Comisión Nacional de Evaluación y Productividad

# EXECUTIVE SUMMARY

# Annual Productivity Report

2016

## Productivity Report – 2016

This inaugural annual Productivity Report by the National Productivity Commission aims to examine Chilean productivity trends and analyze critical factors to promote more robust, sustainable economic growth, enhancing citizens' well-being.

Productivity measures the quantity of goods and services produced with specific inputs, such as labor and capital. It can apply to a company, a sector, or a country. Increased productivity implies making more goods and services with the same resources, which is the primary driver of economic growth. Higher capital productivity stimulates investment and raises wages, fostering greater social mobility and equity.

Increased productivity generally leads to greater well-being for citizens, through either better access to goods and services or more leisure time. Workers in more developed countries (hence, with higher productivity) work fewer hours per week and enjoy more extended vacations than Chileans.

This report underscores the following points:

1. Over the past 15 years, Chile's productivity growth has slowed. Productivity contributed 2.3 percentage points to annual growth in the 1990s, but this contribution has fallen to 0.1 percentage points since 2000. If the productivity growth rate of the 1990s had persisted, Chileans would have a living standard over one-third higher today.

2. The decline in aggregate productivity since 2000 is mainly due to the sharp decrease in mining productivity resulting from deteriorating ore grade and natural capital. The 1990s saw several large projects achieve exceptional efficiency levels. At the same time, high prices during the recent commodity super-cycle led to the exploitation of less productive deposits and changes in the labor market composition.

3. The productivity slowdown is not exclusive to the mining sector. Non-mining productivity growth also slowed, though less drastically, growing at around 1.4% per year since 2000 compared to 2.3% in the 1990s. This pattern is widespread across non-mining activities, except in the commerce and services sectors.

4. Productivity fell by -0.5% in 2015, and we estimate it fell between -0.5% and -1.0% during 2016. These declines reflect the underutilization of productive factors during a period of weak demand. The slowdown in aggregate productivity is concerning, with the trend continuing in 2015 and 2016. Non-mining productivity fell by -0.2% in 2015, while in 2016, it is estimated to have grown between 0.3% and 0.9%.

5. The recent productivity deceleration is a global concern, affecting countries at the technological frontier. Both the IMF and the OECD have expressed concerns about the lower productivity impact of new information technologies compared to technological advances in the second half of the 20th century.

6. In Chile, additional factors may exacerbate this global trend. Two potential hypotheses are that the liberalizing reforms of previous decades are reaching diminishing returns and that Chile's concentrated, productive base in natural resources is insufficient to sustain continued export dynamism, innovation, and productivity improvements.

7. Despite these hypotheses, Chile can continue raising aggregate efficiency by intelligently copying and adapting the best international practices and technologies, as the productivity gap with developed economies remains significant. However, this requires policies that facilitate and promote such imitation.

8. Besides potential productivity gains achieved by adopting more efficient technologies and processes, progress can be made by shifting production factors from

low-productivity to high-productivity activities. It is essential to remove barriers that obstruct efficient resource reallocation, whether due to market or state failures.

9. For Chile to reach the standard of living of developed countries within the next 10-15 years, it is crucial to reverse the current productivity deceleration and regain a strong growth trajectory. While significant progress can be made by intelligently imitating the best international practices and technologies, our progress will increasingly depend on our innovation efforts as we approach the technological frontier. This requires the removal of barriers hindering this process and the improvement of market and state functions, which impose immediate transitional costs but yield greater future rewards. An appropriate institutional framework for public policy that transcends political cycles is needed. The creation of the National Productivity Commission, as part of the 2014-2018 Productivity Agenda, is a step in this direction. Continually improving productivity is a vital task.

The remainder of the report is divided into four additional sections. The first section discusses the concept of productivity, its measurement, and its significance to the economy. The following section introduces the National Productivity Commission's productivity indicator, comparing it with other available indicators in Chile, all of which confirm the deceleration since 2000. The following section analyzes productivity evolution in Chile's unique context, a country rich in natural resources and heavily reliant on mining. It highlights the importance of distinguishing between productivity trends with and without mining and across sectors. The report confirms that while mining is the primary cause of the slowdown, the decline is not exclusively a mining issue but a cross-sectoral concern. It also emphasizes that a significant portion of productivity improvement stems from reallocating production factors to higher productivity activities. Finally, the last section concludes with reflections and outlines public policy challenges.