collective working time reduction as one of the possible responses.


[^0]:    ${ }^{1}$ Let $w$ designate the hourly labor cost and $h$ the daily duration of work before the reduction in working time. Assume that the shift from 5 to 4 days or work per week is made without changing $h$. Then, the new hourly labor cost is the (assumed) unchanged labor cost per week $5 w h$ divided by the new length of the working week $4 h$, i.e., 1.25 w . So, everything else equal, the relative change in the hourly labor cost is a rise of $25 \%$.

