

BOX 02

Addressing Data Gaps in Private Sector Wage Dynamics Using EPF Based Formal Sector Wage Rate Index

1

Monitoring wage behaviour is essential for monetary policy decision making as it represents a key channel through which labour market conditions influence inflation and overall macroeconomic stability. Wage fluctuations that are aligned with changes in labour productivity can support sustainable economic growth while maintaining price stability.¹ Hence, for this purpose, the Central Bank of Sri Lanka (CBSL) refers to different indices where the Formal Private Sector Minimum Wage Rate Index compiled by the Department of Labour on a monthly basis is used to assess the wage dynamics of the formal private sector. A key advantage of this index is its monthly availability, which facilitates timely monitoring of minimum wage trends, supporting analysis related to inflation and labour market conditions. However, this index has several limitations. This index, which was introduced with December 1978 as the base period and covers minimum wages for 21 wage boards, has not been updated despite the number of wage boards increasing to 44. As a result, the index fails to reflect wage developments in wage boards established subsequently. In addition, employees covered by wage boards represent only a segment of the overall private sector workforce, implying that the index does not reflect the minimum wage structure of the entire formal private sector. Furthermore, the index is constructed using statutory minimum wages rather than actual earnings. Minimum wages are not revised frequently, whereas total earnings comprising basic wages, variable payments, and various allowances may adjust more regularly in response to labour market conditions, limiting the index's ability to capture the true dynamics of wage adjustments. In view of these limitations, the CBSL has initiated the development of an alternative private sector wage rate index using data from contributions to the Employees' Provident Fund (EPF), with the objective of constructing a more representative indicator of wage movements in the private sector.²

¹ Bank for International Settlements (2010), Monetary policy and the measurement of inflation: prices, wages and expectations, BIS Papers No. 49, Basel: Bank for International Settlements. Available at: <https://www.bis.org/publ/bppdf/bispap49.pdf> (Accessed: 20 March 2026).

² CBSL initiated researching and compiling a new wage rate index for the Formal Sector in collaboration with the Faculty of Science, University of Colombo. In addition, CBSL sought expert guidance from the International Labour Organization (ILO) and the Faculty of Arts, University of Colombo to validate the methodology used in compiling the index.

Rationale for Using Superannuation Contribution Data

Given the limitations of existing wage statistics and the need for a timely indicator to assess private sector wage dynamics, administrative data sources were considered. Among these, superannuation contribution records were identified as a suitable basis for developing a high-frequency private sector wage rate index to enhance the monitoring of labour cost developments relevant for macroeconomic and monetary policy analysis. The analysis is based on aggregated EPF administrative data, and no individual level information is used, ensuring confidentiality of contributors.

Data Source and Methodological Approach

The wage rate index is constructed using administrative data obtained from the EPF, covering the period from January 2017 to December 2025. The dataset comprises employer-reported contribution records submitted through manual, online, and e-media platforms, with online and e-media channels accounting for many contribution values, ensuring broad coverage of formal sector employment. It includes key variables such as employer identifiers, number of employees, contribution values, and reporting periods, enabling the compilation of a high-frequency wage indicator. Given differences in reporting lags, more timely partial datasets can be utilised for policy analysis, while finalised datasets are used for official publication.

The index is compiled using January 2017 as the base period, reflecting relatively stable wage conditions. Among alternative index number approaches evaluated, the Laspeyres method was selected based on its empirical performance and consistency. This approach, which uses fixed base-period weights, is widely adopted in international practice and provides a stable measure of wage movements over time.

Administrative data differs from survey-based wage statistics in terms of frequency, coverage, and compilation. Superannuation contribution records are generated through mandatory reporting and reflect payroll information, making

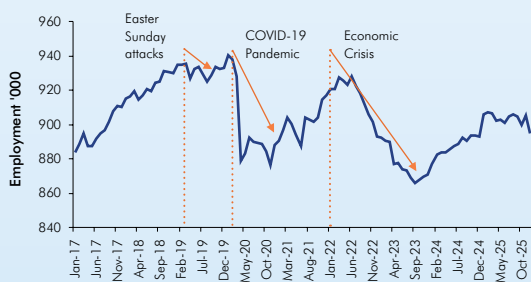
them less affected by sampling variability. In contrast, survey-based wage statistics are compiled periodically and require additional time for data collection and processing. While surveys provide insights into employment structures and income distribution, their lower frequency makes them less suitable for capturing short-term wage movements. Accordingly, administrative and survey data serve complementary purposes.

Superannuation contribution records cover around 60% of formal sector employment across sectors, enhancing the representativeness of the wage rate index. Focusing on the formal private sector remains appropriate given its role in driving aggregate demand and transmitting wage pressures to prices. A key advantage of this data is its availability in a monthly frequency, enabling timely monitoring of wage movements and early identification of emerging trends. Without such data, policy analysis may rely on lagged information, limiting the timely assessment of wage-price dynamics.

The index is constructed using aggregated superannuation contribution records, with a fixed base period to ensure consistency and comparability over time. Employer-wise records are aggregated to derive an index reflecting overall wage movements within the formal sector. The approach is kept simple and transparent to support regular monitoring, while detailed methodological aspects are documented separately.

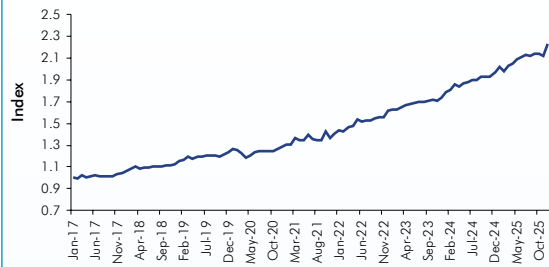
Developments in formal private sector employment provide a useful context for interpreting wage movements. Figure B 2.1 presents the movement of formal sector employment, highlighting the importance of considering broader labour market dynamics when assessing wage developments and

Figure B 2.1
Movement of Employment Based on EPF Data



Source: Central Bank Staff Calculations

Figure B 2.2
Movement of EPF Based Formal Sector Wage Rate Index



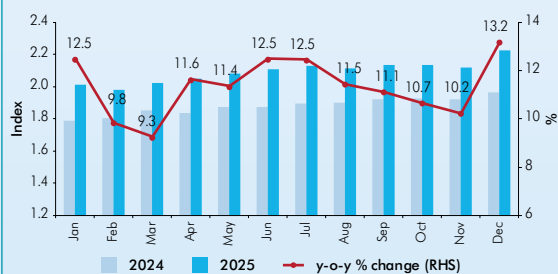
Source: Central Bank Staff Calculations

labour cost pressures. Employment data presented here are based on establishments that continuously reported EPF contributions and satisfy the criteria used for index compilation; hence, these figures are not directly comparable with official labour force estimates.

Figure B 2.2 illustrates a gradual upward trend in formal sector wages, with a more pronounced increase following the inflationary period during 2022–2023. Figure B 2.3 illustrates sustained wage growth with some moderation during mid-2025, followed by a pickup towards the end of the year, reflecting changes in economic activity, seasonal factors, and wage-setting practices.

Superannuation contributions are calculated as a fixed proportion of employee earnings, establishing a direct link between reported wages and contribution amounts. As a result, changes in aggregate contributions broadly reflect movements in earnings, supporting their use as a proxy for tracking private sector wage developments over time.

Figure B 2.3
Movements of EPF Based Formal Sector Wage Rate Index



Source: Central Bank Staff Calculations

Conceptual Framework of the New Wage Rate Index

The wage rate index is designed to measure changes in formal sector wages over time rather than absolute wage levels. By focusing on relative movements, the index provides an indicator of wage growth dynamics that can be assessed across periods and considered alongside other macroeconomic indicators, including inflation and output measures.

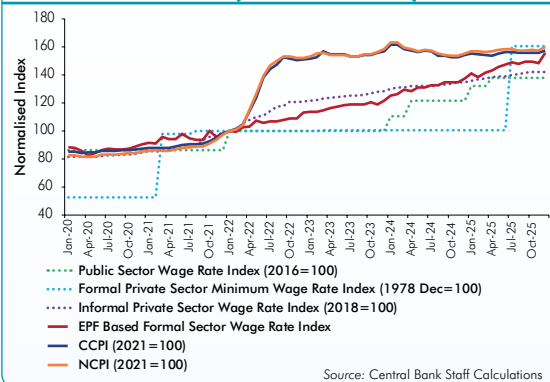
The resulting wage rate index provides a stable time series suitable for macroeconomic analysis. The use of administrative data enhances comparability over time and reduces volatility associated with sampling variation. Wage adjustments tend to occur with a delay relative to price movements, reflecting wage-setting mechanisms and institutional arrangements. In this context, the availability of a high-frequency wage rate index improves the monitoring of labour cost pressures and complements existing wage indicators derived from survey data and institutional wage adjustments.

Implications for Monetary Policy and Labour Market Analysis

The new index offers timely and robust insights into the interplay between private sector wage growth, inflationary pressures, and broader macroeconomic conditions. Analysis of the index shows that wage growth responds not only to underlying economic activity but also to changes in the price level. Figure B 2.4 indicates that the new wage index has been catching up with the increase in price indices. For example, the pronounced increase in average wages during 2022–2023 reflects the impact of elevated inflation, underscoring the potential for second-round effects in wage-setting behaviour. By capturing these dynamics more accurately than traditional indicators, the new wage index enhances the CBSL's capacity to anticipate and respond to emerging inflationary pressures.

High-frequency administrative data are particularly valuable for forward-looking policy. With online and e-media submissions accounting for roughly 80% of EPF contributions, the monthly aggregation of this information enables more responsive monitoring of labour cost developments. The new wage index complements existing indicators, including the long-standing Formal Private Sector Minimum Wage Rate Index, by providing a broader, more representative measure of formal private sector wages, covering over 800,000 employees. This expanded coverage allows

Figure B 2.4
Movements of Wage Rate Indices and Price Indices (Jan 2022=100)



policymakers to track structural labour market trends with greater precision, supporting evidence-based decisions on monetary policy and wage-related interventions.

Strengthening Wage Monitoring and Future Directions

The compilation of the index represents a major enhancement in Sri Lanka's macroeconomic data infrastructure. Leveraging over 6 mn individual observations received over a period of 9 years, analysed using big data analytics techniques, the index establishes a foundation for regular, high-frequency monitoring of private sector wages. Moving forward, priority will be given to institutionalising data sharing, ensuring seamless integration of monthly contributions for policy analysis while maintaining semi-annual updates for the full dataset.

Beyond aggregate wage tracking, the administrative dataset offers significant analytical potential. Planned refinements include the development of sectoral indices to provide industry-specific insights into wage dynamics. In the longer term, integrating supplementary administrative datasets could allow the construction of a multi-dimensional framework for wage analysis, improving transparency and equipping policymakers and researchers with a comprehensive tool to assess evolving labour market conditions. Collectively, these initiatives position the index not only as a critical instrument for monitoring wages and inflation but also as a cornerstone for strengthening evidence-based macroeconomic policy in Sri Lanka. Going forward, the Central Bank intends to disseminate EPF-based Formal Sector Wage Rate Index statistics through its annual and semiannual publications.