

Angelo Leogrande^{1*o^}

*LUM University Giuseppe Degennaro, Casamassima, Bari, Puglia, Italy, EU

°LUM Enterprise s.r.l., Casamassima, Bari, Puglia, Italy, EU

^University of Bari Aldo Moro

Labor Productivity in OECD Countries

Labor productivity in OECD countries grew by an average of 10.23% between 2015 and 2022. The OECD calculates the value of GDP per hour worked, providing a measure of labor productivity. The data is available in the form of an index number with the base year set at 2015.

Labor Productivity in 2022. An analysis of labor productivity data in OECD countries for 2022, with the base year set at 2015, shows significant variations among member states. Labor productivity is an essential indicator for evaluating how efficiently a country's economy transforms labor resources into goods and services. These data reflect each country's ability to innovate, improve work processes, and implement advanced technologies. Ireland stands out as the undisputed leader with a productivity index of 139.64, indicating a substantial increase since the base year. This can be attributed to the strong presence of high-tech multinational companies, especially in the pharmaceutical and technology sectors, which have significantly increased output per worker. Countries like Latvia, Poland, Turkey, and Korea also show robust increases, with values above 120. This suggests that these countries have implemented effective reforms or benefited from significant investments in technology and training, thus improving their labor efficiency. Countries such as the United States, Sweden, Germany, and Denmark show more moderate increases. Despite being already highly developed and efficient, the margin for further productivity improvements is relatively smaller, reflecting more gradual and stable growth. Some countries, like Luxembourg, France, and Greece, show productivity indices close to or below 100, suggesting that their labor productivity may have stagnated or even decreased since 2015. For France and Greece, this may indicate internal structural challenges, such as labor market rigidity or insufficient investments in key sectors. Overall, while some countries show significant progress, others face persistent challenges. The OECD, as an international body, can play a key role in assisting member countries with the exchange of best practices and transnational collaboration to address productivity challenges in a coordinated and effective manner.

Labor Productivity Trends between 2015 and 2022 in OECD Countries. An analysis of labor productivity data in OECD countries between 2015 and 2022 provides a detailed snapshot of how different economies have evolved their labor efficiency in terms of output produced per unit of labor. These changes are expressed in both absolute and percentage terms, with the base year set at 2015. Ireland stands out with an exceptional increase of 39.64%, bringing its productivity index to 139.64. This increase may reflect the impact of significant investments in high-tech sectors and the effectiveness of economic policies in promoting innovation. Other countries that have shown notable increases include Costa Rica, Hungary, and Latvia, with improvements of 16.44%, 16.57%, and 28.93%, respectively. These data suggest that these nations have boosted their productive capacity through targeted reforms, improvements in education and training, or through attracting foreign direct

¹Assistant Professor of Economics at LUM University Giuseppe Degennaro and Researcher at LUM Enterprise s.r.l. Email: leogrande.culture@lum.it, Strada Statale 100 km 18, Casamassima, Bari, Puglia, Italia.

investment in key sectors. Many OECD countries have recorded moderate growth in productivity. For example, Germany and Denmark have seen increases of 6.46% and 6.09%, respectively. These improvements, though more contained compared to the leaders, are significant in already developed and mature economies, where large productivity gains are more difficult to achieve. Conversely, France and Greece have shown a slight decrease in productivity, with both countries recording a decline of 0.24%. This could indicate structural problems in the economy or challenges in maintaining competitiveness in a rapidly evolving global context. Mexico shows a more significant contraction of 7.57%, highlighting potentially more severe internal challenges such as labor market inefficiencies or deficiencies in the educational and training system.

Economic Policies to Increase Labor Productivity in OECD Countries. Increasing labor productivity in OECD countries requires a complex approach involving both the public and private sectors. Higher productivity not only improves economic competitiveness but can also lead to a better quality of life for citizens through greater efficiency and a more equitable distribution of resources. A modern and efficient infrastructure is fundamental for the functioning of modern economies. Investments in transportation, telecommunications, and energy can significantly reduce operational costs and increase efficiency. Promoting the adoption of advanced technologies through tax incentives for R&D expenses and the purchase of new technologies can facilitate innovations in production processes. To maintain a flexible and responsive workforce to the changing needs of the labor market, it is essential to invest in education and continuous training. This can include professional development programs, incentives for higher education in STEM fields (Science, Technology, Engineering, Mathematics), and partnerships between universities and industries to ensure that curricula meet market needs. Making the labor market more flexible can contribute to higher productivity through better matching of labor supply and demand. This can include simplifying labor regulations, reducing the bureaucratic burden for new hires, and introducing more flexible work contracts that benefit both workers and employers. Encouraging sustainable practices can also drive productivity, as companies seek to reduce waste and improve energy efficiency. Incentives for green investments, stringent environmental regulations, and carbon emission taxes can push companies to innovate to remain competitive. A stable economic environment is crucial for long-term investment in physical and human capital. Predictable fiscal policies and a monetary policy aimed at keeping inflation at manageable levels can help create a climate of confidence for investors and companies, essential for productivity investments. Transnational collaboration can facilitate the exchange of best practices and technologies, as well as open new markets and business opportunities. Free trade agreements, technological cooperation programs, and joint research initiatives can all contribute to improving global productivity. Finally, digital integration can transform entire sectors, increasing efficiency through automation and improving access to global markets through e-commerce and digital platforms. Policies that support digital transformation, such as the development of national network infrastructures and incentives for the digitalization of SMEs, are essential. In summary, improving labor productivity in OECD countries requires a coordinated effort ranging from technological innovation to education, regulatory reforms to digital integration. Through these policies, OECD countries can not only increase their productivity but also ensure that the benefits of greater efficiency are equitably distributed among all segments of society.

Conclusions. Looking at the labor productivity index in OECD countries between 2015 and 2022, we can see an average growth of 10.23%. However, not all countries have performed so efficiently. We

can see that some countries have had lower or higher performances than the average. Among the countries that exceeded the threshold value are: Ireland with +39.64%, Latvia with +28.93%, Poland with +25.95%, Turkey with +24.81%, South Korea with +21.26%, Lithuania with +20.48%, Israel with +17.96%, Hungary with +16.57%, Slovakia with +16.5%, Costa Rica with +16.44%, Estonia with +15.69%, Colombia with +14.05%, Slovenia with +13.5%, Portugal with +11.16%, Switzerland with +11.02%, Chile with +10.59%, Iceland with +10.27%. There are also many countries that have had a performance below average, such as the United States with +8.65%, Sweden with +8.29%, the Czech Republic with +8.04%, Germany with +6.46%, Denmark with +6.09%, Finland with +5.76%, New Zealand with +5.08%, Austria with +5.00%, along with many other Western and European countries. There are even three countries that have seen a reduction in labor productivity between 2015 and 2022, namely France with -0.24%, Greece with -0.24%, and Mexico with -7.57%. We can see that generally, countries with high per capita incomes tend to have a declining trend in labor productivity. However, there are some exceptions, such as Israel, Switzerland, Ireland, and South Korea, which, despite having a medium-high per capita income level, have still experienced labor productivity growth between 2015 and 2022. It is necessary to emphasize that the growth of labor productivity can depend on a set of heterogeneous factors such as the level of technology, human capital, the regulatory-institutional framework, and productivity incentives recognized as components of wage remuneration. Also very relevant are economic policies aimed at ensuring social and financial promotion mediated by labor productivity.

Declarations

Data Availability Statement. The data presented in this study are available on request from the corresponding author.

Funding. The author received no financial support for the research, authorship, and/or publication of this article.

Declaration of Competing Interest. The author declares that there is no conflict of interests regarding the publication of this manuscript. In addition, the ethical issues, including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication.

References

- Costantiello, A., & Leogrande, A. (2021). The innovation-employment nexus in Europe. Costantiello, A., & Leogrande, A. (2020). The innovation-employment nexus in Europe. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 4(11), 166-187.
- Leogrande, A., Saponaro, A., Massaro, A., & Galiano, A. M. (2020). A GIS based estimation of quality of life in Italian regions. *American Journal of Humanities and Social Sciences Research (AJHSSR)* e-ISSN.
- Costantiello, A., Laureti, L., & Leogrande, A. (2021). The intellectual assets in Europe. *Available at SSRN 3956755*.
- Magazzino, C., & Leogrande, A. (2020). Subjective well-being in Italian regions: A panel data approach.
- Leogrande, A., Massaro, A., & Galiano, A. M. (2020). The attractiveness of European research systems. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 4(10), 72-101.
- Costantiello, A., & Leogrande, A. (2023). The Impact of Research and Development Expenditures on ESG Model in the Global Economy. *Available at SSRN 4414232*.

Leogrande, A. (2023). The Rule of Law in the ESG Framework in the World Economy. *Available at SSRN 4355016*.

Leogrande, A., Massaro, A., & Galiano, A. M. (2020). The impact of R&D investments on corporate performance in European Countries. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 4(7), 186-201.

Costantiello, A., & Leogrande, A. (2023). The Role of Political Stability in the Context of ESG Models at World Level. *Available at SSRN 4406997*.

Leogrande, A., Laureti, L., & Costantiello, A. (2022). The Innovation Index in Europe. *Available at SSRN 4091597*.

Laureti, L., Costantiello, A., Matarrese, M., & Leogrande, A. (2022). Enterprises Providing ICT Training in Europe. *Available at SSRN 4021150*.

Leogrande, A., & Costantiello, A. (2023). The Labor Force Participation Rate in the Context of ESG Models at World Level. *Available at SSRN 4466452*.

Costantiello, A., & Leogrande, A. (2023). The Impact of Voice and Accountability in the ESG Framework in a Global Perspective. *Available at SSRN 4398483*.

Laureti, L., Costantiello, A., & Leogrande, A. (2023). The Role of Government Effectiveness in the Light of ESG Data at Global Level. *Available at SSRN 4324938*.

Costantiello, A., Laureti, L., Leogrande, A., & Matarrese, M. (2021). The Innovation Linkages in Europe. *Available at SSRN 3983218*.

Laureti, L., Costantiello, A., & Leogrande, A. (2022). Satisfaction with the Environmental Condition in the Italian Regions between 2004 and 2020. *Available at SSRN 4061708*.

Laureti, L., Costantiello, A., Matarrese, M., & Leogrande, A. (2022). Foreign Doctorate Students in Europe. *Available at SSRN 4032975*.

Laureti, L., Costantiello, A., Matarrese, M., & Leogrande, A. (2022). The Employment in Innovative Enterprises in Europe. *Available at SSRN 4010098*.

Leogrande, A., Costantiello, A., Laureti, L., & Leogrande, D. (2021). The Determinants of Landscape and Cultural Heritage Among Italian Regions in the Period 2004-2019. *Available at SSRN 3971174*.

Leogrande, A., Massaro, A., & Galiano, A. M. (2020). The Determinants of Innovation in European Countries in the period 2010-2019. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 4(8), 91-126.

Ferri, G., & Leogrande, A. (2015). Was the Crisis due to a shift from stakeholder to shareholder finance? Surveying the debate.

Laureti, L., Costantiello, A., Massaro, A., & Leogrande, A. (2024). The Role of Renewable Energy Consumption in Promoting Sustainability and Circular Economy: A Data-Driven Analysis. In *Data-Driven Intelligent Business Sustainability* (pp. 360-386). IGI Global.

Leogrande, A., & Costantiello, A. (2023). The Role of GDP Growth in the ESG Approach at World Level. *Available at SSRN 4434206*.

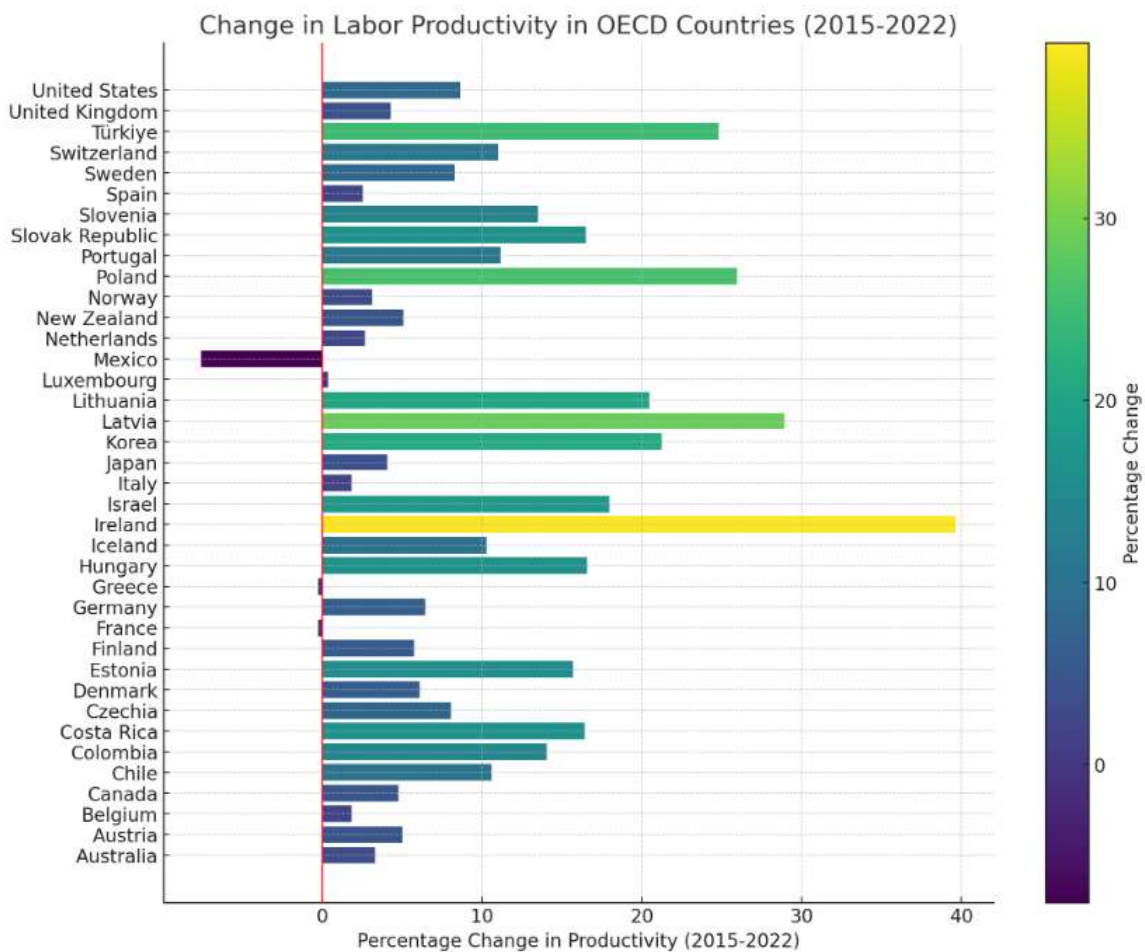
Costantiello, A., & Leogrande, A. (2023). The Regulatory Quality and ESG Model at World Level. *Available at SSRN 4388957*.

Leogrande, A., Magaletti, N., Cosoli, G., & Massaro, A. (2022). Fixed Broadband Take-Up in Europe. *Available at SSRN 4034298*.

Leogrande, A., Costantiello, A., Laureti, L., & Leogrande, D. (2021). The Determinants of Design Applications in Europe. *Available at SSRN 3956853*.

Laureti, L., Costantiello, A., & Leogrande, A. (2021). THE DETERMINANTS OF FIRM INVESTMENTS IN RESEARCH AND DEVELOPMENT. In *IAI ACADEMIC CONFERENCE PROCEEDINGS Education and Social Sciences Business and Economics* (pp. 55-67).

Appendix



Politiche economiche per
incrementare la produttività del lavoro
nei paesi OCSE

