



Comisión  
Nacional de  
**Evaluación y  
Productividad**

# EXECUTIVE SUMMARY

Technical Analysis of a  
Legal Reduction of the Workday

2020

## **Technical Analysis of a Legal Reduction of the Workday**

1. A presidential mandate, delivered on September 13, 2019, requested an analysis of the expected impact of legally reducing the maximum working hours on employment levels, wages, informality, and economic growth. The mandate did not include an analysis of the policy's benefits, nor did it require specific recommendations from this Commission.

2. People value both income and leisure time, so along with increased income, economic progress also implies shorter working hours and a reduction in the total number of hours worked per year, as confirmed by international evidence. Among OECD countries, real per capita GDP increased from \$37,000 annually in 2000 to around \$46,000 in 2018, while weekly working hours decreased from 39 to 37.7. In Chile, between 1990 and 2018, per capita income rose from \$9,500 to \$25,100 annually, the effective weekly working hours decreased from 49 to 41.3, and the total hours worked per year decreased from 2,422 to 1,941.

3. Considering this relationship, if Chilean per capita income were to grow at 2% (approximately 3% GDP growth, equivalent to the average of the last decade), we estimate that we would be working 40 hours per week in 2028 and the current 37.7 hours worked by the OECD today by 2047. If per capita income grows at 1%, these working hours could be reached in 2038 and 2076, respectively. If per capita income grows at 3%, we will achieve these working hours by 2025 and 2037. Thus, improving our productivity to increase economic growth is crucial in creating conditions that allow for more leisure time.

4. Some countries (especially in Europe) have sought to accelerate the working week reduction through legal means. These experiences are very elucidative for our country. In the cases we observed, the policies were implemented during an economic expansion period, not during a recessionary scenario like the current one in Chile. Additionally, the policies were designed to explicitly reduce some expected negative impacts related to the higher labor costs in reducing working hours. In particular:

- a. The measure was announced years in advance, allowing for a voluntary process of reducing working hours agreed upon between companies and workers;
- b. Transition periods were provided, differentiated according to the size of the companies and the expected impact of the measure;
- c. Labor flexibility was promoted to increase productivity and compensate for the higher labor costs;
- d. The shortened working week was calculated over a reference period longer than one week to allow for these adjustments (four months in the case of Portugal and one year in the case of France);
- e. The reduction of the additional cost associated with overtime hours was allowed;
- f. Subsidies were provided to companies during the transition period. In summary, the measure was designed to minimize its negative impacts.

5.- To estimate the potential effects of a legal reduction in working hours, we conducted a micro econometric analysis on the reduction of working hours from 48 to 45 in Chile. This measure was announced in 2001 and implemented in 2005. The investigation was done at the individual level and considered alternative methodologies and databases. We found differentiated effects depending on the individual's working hours under study. Thus, those who worked more than 45 hours per week experienced a negative impact on employment and wages, while those who worked less than 45 hours underwent a positive effect on employment. The main results of the analysis are as follows:

- a. The reform resulted in a 4.5 percentage point reduction in employment for the group the measure aimed to benefit (private sector employees working more than 45 hours). The effect was more significant for young people (8.3), women (5.6), and workers with a medium level of education (5.4).
- b. Part of the reduction in employment for the affected group translated into higher unemployment, especially for men aged 31-49. This group's unemployment probability increased from 3% to 4.8%.
- c. Another part of the reduction in employment for the affected group led to increased inactivity (i.e., not participating in the labor market upon losing their jobs), especially

for women, individuals with a medium level of education, and those under 30 years old.

- d. For those who worked more than 45 hours and remained employed, the reduction in their working hours resulted in a 2% decline in their real wages, with a more significant impact on those under thirty.
- e. No significant impact was found on self-employment (an approximate measure of informal employment) or public-sector employment.
- f. Before the reform, private sector salaried workers with working hours up to 45 hours, public sector employees, self-employed workers, and unemployed individuals increased their employment rate from 40% to 48%, comparing one year before and one year after the reform, indicating a shift in the employment composition.

6. In addition to the microeconomic study at the individual level, we analyzed the macroeconomic impacts of the 2005 reform. These estimates have a higher level of uncertainty than those obtained with microeconomic data, as they present impact ranges. We estimated that for every 1-hour reduction in the legal working hours, effective working hours decrease by 0.4 hours (many work less than the maximum legal hours). Thus, a reduction in the ordinary weekly working hours from 45 to 40 (equivalent to 11%) would result in:

- a. A reduction of around 5% in the total hours effectively worked annually (average per person);
- b. A decrease in real monthly wages in the range of 0.5% to 5.5%;
- c. A decrease in annual GDP growth between 0.5% and 1.5%;
- d. A decrease in annual productivity growth between 0.1% and 0.4%, generated by job reallocation;
- e. An annual capital stock growth increase between 0.1% and 0.2%, presumably replacing the relatively more expensive labor factor.

7. Based on these estimates, we simulated a gradual implementation of a yearly reduction of one hour, leading to a 40-hour working week in five years. The results show that the adverse effects on wages, and to a lesser extent, GDP and productivity, decrease.

8. The evidence from the 2001-2005 reform illustrates the effects of a legal reduction in working hours. This exercise should consider the Chilean economy's situation between 2005 and 2019. The four-year gap between the policy's announcement (2001) and implementation (2005) generated anticipation effects in the labor market and effects after implementation. This suggests that our estimates may underestimate the impact of a similar reform implemented suddenly in the current situation. Thus, the effects of the 2001-2005 reform would be conservative compared to the present scenario, mainly because achieving productivity efficiency is more challenging with shorter working hours, given the increased possibility of labor substitution due to automation and the expansion of the labor supply resulting from immigration. Additionally, it is reasonable to assume that the impact of reducing from 45 to 44 hours would be more significant than lowering from 48 to 47 hours, which further amplifies the underestimation effect.

9.- Based on this study, we conclude that there are well-founded reasons based on domestic evidence and international experience that advise for a profound debate regarding the policy's objective, design, and implementation. In particular, flexibility mechanisms should be considered to allow for increased productivity (which is already very low in our country and would be further reduced by the proposed reform). Additionally, adjustment periods and instruments that enable companies to reorganize their productive structure to mitigate the expected adverse effects on wages and employment should be encouraged.