



Comisión  
Nacional de  
**Evaluación y  
Productividad**

# EXECUTIVE SUMMARY

## Annual Productivity Report

2020

## **Productivity Report 2020**

Productivity growth is vital for long-term improvements in living standards. Amid the COVID-19 pandemic and the accompanying uncertainty, productivity measurements require further contextual analysis, as presented in this edition of the Annual Productivity Report.

For the fifth consecutive year, the National Productivity Commission (CNP) publishes the Annual Productivity Report, mandated by the Presidency. The report aims to track the evolution of productivity in Chile, both in aggregate and sectoral terms, to identify areas for enhancement.

The significance of boosting productivity is evident, given the concerning slowdown since 2000. Average annual productivity growth was about 2.3% in the 1990s, but it has only contributed 0.1% to average yearly growth in recent years. If the previous pace had continued, Chile's per capita income and quality of life would be one-third higher today. Countries that are more productive typically enjoy increased leisure time, access to higher-quality goods at lower prices, higher real wages, and the ability to finance more and better public services.

Productivity is calculated in various ways, with CNP using Total Factor Productivity (TFP) based on the ratio between output and an index of the productive factors used. TFP measures the number of goods and services produced with multiple productive factors, such as labor and capital—higher productivity results in increased output with the same input levels. As productivity is not directly observable, it must be estimated, with appropriate analysis focusing on the medium term.

### **Specificities of productivity variation in the COVID-19 context.**

The COVID-19 pandemic has presented challenges in measuring productivity and explaining positive or negative short-term growth.

Annual TFP measurement has limitations, as highlighted in the 2016 Annual Report. In particular, cyclical adjustments are crucial to account for the output generated by the productive factors used (not potentially used). Labor and capital adjustments take time, so having more employed effective elements does not necessarily mean having more factors producing (e.g., fewer hours used). This limitation disappears in the long term, as cyclical adjustments tend to cancel each other out.

The pandemic has affected labor supply and workforce, causing estimates to be susceptible to assumptions regarding the intensity of productive factor use. Two different methodologies yield different results for 2020, highlighting the challenges of measuring the adequate adjustment of capital and labor during this time. These figures should be analyzed within a longer-term horizon, as cyclical adjustments tend to disappear in the medium term. This year's estimation may be constrained once base employment and activity information is corrected during 2021.

Considering data from 2015 to 2020, along with recent microeconomic information, significant conclusions arise regarding the TFP's current behavior. In particular, the deceleration trend over the past 20 years has remained relatively the same, posing long-term economic growth and development challenges. Lessons on productivity will emerge after the pandemic ends and the economy's long-term productive changes occur. The acceleration in adopting new technologies, such as teleworking, artificial intelligence, and robotics, should create opportunities to improve aggregate efficiency. However, they also represent challenges for training to complement work and capitalize on these opportunities.

### **COVID-19's Impact on Employment, Sales, and Business Activity**

This updated edition of the Productivity Report features special chapters that explore the implications and aftermath of COVID-19 on employment and business activity. The analysis particularly emphasizes the effects on SMEs and sectors heavily impacted by health restrictions, such as construction, hotels, and restaurants. The pandemic resulted in an 18% reduction in sales between March and June 2020, with SMEs experiencing a 25% decline and large companies a 16% decrease.

The analysis further examines sales trends across various economic sectors. Industries most restricted by health regulations, such as arts and entertainment, hotels and restaurants, and construction, suffered the most significant declines at 69%, 46%, and 39%, respectively. In contrast, sectors like mining, information and communications, electricity and gas, and health maintained relatively stable sales, with a maximum drop of 2%.

Additionally, the number of active companies is reduced mainly in smaller businesses, with 15,000 small and 1,000 medium-sized companies becoming inactive in 2020. Employment data reveals that job advertisements and vacancies decreased significantly (-17.6% and -24.6%, respectively) during the social unrest in October 2019, and even more so following the pandemic's onset (-41% and -44.9%, respectively). Moreover, the proportion of full-time jobs offered has diminished, and experience and educational requirements have risen.

For job seekers, measures of "job search" activity declined during the social unrest and again after the pandemic began, despite higher unemployment rates. This decrease was particularly sharp among young people, individuals over 55, women, and workers looking to change jobs. Factors contributing to this decline include the risk of contracting COVID-19, confinement measures, limited mobility, childcare responsibilities, and diminished expectations of finding a job in a low labor-demand environment with heightened experience and education requirements.

These findings indicate that health risks significantly influence labor demand and supply and depress job search activity. Salaries offered in job advertisements positively correlate with infection rates, suggesting a compensatory differential associated with the perceived increased health risk.

These labor market developments have consequences for aggregate productivity, as stable jobs tend to possess a high productivity component. Due to the severity of the COVID-19 shock, many jobs have been lost, including those with high productivity that would have been viable in the absence of a pandemic.

Overall, the results demonstrate a negative impact exceeding 15% on sales, purchases, and the number of active companies compared to March 2020. This effect is even more pronounced in industries subject to health operating restrictions, such as construction, hotels, restaurants, and arts and entertainment. Formal employment, both salaried and self-employed, has also decreased significantly (15% and 26%, respectively).

### **CNP's Evaluation and Contributions**

The CNP strives to address crucial topics and foster public discourse through evidence-based studies and recommendations. Chapters 4 and 5 of this report outline the Commission's 2020 research and provide updates on the proposals put forth by the Commission.

The CNP has undertaken 14 comprehensive studies to date, encompassing a wide range of economic areas. These studies have resulted in the formulation of over 387 valuable recommendations for public policy. The areas covered include mining, technical-professional training and education, regulation and taxation of digital platforms, strategic sector regulation, efficient utilization of pavilions and management of waiting lists, female labor participation and gender equality in the labor market, productivity agendas since 2000, and annual reports tracking the country's aggregate productivity evolution. The CNP's extensive research and recommendations have contributed significantly to shaping effective policies across multiple sectors of the economy.

In 2020, the CNP completed the report "Productivity in Construction" and delivered it to the Presidency. The recommendations of this study focused on policies that promote adequate development of public infrastructure and policies that support more efficient execution of works (whether private or public).

Finally, the publication of the document: Twelve Recommendations for Economic Recovery (2020) is a necessary work to highlight, as it collects recommendations made by the Commission since its creation in various studies and that, in the current context, are considered relevant to support the reactivation of the economy. This study aligns with the

ongoing commitment of the CNP to monitor the implementation of recommended measures outlined in its previous reports. These reports include the "Agenda of Agendas: Review of Productivity Agendas" (2016), "Productivity in Large Copper Mining" (2017), "Women in the World of Work" (2017), "Formation of Competencies for Work" (2018), "Disruptive Technologies: Regulation of Digital Platforms" (2019), and "Efficiency in Operating Rooms and Prioritization of Patients for Elective Surgery" (2020). Through diligent monitoring of these measures, the CNP not only ensures the ongoing efficacy of its recommendations but also cultivates positive transformations across diverse sectors of the economy. The primary objective is to assess the extent of compliance with the proposed measures by distinguishing between implemented recommendations and those that are still pending. By doing so, the CNP stimulates public debate and discourse at both the legislative and executive levels, depending on the nature of the recommendations, whether they necessitate legal, administrative, or managerial modifications. This comprehensive evaluation framework encourages transparency and accountability while facilitating informed decision-making processes for the betterment of the country's economic landscape.

Of the 187 recommendations analyzed, almost all maintain their validity - only 1% lost validity and importance. Only 11% of the reviewed measures have been effectively "implemented," that is, fully complied with, possibly because many of the actions require long-term structural changes for their effective implementation, which explains why, to date, 32.7% of the recommendations are in a "partially implemented" phase. 43.7% of the CNP's requests have been taken into account, understanding that both the executive and legislative branches are working on or analyzing how to fulfill them. There are currently 14 bills being processed in Congress, which, if approved, would be applying CNP recommendations.

Notably, different governments have presented many of these projects more than once. Many, either need movement or their parliamentary discussion is paralyzed in one of the Upper or Lower House committees. This discontinuity indicates the need to emphasize a long-term strategy that goes beyond political cycles so that recommendations can be effectively implemented.

Currently, the Commission is carrying out two government requests. The first, Regulatory Review for SMEs, aims to conduct a review focused on this type of company to propose policies that encourage their activity and promote their prompt reactivation.

The second work mandated during 2020 refers to the development of policies to promote primary health care, along with policies that allow a more efficient use of health resources. This work continues the analysis carried out in the study on Hospital Efficiency and Management of Surgical Waiting Lists, delivered in early 2020.