



Comisión
Nacional de
**Evaluación y
Productividad**

EXECUTIVE SUMMARY

Annual Productivity Report

2022

Productivity Report 2022

The National Evaluation and Productivity Commission (CNEP) was created in August 2021 following a modification of the regulatory framework governing the National Productivity Commission's operation. Initially established in February 2015, its primary function was to make proposals and recommendations to increase the country's productivity and improve the quality of public policies through two types of studies: those originating from a mandate or request from the Chilean government and those arising from the analysis generated by CNEP's board members. Currently, the CNEP's regulations stipulate that, in addition to developing recommendations to improve productivity and people's welfare, it must advise the President of the Republic on matters related to improving regulatory quality and evaluating public policies and programs, including the methodologies used.

Regarding the country's productivity, the CNEP has published the Annual Productivity Report for the seventh consecutive year. The President of Chile mandates this report to monitor the country's productivity evolution, both aggregated and sectorial, and identify areas for improvement.

Since 2000, according to CNEP's Annual Reports, Chile has experienced sustained productivity deceleration, with an average annual contribution to growth of only 0.1%. During the 1990s, average annual productivity growth was around 2.3%, and if this pace had been maintained, the country's per capita income level would be a third higher than it currently is. Higher productivity in a country enables higher real wages, more significant fiscal revenues, and generally, better financing of more and better public services. This allows people access to more leisure time and a more comprehensive range of goods of better quality and lower prices. Additionally, higher productivity enables more output to be generated with the same level of inputs, which is especially relevant given the current national discussion about the feasibility of reducing the workweek to 40 hours.

Although productivity measures how many goods and services are produced with a specific number of productive factors (such as labor and capital), it is a variable that is not directly observable and must be estimated. The CNEP estimates the Total Factor Productivity (TFP) each

year based on determining the ratio between the output and an index of the combination of the productive factors (capital and labor) used in generating the production each year.

The 2022 Annual Productivity Report elaborates and presents the figures for the country's TFP evolution up to the present year. This exercise enables the observation and characterization of the country's productivity evolution, conducted for both the aggregate economy and the economy without mining. Mining is excluded as a sector due to its high relevance in the country's GDP, although not as relevant regarding employment, and its dynamics only sometimes represent those of the rest of the economy.¹

The analysis shows that in 2022, the aggregated TFP would have fallen between 3.4% and 3.6% and 2.1% and 2.4% for the non-mining economy, partially reversing the productivity gains generated during the pandemic (2020-21 - see Annual Report 2021). Under this hypothesis, the active companies and workers during this period were the most productive, contributing to increasing the TFP. One of the reasons that could explain the quick productivity rebound during the pandemic is workers' transitory departure (and subsequent return) and the cessation of low-productivity companies' operations during the pandemic (such as construction, tourism, or smaller companies). This phenomenon also occurred in other places, such as the United States.

Under this hypothesis, the companies and workers that remained active during this period were those with higher productivity, contributing to the increase in TFP. As has been emphasized in previous reports, a proper productivity analysis must be carried out with a long-term perspective, considering that the factors that establish it can be seen over several years. Looking towards the future, potential GDP will register low growth of around 2.3% by 2027, which suggests low growth in TFP in the coming years if no factors significantly change the trend. It is necessary, therefore, to constantly work on policies whose fruits are seen after several years.

¹ The TFP (Total Factor Productivity) figures from CORFO UAI (predecessor to the CNEP measurement) indicated that, when excluding natural resource sectors, the rest of the economy maintained productivity growth. According to CNEP figures, this held true during the 2000s, where the slowdown in aggregate TFP was closely linked to the decline in mining TFP. However, from the 2010s onwards, the slowdown would have permeated other sectors.

New functions of the National Commission for Evaluation and Productivity: evaluation of public programs

During 2022, there was significant growth in the number of workers, which resulted in a decrease in labor productivity compared to the previous period, affecting the entire TFP. Productivity remains within the trend of relative stagnation that began around 2005, and the surge during the pandemic would have been mainly transitory. The prospects for TFP do not indicate any change in trend; therefore, it is necessary to generate and apply a vigorous productivity agenda that significantly increases investment, improves the quality of education, and promotes entrepreneurship and innovation.

The National Commission for Evaluation and Productivity (CNEP) must advise the President of the Republic on various matters related to the evaluation of public policies. In this regard, it is essential to highlight that, regardless of its implementation path, whether through plans, programs, investment projects, regulations, or the general action of public institutions, systematically evaluating the relevance, quality, and efficiency of public policies and their components is a specific task to improve the quality of life sustainably. This is not only to determine their effectiveness in addressing the problem that justified their design and implementation but also to respond to growing demands for the efficiency and quality of public spending in a framework of greater transparency regarding resource management.

The advisory role of the CNEP will consist of measuring the impact of new regulations and reviewing existing ones to evaluate their coherence. Additionally, the CNEP will advise the Undersecretary of Social Evaluation and the Budget Directorate (DIPRES) in this matter through the conduct of studies and proposals that enhance and strengthen the methodologies used, monitoring mechanisms, and evaluation. Within a work agenda that must include a roadmap of proposed public programs and institutions to be evaluated, the CNEP will offer programs, institutions, and public policies for ex-post evaluations. In this context, the chapter "Evaluation of Public Policies" addresses this function for the first time and analyzes the evaluation ecosystem in general, both in light of comparative and national experience, to understand its scope, foundations, evolution over time, and, above all, the challenges it poses for the following studies and revisions of the CNEP.

Effects of the COVID-19 Pandemic on human capital

The CNEP Annual Reports offer studies on various subjects that contribute to the debate on productivity. In the current post-pandemic conditions, human capital as a productive factor was analyzed in the chapter "Effects of the COVID-19 pandemic on human capital," and evidence was presented suggesting that the effects of the pandemic will be considerable and lasting, affecting long-term labor productivity and potential growth. The results also indicate that the pandemic had a more substantial impact on the education of students from more vulnerable sectors, which could lead to more profound inequities in the long term.

The analysis is based on empirical evidence, using public administrative education data in Chile, combining descriptive analysis with causal inference methods:

1. The chapter documents that the proportion of remote class days was considerably higher in schools with low socioeconomic status. During the years 2020 and 2021, municipal and subsidized private schools spent more than 80% of their time in online classes.
2. The data indicates that this group of students faced the pandemic with lower skills and poorer internet access.
3. The study reveals incipient signals about possible impacts on the accumulation of human capital: for students in municipal and subsidized private schools, there is a decrease in access to higher education and a decline in school attendance in 2022.

A fixed effects regression model indicates a causal relationship between the percentage of days that schools were closed during the pandemic and the decline in attendance in 2022. The chapter concludes with tentative calculations of long-term impacts, specifically on the future salaries of current students.

Studies completed and in progress during 2022.

In 2022, the CNEP delivered to the government the study "Efficiency in the Management of Primary Health Care," which offers a diagnosis of the current situation and presents a set of 56 findings. Based on these findings, the CNEP provides 36 recommendations to generate substantial improvements in the management, infrastructure, and financing of Primary Health Care to

contribute to a robust health system that allows for developing and improving people's well-being in Chile. Six measures were prioritized, considering feasibility, time, and impact, with the focus being to improve people's access to and use of technology in the system. Additionally, the CNEP delivered the "Study on the Efficiency and Effectiveness of public social spending in the Context of the Pandemic." The study identified how direct transfers to households began (at the beginning of the pandemic) with low coverage, concentrated on more vulnerable families. Towards the end of the pandemic, these transfers were expanded to include 80% of the population, generating a positive cumulative net variation in household work income (excluding withdrawals from the AFP). While the transfers more than compensated for the loss of work income due to the pandemic, this occurred towards the second quarter of 2021, reflecting that the aid was adequate but did not manage to be timely. This study offers three recommendations to improve how the state controls the information used to develop programs, benefits, and services.

In March of the current year, the presidency mandated the CNEP to carry out the study "Productivity in Telecommunications." The objective is to identify the main barriers to productivity growth in different productive sectors and benefits to households after the increase in the provision of telecommunications services, proposing actions to improve their performance. The study is expected to be completed during the first half of 2023.