

BOX 1.3:

Labor market evolution

The labor market is showing mixed signals. In a context where activity has been growing at rates consistent with its potential and the gap has been closing, employment is growing moderately, and the unemployment rate remains above its pre-pandemic levels. Meanwhile, administrative records—the number of contributors to the Unemployment Fund Administrators (AFC)— show that the net rate of formal job creation has been mostly negative or close to zero from 2023 to date¹/. Job creation and destruction, which are variables related to labor turnover, are also at record lows. Similarly, the time spent searching for formal employment has been on the rise since 2023²/. On the other hand, labor costs have been growing above their pre-pandemic average (Figure I.31).

Past Bank reports have proposed various factors to explain this dynamic, including higher labor costs —resulting from minimum-wage laws and reduced working hours—, the sluggish recovery of certain labor-intensive sectors, and more structural factors such as demographic changes and the adoption of new technologies in production processes (Box II.1 in December 2024 IPOM; Albagli *et al.*, 2024).

This Box presents new evidence on how different elements combine to explain the most recent developments in the labor market. Quantitatively, it confirms the negative impact of rising labor costs on employment. This evidence is complemented by qualitative data suggesting that these higher costs may be acting as a catalyst for technological change, replacing certain types of jobs, or creating mismatches between the skills required by employers and those that the workforce can offer.

Causal analysis of the effects of increasing labor costs

In May 2023, Law 21,578 was approved, establishing minimum wage increases of 7.3% in May 2023, 4.5% in September 2023, 8.7% in July 2024, and 2.1% in January 2025 —accumulating a 24.5% increase between April 2023 and January 2025, compared to the cumulative CPI increase of 7.0% during the same period. The wage index measured by the National Statistics Institute (INE) —which is representative of the monthly evolution of hourly wages for formal employment in the country— showed an increase of 14.2% during that period, indicating that the rise in the minimum wage far exceeded the average increase in wages³/.

Albagli et al. (2025) update the work presented at the end of last year, in which, based on administrative records from AFC, they divide firms into two groups according to their fraction of workers subject to the minimum wage. Their results show that, on average between March 2023 and April 2025, wages in firms with more workers earning the minimum wage grew 4.8% more than those in firms with fewer workers being paid the minimum wage. At the same time, employment in those firms fell by an average of 5.6% compared to employment in the less affected firms (Figure I.32, panels a and b).

^{1/} In the case of administrative records, formal employment refers to contributors to the pension system (AFP, mandatory contributions) and unemployment insurance (AFC). However, in INE surveys, formal employment is defined as employees with access to social security through their employment relationship, as well as self-employed workers who report working in the formal sector. These groups of workers are not necessarily equal for various reasons (group covered, nature of sources, measurement criteria, etc.).

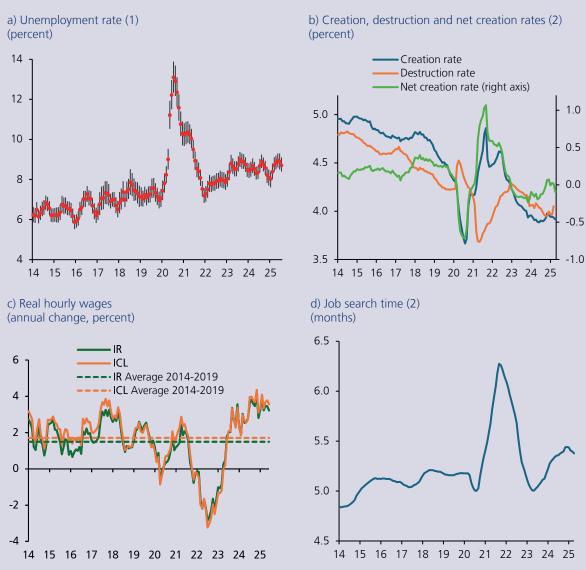
²/ The formal job search time is calculated using AFC data, such as the average number of months spent outside formal employment by workers who find employment in each month, excluding those who take longer than 24 months. For details, see <u>Albaqli et al.</u> (2025). ³/ Both the cumulative increase in the CPI and the labor cost index (ICL) are calculated by splicing the reference series.



Two additional facts emerge from this exercise. First, the composition of employment in the most affected firms shifted toward a higher proportion of workers with higher education. Second, the impact is observed across different economic sectors and firm sizes. A complementary exercise shows that the upward impact on wages and downward impact on employment is observed not only among workers earning the minimum wage, but also among those with wages close to it (Figure I.32, panels c and d).

The exercise does not allow for estimating the aggregate effects of the minimum wage on the variables analyzed. Furthermore, as in other exercises of this nature, the results depend on the particular macroeconomic context in which the measure is implemented and cannot necessarily be extrapolated to other situations.

FIGURE I.31



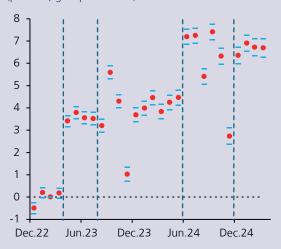
(1) Point estimates based on INE data are reported in red, while the vertical black lines capture the 95% confidence interval.
(2) The series are constructed using AFC data that includes lagged contributions and are spliced using the growth rates of the same series with data that do not include lagged contributions..

Sources: AFC and INE.



FIGURE 1.32

a) Effects of minimum wage on average wage (1) (percent, groups of firms)



b) Effects of minimum wage on average employment (1) (percent, groups of firms)



c) Changes in wages and spillovers (2) (percent, groups of workers)



d) Changes in employment and spillovers (2) (percent, groups of workers)



(1) Difference-in-differences exercise with treatment and control groups of firms. (2) Difference-in-differences exercise with treatment, semi-treatment, and control groups of workers. Red markers indicate effects on the treatment group. Green markers indicate effects on the semi-treatment group. Confidence intervals are in light blue for both groups. 95% confidence intervals are used in all figures. Vertical lines correspond to months in which minimum wage increases occurred. Source: Albagli et al. (2025) based on AFC and DT data.



Analysis of the aggregate effects of the labor cost increase

Although the above exercise allows establishing a causality between the labor cost increase and employment and other variables, it is not designed to quantify the aggregate effects on the labor market. For this purpose, two additional methodologies are used. In the first, Albagli et al. (2025) conduct estimates of a semi-structural SVAR model⁴/. This method yields that, in the last year, various supply and cost shocks —including the increased minimum wage and the 40-working-hour week law— account for most of the rise in labor costs and have had a negative impact on employment (Figure I.33). According to these estimates, a real increase in the minimum wage similar to that observed since 2023 causes a drop of approximately -1.5% in formal wage employment and a somewhat smaller impact on total employment, which is to be expected given the cushioning role that informal and self-employment tend to play when unemployment rises.

In the second methodology, <u>Albagli et al.</u> (2025) use an extension of the XMAS general equilibrium economic model (<u>García et al.</u>, 2019) to understand recent wage and employment behavior⁵/. Their results suggest that, in the period 2022-2025, legislative measures have increased both average wages and the unemployment rate. With regard to the former, the average effect on the real wage level has been around 1.1% when all policies are considered, and 0.85% when only the minimum wage is considered. Unemployment is estimated to rise by up to 0.3 pp above its long-term level. These estimates do not include the effect that legislative measures may have had on the reference unemployment rate (NAIRU), which, as mentioned above, has risen in recent years. According to this model, legislative measures will continue to put pressure on labor costs and employment dynamics in the coming quarters to a similar extent as observed in recent years, to then dissipate gradually, something that is factored into the central scenario of this IPoM.

Qualitative evidence of automation trends

<u>Albagli et al. (2025)</u> review the information obtained in the Business Perceptions Report. By applying qualitative analysis techniques to the transcripts of 365 semi-structured interviews conducted between February 2023 and August 2025, they conclude that, according to the firms' perceptions, a new organizational equilibrium characterized by smaller workforces has taken hold in recent years. This is explained not only by the evolution of economic activity or higher costs, but also by the introduction of new technologies, work reorganization, and regulatory pressures.

According to this analysis, these trends do not operate in isolation but rather reinforce each other and generate chain effects. For example, in the opinion of the firms, automation has made it possible to operate with fewer staff, which has contributed to consolidating minimum efficient staffing levels. In turn, this reduction has created gaps in the labor market, especially in lower-skilled segments. At the same time, automation has transformed the profiles required, which partly explains the difficulty in finding skilled labor, especially in more technologically advanced sectors. Labor cost pressures, in the opinion of businesses, have acted as a catalyst for these processes, encouraging the search for efficiency and the incorporation of technology.

In turn, evidence from administrative records suggests that, in recent years, businesses have increased their spending on IT consulting, with a significant increase in the fraction of total spending they allocate to this item (Figure I.34).

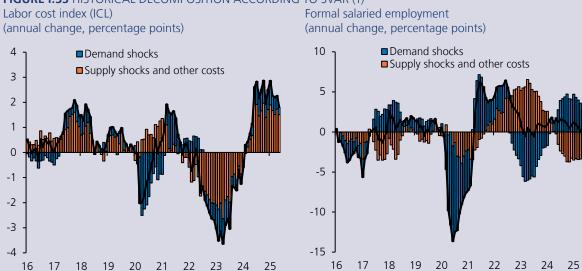
⁴/ A structural vector autoregressive (SVAR) model is estimated that identifies labor supply and demand shocks with sign restrictions and time-varying coefficients, with real labor costs (ICL), formal and total salaried employment, and hours worked as endogenous variables, and minimum wage as an exogenous variable.

⁵/There are different types of models that explain how an economy works and how different policy decisions affect it. Semi-structural SVAR models are based on historical data and certain theoretical rules to analyze how variables such as inflation or employment react to changes in, for example, interest rates. Conversely, structural general equilibrium models represent the economy at large and allow simulating how it would behave if conditions such as taxes or the price of the dollar were to change.



This network of relationships shows that the Chilean labor market is undergoing significant changes, with employment decisions increasingly focused on flexibility, efficiency, and retention. Even in contexts of economic recovery, employers have maintained a cautious stance toward hiring, prioritizing lean and adaptable structures.

FIGURE 1.33 HISTORICAL DECOMPOSITION ACCORDING TO SVAR (1)



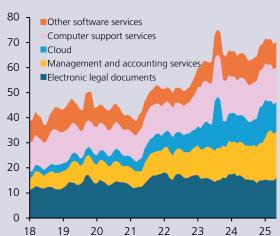
(1) Structural decomposition using an SVAR model that includes employment, hours, real ICL, and real minimum wage (exogenous variable), identifying labor supply and demand shocks with sign restrictions and time-varying coefficients. ICL and minimum wage are deflated by the CPI, taking into account the frequency of wage adjustments based on inflation. Supply shocks and other costs include changes in minimum wage. Variables are plotted as deviations from the model constants.

Source: Albagli et al. (2025) based on INE data.

FIGURE 1.34a) IT consulting spending (1) (percent of total purchases)



b) IT consulting purchases details (2) (billion pesos 2019, three-month moving average)



(1) Total excludes Retail and Wholesale Trade Activities, as well as Restaurants and Hotels. (2) Breakdown is performed based on the descriptions reported in electronic invoices. Categories were classified using natural language processing techniques and unsupervised learning algorithms. Excludes those descriptions that could not be classified.

Source: Albagli et al. (2025) based on administrative records of the SII.



Conclusions

Recent labor market developments are giving mixed signals, with weak job creation and the unemployment rate above its pre-pandemic levels, but at the same time with real labor costs growing above their historical average.

This box contains new quantitative and qualitative information suggesting that labor market behavior responds to multiple factors, including the impact of legislative measures —such as the minimum wage and the 40-hour workweek law— and adaptation to technological change, which may have accelerated in response to rising labor costs.

In any case, these results explain labor market movements in the short and medium term. In the long term, its behavior will depend on factors such as productivity, population growth, and new configurations of production processes in a context of adoption of new technologies.