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INFLATION AND UNEMPLOYMENT IN SLOVAKIA: IS THE PHILLIPS CURVE STILL RELEVANT?

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ABSTRACT

This article investigates the validity of the Phillips curve in the current economic conditions of the Slovak Republic. The Phillips curve, which suggests an inverse relationship between inflation and unemployment, has been one of the most important concepts in macroeconomics since its creation. However, its role and relevance in modern economies have been questioned, primarily due to various factors such as monetary policies, globalization, and structural changes in labor markets. The analysis focuses on the Slovak economy. Examined was the relationship between inflation and unemployment after the country joined the European Union and adopted the euro. By utilizing multiple correlation analysis, the study assesses the strength, direction, and statistical significance of the relationship in recent years. The results suggest that, while the Phillips curve remains valid in the Slovak economy, the strength of the correlation has diminished compared to the period when the theory was first introduced. This decline in the relationship can be attributed to various factors, including the centralization of monetary policy under the European Central Bank, changes in labor market dynamics, and external economic shocks. These findings imply that policymakers should reconsider relying solely on traditional inflation-unemployment trade-offs when formulating monetary and labor market policies. Overall, the findings of this study provide valuable insights into the evolving nature of the Phillips curve and its relevance in today's economy. This research contributes to the limited empirical literature on small open economies within the euro area, providing updated evidence on the dynamics of the Phillips curve in the Slovak context.

KEYWORDS: Unemployment, inflation, minimum wage, interest rates

JEL CLASSIFICATION: E24, E31, C12

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INTRODUCTION

Unemployment and inflation are complex socio-economic issues that have far-reaching consequences for individuals, society, and the economy. As the unemployment rate increases, the economy's output decreases. In the case of long-term unemployment, the negative consequences are also reflected in the health of individuals and society. One of the most well-known factors with a proven connection to unemployment is inflation. It is not possible to determine with certainty which variable is the independent variable and which is the dependent variable, as the relationship itself can change depending on the phase of the economic cycle (Gabriel, 2023). According to Solarin and a collective of authors (2024), there is no long-term dependence between inflation and unemployment, despite both being persistent. Only in a small number of analyzed countries were authors able to find a long-term equilibrium.

Economist A.W.H first introduced the theory of the inverse relationship between inflation and unemployment. Phillips in the 20th century, when he demonstrated an indirect connection between

these two variables. The Phillips curve states that if there is a low unemployment rate (high demand for labor), it will cause wages to rise. While wage growth stimulates labor supply, it also reduces demand for labor, which can subsequently lead to a resurgence in unemployment (Neverauskiene et al., 2024). The original Phillips curve put wage inflation and the unemployment rate in an inverse relationship – with a high unemployment rate, wages fall, i.e., wage deflation occurs; conversely, with a low unemployment rate (lower than the natural rate), wages rise, which leads to wage inflation

Later, other economists expanded the original Phillips curve and included overall (price) inflation in the relationship with unemployment. They assumed that rising wage costs also cause price increases in the market – if wage inflation occurs with constant labor productivity (aggregate supply does not change), it will cause price inflation. Higher wages stimulate aggregate demand, which can exceed aggregate supply, with the new market equilibrium being established at a higher price level (Gregová, 2017). A similar relationship between price and wage inflation was also pointed out by Motyovszki (2013) and recently also by Oteng and Ngo-Henha (2024), who argued that price inflation will be felt over time by employees who will demand higher wages, which will subsequently lead to wage inflation and cost growth. The relationship between inflation and unemployment is therefore direct in both cases, with the dependent and independent variables being exchanged in the individual models.

Over time, the traditional Phillips curve has been criticised, especially during periods of stagflation (Gallegati & Desai, 2024). High inflation and high unemployment coexistence contradicted the curve's original assumptions. This phenomenon, observed especially during the oil crisis of the 1970s, has led economists to reassess the stability and universality of the Phillips curve (Musibau, 2025). In response, the expectations-based Phillips curve was developed by economists such as Milton Friedman and Edmund Phelps. They introduced the concept of the natural rate of unemployment and emphasized the role of inflationary expectations. According to their theory, in the long run, any attempt to reduce unemployment below its natural rate through expansionary monetary or fiscal policy would only lead to an acceleration of inflation without a sustained increase in employment (Backhouse et al., 2023; Gokcu, 2024; Verne, 2024).

In contemporary economic modeling, the relationship between inflation and unemployment continues to be reevaluated, especially in light of modern monetary policies and globalization. Central banks, such as the European Central Bank and the Federal Reserve, now target inflation directly, while trying to maintain stable employment (Alfieri & Gabrielyan, 2024; Phiri, 2025). However, factors such as automation, digitalization, and demographic changes have fogged up the original Phillips curve relationship. These factors independently affect both price and labor dynamics, suggesting that the original curve may no longer fully capture the reality of today's interconnected economy (McDonald, 2023).

Recent empirical research, particularly in the context of the post-COVID economic recovery, has attempted to test the validity of the Phillips curve under new economic pressures. Studies in Slovakia, for example, show that during the labor market recovery, inflation was primarily driven by cost factors such as energy prices and supply chain disruptions, rather than by demand-pull factors tied to employment levels (Janoskova et al., 2024). This is consistent with broader European trends, where unemployment remains relatively stable, yet inflation persists due to external shocks and volatile commodity prices. These findings challenge the traditional assumption that inflation can only be effectively managed through employment-oriented policies (Devaguptapu & Dash, 2023).

Despite these complexities, the inflation-unemployment relationship remains a key element of macroeconomic analysis and policymaking (Sirakovova, 2024). It serves as a basic framework for assessing the trade-offs of monetary and fiscal interventions. Policymakers need to consider a range of factors, including inflation expectations, labor market flexibility, and productivity growth, in order to

assess the potential effects of economic policies. While the original Phillips curve may not provide a definitive explanation, its evolving interpretations continue to provide valuable information about how economies respond to changes in labor demand, price levels, and external shocks.
The article is divided into the following sections:

- **Methods** – description of the main aim of the work, the methods used, and data sources for the analyses.
- **Results** of the work.
- **Discussion** – interpretation and comparison of the results with other studies.
- **Conclusions** – summary of the work, recommendations, and limitations of this study.

1 METHODS

Knowing the relationship between unemployment and inflation is important for both ordinary people and even more for the government, which is concerned about both macroeconomic variables (Abbasov, 2023). Hence, in this paper, the relationship between the inflation rate and the unemployment rate in the current conditions of the Slovak Republic will be examined. Since, based on current theoretical knowledge, it is not entirely clear which of the variables is the determinant, in this paper, we will look for a connection, not a dependence. In addition to the connection between inflation and unemployment, we decided to expand the analysis to include the connection between unemployment and interest rates and unemployment and gross minimum wages.

Raising interest rates is one of the basic tools for fighting inflation, so if a connection between unemployment and inflation is evident, it is likely that a similar connection will also be between unemployment and interest rates, which could be an interesting extension of the Phillips curve, while we expect an equally indirect dependence. As mentioned earlier, the original Phillips curve linked wage inflation and unemployment (Motyovszki, 2013). Wage inflation undoubtedly also depends on the level of the minimum wage, although not only on it (Pavelka et al., 2014; Berger et al., 2025). Therefore, the investigation of such a connection is interesting, and we also expect an indirect dependence.

1.1 Source of data

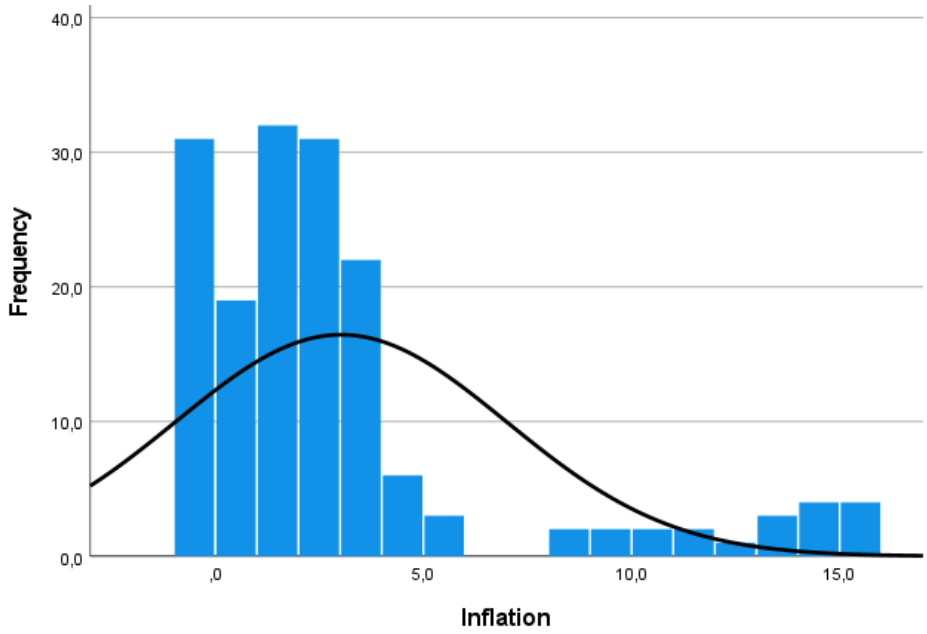
The period from January 2010 to August 2023 was analyzed. To maintain objectivity and ensure comparability of the results, we utilized monthly unemployment data from the Eurostat website (Eurostat, 2023), as these data are based on the ILO's definition of unemployment. Data on the unemployment rate can also be found on the website of the Statistical Office or the Ministry of Labour, Social Affairs and Family of the Slovak Republic. However, both institutions employ their own methodologies, which could lead to discrepancies in future comparisons of results. Monthly data on interest rates were also downloaded from the Eurostat website (Eurostat, 2023). Monthly data on the gross minimum wage were obtained from the Trading Economics website (Trading Economics, 2023). Monthly data on inflation were obtained from the Statistical Office of the Slovak Republic website (Statistical Office of the Slovak Republic, 2025).

1.2 Distribution of variables

The basic tool for verifying the relationship between two quantitative variables is the Pearson correlation coefficient (Storm & Naastepad, 2012). This coefficient assumes a normal distribution of variables; therefore, auxiliary tests for verifying normality and descriptive statistics were applied before the analysis itself (Furuoka et al., 2021). The results of descriptive statistics indicated a possible problem with the normality of the distribution of the inflation variable, with the skewness value being 1.91.

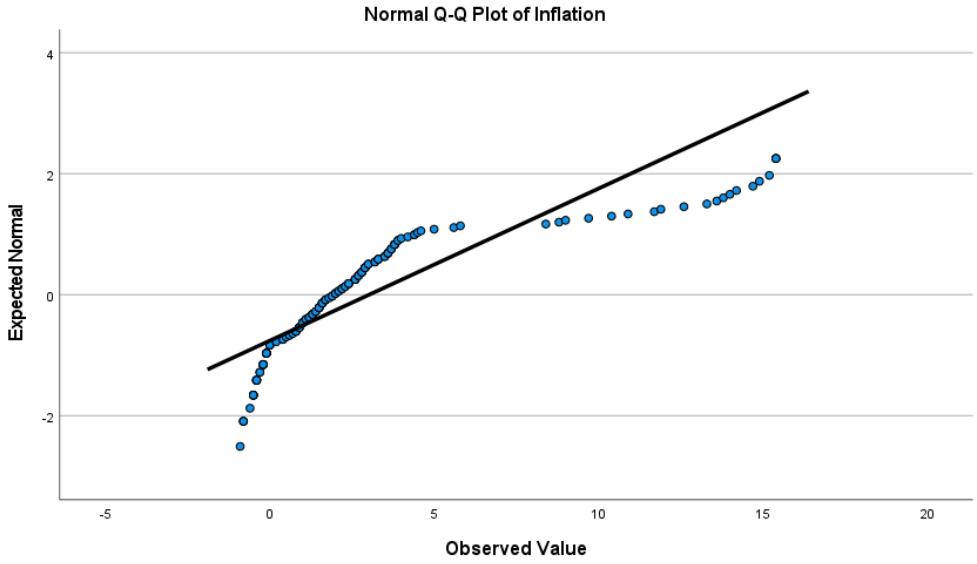
Although there are no generally defined skewness values that would represent a violation of normality, a value above 1.5 should be checked with additional tests. The following figure shows a histogram of the frequency of individual values of the inflation rate in Slovakia in the monitored period with the addition of a normal distribution curve.

Figure 1 **Histogram of the frequency of inflation rate values**



(Source: own elaboration)

Figure 2 **Normal QQ plot**

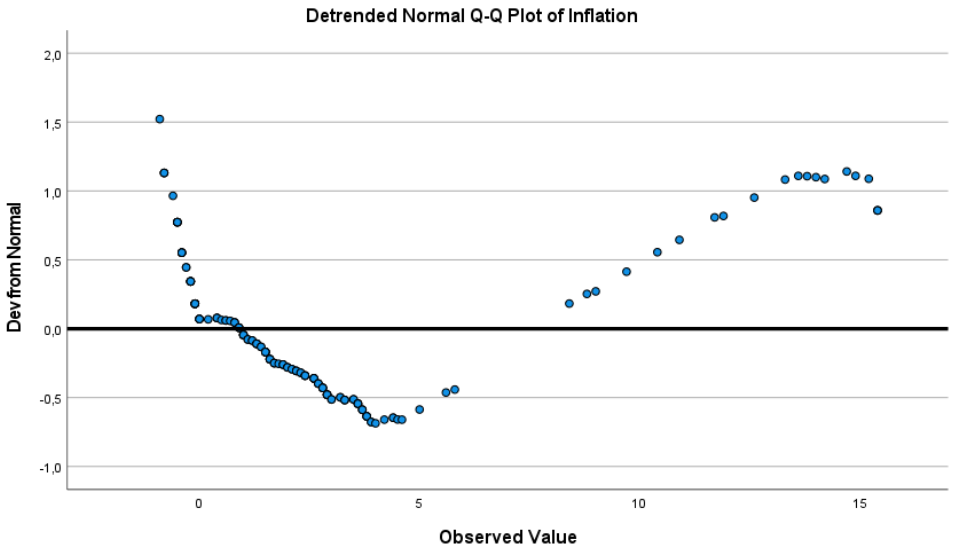


(Source: own elaboration)

It is clear from Figure 1 that normality is violated in the case of inflation. The analysis of normality can be further expanded with Statistical analysis using Tests of Normality and a normal QQ plot, and a detrended normal QQ plot. For statistical analysis, the Kolmogorov-Smirnov test was chosen, which

was significant at a 1% significance level, while sig. was <0.001, indicating that the inflation rate data might be normally distributed. The final decision was made based on the following plots.

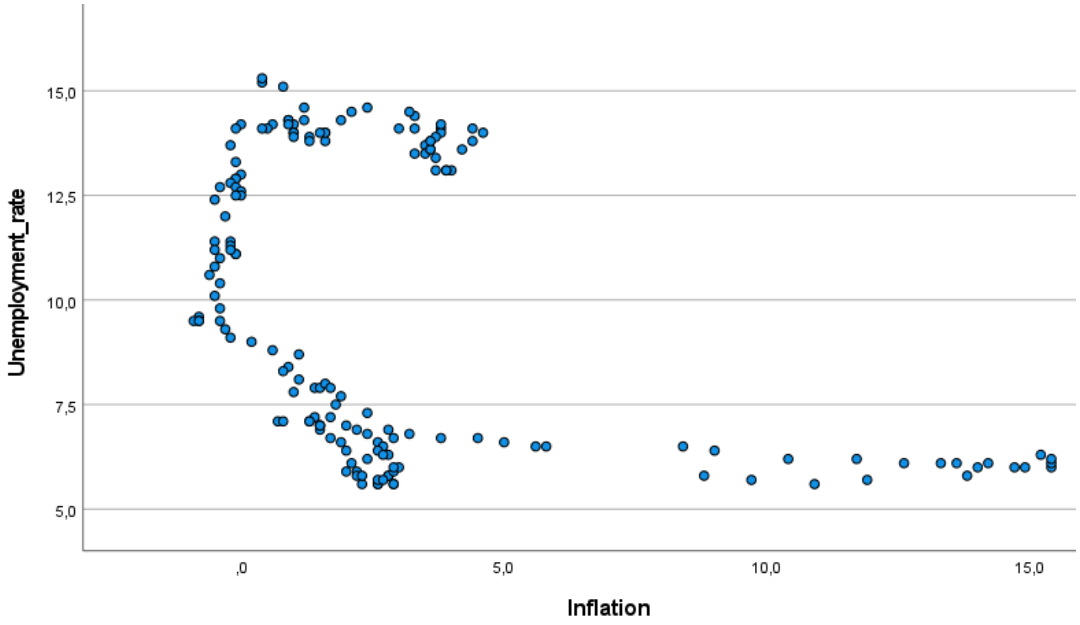
Figure 3 **Detrended normal QQ plot**



(Source: own elaboration)

QQ plots clearly demonstrate that the data is not normally distributed. Visible curvature and asymmetric deviations from the zero line indicate skewness and possible kurtosis. The data have long tails on both sides, which may indicate the presence of extreme values (outliers) or a heavy-tailed distribution. This problem can generally be solved by logarithmization; however, in the period we monitored, inflation values were both zero and negative (deflation), which made the usage of logarithmization impossible, so the analysis with a non-parametric test - Spearman's correlation coefficient for examining the relationship between inflation and unemployment was used.

Figure 4 **Scatter plot of inflation rate and unemployment rate.**



(Source: own elaboration)

Before conducting the correlation analysis, it is advisable to examine the graph of the variables under study, from which it is possible to infer a potential connection. A scatter plot showing the relationship between inflation and unemployment is shown in the following figure.

In Figure 4, it can be seen that the points form clusters, indicating an indirect dependence. However, it is interesting that the points with inflation rates in the interval approximately (0;5) form two clusters, especially at unemployment rates around 13% and 7.5%. This phenomenon is likely caused by another factor that is not captured in the graph. Within the economy, many factors and entities interact with each other, which is probably the reason why the relationship between inflation and unemployment cannot be linear. exponential (as in the case of the original Philips curve) (Reinbold & Wen, 2020).

2 RESULTS

This section presents the results of the correlation analysis. As mentioned, inflation likely does not meet the condition of the Pearson correlation coefficient, which requires a normal distribution; therefore, we extended the analysis to include a non-parametric alternative, the Spearman correlation coefficient. All other factors likely meet the condition of normal distribution, so the relationships between these factors can be quantified using a parametric test. The results of the correlation analysis of the Pearson correlation coefficient are in the following table.

Table 1 **Correlation matrix (Pearson's correlation coefficient)**

	UNEMPLOYMNET RATE	INFLATION	INTEREST RATES	GROSS MINIMUM WAGE
UNEMPLOYMNET RATE	1	-0.422**	0.677**	-0.893**
INFLATION	-0.422**	1	0.272**	0.639**
INTEREST RATES	0.677**	0.272**	1	-0.482**
GROSS MINIMUM WAGE	-0.893**	0.639**	-0.482**	1
** Correlation is significant at the 0.01 level (2-tailed				

(Source: own elaboration)

Table 2 **Correlation matrix (Spearman's correlation coefficient)**

	UNEMPLOYMNET RATE	INFLATION	INTEREST RATES	GROSS MINIMUM WAGE
UNEMPLOYMNET RATE	1	-,387**	,602**	-,905**
INFLATION	-,387**	1	,264**	,363**
INTEREST RATES	,602**	,264**	1	-,629**
GROSS MINIMUM WAGE	-,905**	,363**	-,629**	1
** Correlation is significant at the 0.01 level (2-tailed				

(Source: own elaboration)

The results of the correlation analysis confirm the expected relationships, all of which are statistically significant at the 1% significance level, indicating that these relationships are not coincidental. As already mentioned, this test was supplemented by a non-parametric test, which is shown in the following table.

Table 2 shows the results of the non-parametric test, which we used mainly for the inflation correlations, i.e., in this table we mainly observe the correlation values in the inflation column (or row). Compared to the previous parametric test, this non-parametric test yielded similar correlation values, which were slightly reduced, but all correlations remain statistically significant.

3 DISCUSSION

The results of this work demonstrate that the Phillips curve is indeed valid even today. Although the connection between inflation and unemployment was weak, it was statistically significant. There may be several reasons for the weak correlation:

1. The connection between inflation and unemployment is not as strong in the current conditions of the Slovak Republic as it was in the conditions under which the theory was created;
2. An incorrect coefficient (non-linear relationship) was used to verify the relationship. However, it is necessary to note here with regard to the graphical analysis that although the points were collected around a certain imaginary curve, such a curve would not represent a functional relationship (it was the shape of the letter C), therefore, point number 3 appears to be the most likely cause;
3. The relationship between inflation and unemployment is statistically significant, but a number of other factors enter this relationship; the absence of these factors causes the interaction of these factors to appear weak.

Another interesting point is the very strong, indirect connection between gross minimum wages and unemployment. This result suggests that unemployment is probably more closely related to wage inflation than to price inflation. Although the level of the minimum wage does not define wage inflation, it certainly has a significant impact on it. Therefore, one can expect a closer connection between unemployment and wage inflation. The low value of the correlation coefficient between interest rates and inflation is quite surprising, as we can see only a weak and direct connection. However, the test confirmed that the connection is statistically significant. The reason for the low value of the coefficient is probably that interest rates also develop depending on factors other than inflation (although this is probably the most significant) and in the case of inflation growth, the central bank's reactions by subsequently increasing interest rates may record different time lag values, which can significantly reduce the value of the correlation coefficient. The direct, moderately strong relationship between interest rates and unemployment is also surprising, as inflation and interest rates are typically directly related, whereas unemployment and inflation have shown an inverse relationship.

The relevance of the Phillips curve in current conditions was also verified by Furuoka et al. (2021). However, the analysis was conducted in Southeast Asian countries. They similarly arrived at a decreasing strength of the relationship between inflation and unemployment, but confirmed the relationship itself, which is in agreement with this work. Many authors have recently highlighted potential differences in the length of the analyzed period (Reinbold & Wen, 2020; Pontiggia, 2020; Fratianni, Gallegati, & Giri, 2022; Russell & Rambaccussing, 2019; Mallick, 2019). This may be another reason why the correlation coefficient showed a weak relationship. According to the authors, the relationship turns from indirect to direct in the long run. A shorter time period could therefore cause a stronger connection.

The connection between unemployment and interest rates has been studied by several authors in recent years (Liptáková et al., 2021; de Lima et al., 2022; Al Kindhi et al., 2021). The results indicate a rather unclear or indirect connection. In our work, the correlation was positive. As we could see when verifying the validity of the Phillips curve, the strength and even the direction of the correlation are strongly influenced by the length of the analyzed period, the conditions of the given economy, but also the period in which the analysis was carried out. The authors' results on the connection between the gross minimum wage and unemployment differ. Some confirm an indirect connection (Pavelka & Čadil, 2014; Pernica, 2017), while other authors confirm a direct connection (Malau et al., 2022; Meixnerová & Krajňák, 2020). The reason is probably that raising the minimum wage stimulates the supply of labor on the market and significantly reduces voluntary unemployment; on the other hand, it reduces the demand for labor. Therefore, everything depends on the market situation. In general, we can say that in developed economies, where demand exceeds supply, raising the minimum wage will cause a decrease in unemployment (stimulating supply), but in less developed economies, where labor supply exceeds demand, raising the minimum wage will be counterproductive and will bring about an increase in unemployment (reducing demand).

Another factor that is worth considering is the role of labour market policies and structural reforms, which, as stated above, can significantly influence both unemployment and wages. For example, in countries with strong social systems, the response of unemployment to changes in inflation or minimum wages may be slightly muted or delayed (Katris, 2020; Östling, 2025; Busch & Ochsen, 2025). In Slovakia, regional differences in job opportunities, the alignment of the education system with labour market needs or the degree of labour market flexibility could contribute to the complexity of the observed correlations. These institutional and structural factors often mediate the theoretical relationships presented in macroeconomic models, making it challenging to identify a clear causal link based solely on statistical measurements.
In addition, the impact of globalisation and external economic shocks cannot be overlooked. Slovakia, as an open and export-oriented economy closely linked to the automotive industry, is particularly sensitive to global demand fluctuations, supply chain disruptions, and trends in foreign investment (Szeiner et al., 2023; Esmaeili et al., 2025). These external factors can simultaneously affect inflation (via import prices) and unemployment (via changes in production), thereby distorting the expected direction or strength of the Phillips curve. In addition, post-pandemic economic volatility and the geopolitical situation in Europe (e.g., energy crisis, war in Ukraine) have introduced new uncertainties that are likely to affect inflation and labor market behavior in ways that traditional models do not fully capture (Malakhail et al., 2023; Afunts et al., 2024; Salvati & Tridico, 2024). Future analyses should consider integrating external economic indicators or exploring multifactor models that account for these broader impacts.

CONCLUSIONS

This article analyzed the relationship between several macroeconomic factors. We were primarily interested in the relationship with unemployment and tried to verify the validity of the Phillips curve in the current conditions of the Slovak Republic. The results suggest that this theory remains valid, although the strength of the relationship may be lower than when the theory was initially developed. The strength of the relationship can change over time, and the scope of the analyzed period is very significant. In addition to the relationship between inflation and unemployment, we also verified the relationships between interest rates and unemployment, as well as the level of the gross minimum wage and unemployment. The relationship between interest rates and unemployment was direct and moderately strong. The relationship between the level of the gross minimum wage and unemployment was strong and indirect, which is in accordance with research primarily conducted in developed

economies. All relationships were verified using correlation coefficients, and all of them turned out to be statistically significant at the 1% significance level.

The weakness of this research is that it only evaluates the linear relationship between selected factors, which can significantly distort the results and reduce the true value of the relationship. Additionally, in this work, we focused on relationships between factors and did not investigate dependencies. In the future, it would therefore be appropriate to expand the research to regression, where it would be possible to detect and quantify the effects of multiple variables on one selected dependent variable. Furthermore, the scope of the analysis proved to be a significant factor, so a shorter or longer period can certainly bring different results. We also recommend including more factors in the analysis, which can contribute to a better understanding and quantification of the relationships between factors.

REFERENCES

Abbasov, J. (2023). A new simple test to evaluate the efficiency of government spending. *Economics and Sociology*, *16*(3), 97-124.

Afunts, G., Cato, M., & Schmidt, T. (2024). Inflation Expectations in the Wake of the War in Ukraine. *Journal of Behavioral and Experimental Economics*, *113*. https://doi.org/10.1016/j.socec.2024.102303

Al Kindhi, B., Dewi, R. A., Santoso, N., Idris, A. Y. S., Yudhistira, A. B., & Putri, F. M. (2021). Prediction of the unemployment and bank interest rates on changes in the stock price index with efficient regression. *IEEE International Conference on Communication, Networks and Satellite (COMNETSAT)*, 190-194.

Alfieri, L., & Gabrielyan, D. (2024). The communication reaction function of the European Central Bank. An analysis using topic modelling. *Baltic Journal of Economics*, *24*(1), 58-87. https://doi.org/10.1080/1406099X.2024.2303904

Backhouse, R. E., Forder, J., & Laskaridis, C. (2023). The natural rate of unemployment and the NAIRU. *European Economic Review*, *159* https://doi.org/10.1016/j.euroecorev.2023.104563

Berger, D., Herkenhoff, K., & Mongey, S. (2025). Minimum Wages, Efficiency, and Welfare. *Econometrica*, *93*(1), 265-301.

Busch, F., & Ochsen, C. (2025). Local Effects of Education and Age Groups on Unemployment in Germany. *Growth and Change*, *56*(1). https://doi.org/10.1111/grow.70011

de Lima, I. P., de Oliveira, E. R., Santos, G. C., & Oliveira, E. D. (2022). Análise da relação da quantidade de participantes ativos das entidades fechadas de Previdência Complementar (EFPC) com o ambiente socioeconômico. *Revista Ambiente Contábil, 14*(1), 174-195.

Devaguptapu, A., & Dash, P. (2023). Global commodity prices and inflation expectations. *International Journal of Emerging Markets*, *18*(5), 1053-1077. https://doi.org/10.1108/IJOEM-11-2020-1382

Esmaeili, P., Rafei, M., Salari, M., & Balsalobre-Lorente, D. (2024). From oil surges to renewable shifts: Unveiling the dynamic impact of supply and demand shocks in global crude oil market on US clean energy trends. *Energy Policy*, *192*. https://doi.org/10.1016/j.enpol.2024.114252

Eurostat. (2025). Retrieved from https://ec.europa.eu/eurostat/en/

Fratianni, M., Gallegati, M., & Giri, F. (2022). The medium-run Phillips curve: A time–frequency investigation for the UK. *Journal of Macroeconomics, 73*, 103450. https://doi.org/10.1016/j.jmacro.2022.103450

Furuoka, F., Pui, K. L., Chomar, M. T., & Nikitina, L. (2021). Is the Phillips curve disappearing? Evidence from a new test procedure. *Applied Economics Letters, 28*(6), 493-500.

Gabriel, R. D. (2023). Monetary policy and the wage inflation-unemployment tradeoff. *European Economic Review*, *159*. https://doi.org/10.1016/j.euroecorev.2023.104565

Gallegati, M., & Desai, M. (2024). Stagflation and inflationary regimes: Long cycles in historical perspective. *Journal of Evolutionary Economics*, *34*(4-5). 709-737.

Gokcu, M. (2024). Estimating time-varying potential output and NAIRU using a multivariate filter for Türkiye. *Central Bank Review*, *24*(2), 1-12. https://doi.org/10.1016/j.cbrev.2024.100158

Janoskova, K., Balcerzak, A. P., & Kral, P. (2024). An unconventional apprach to evaluating the financial performance under critical macroeconomic disturbances: the case of public transport during the Covid-19 pandemic. *Polish Journal of Management Studies*, *29*(2). 273-292. https://doi.org/10.17512/pjms.2024.29.2.14

Katris, C. (2020). Prediction of unemployment rates with time series and machine learning techniques. *Computational Economics*, *55*(2), 673-706.

Liptáková, E., Rimár, M., Kizek, J., & Šefčíková, Z. (2021). The evolution of natural gas prices in EU countries and their impact on the country's macroeconomic indicators. *Civil and Environmental Engineering Reports, 31*(2), 255-273.

Malakhail, F., Debnath, D., & Westhoff, P. (2023). Causes of food inflation in North America: COVID-19 and the Russia-Ukraine war. *Studies in agricultural economics, 125*(2). 98-107. https://doi.org/10.7896/j.2574

Malau, A. G., Sembiring, S. A. A., Rahmanta, R., & Irsad, I. (2022). The impact of the labor market, regional minimum wages, investment on the economic growth of the tertiary sector in North Sumatra Province. *Quality-Access to Success, 23*(191), 290-298.

Mallick, D. (2019). Policy regimes and the shape of the Phillips curve in Australia. *Journal of Policy Modeling, 41*(6), 1077-1094. https://doi.org/10.1016/j.jpolmod.2019.05.002

McDonald, I. M. (2023). Joan Robinson's Phillips curve. *Review of Keynesian Economics*, *11*(1), 52-71.

Meixnerová, L., & Krajňák, M. (2020). Macroeconomic time series affecting the minimum and average wages of V4 countries. *Ekonomie a Management, 23*(4), 4-22.

Musibau, H. O. (2025). New Oil Price Crisis, and Health Costs: Impact on the OECD Economy: Insights From a Novel IV-Quantile–Quantile Analysis. *Sustainable Development*. https://doi.org/10.1002/sd.3381

Neverauskiene, L. O., Ginevičius, R., & Danilevičienė, I. (2024). The influence of wage and employment on competitiveness: An assessment. *Journal of Competitiveness*, *16*(4). 83-105. https://doi.org/10.7441/joc.2024.04.05

Östling, M. (2025). Deemed as' Distant': Categorizing Unemployment in Sweden's Evolving Welfare Landscape. *Social Sciences*, *14*(3), 129. https://doi.org/10.3390/socsci14030129

Oteng, P. A., & Ngo-Henha Eyono, E. P. (2024). Navigating Work-Life Boundaries: How It Influences Employee Commitment and Career Success Among Millennials, With Work-Life Balance As a Moderating Factor. *International Journal of Entrepreneurial Knowledge*, *12*(2), 133–150. https://doi.org/10.37335/ijek.v12i2.270

Pavelka, T., Skala, M., & Čadil, J. (2014). Selected issues of the minimum wage in the Czech Republic. *Ekonomie a Management, 17*(4), 30-45.

Pernica, M. (2017). Evaluation of the adequacy of government minimum wage valorization policy in the Czech Republic in 2017 in the European context. *Oeconomia Copernicana, 8*(1), 21-36.

Phiri, A. (2025). Unconventional monetary policy and the (Neo) Fisher effect: has the federal reserve misunderstood monetary policy?. *Cogent Economics Finance*, *13*(1). https://doi.org/10.1080/23322039.2025.2460070

Pontiggia, D. (2020). Phillips curve and long-run inflation under commitment. *Journal of Economic Studies, 47*(1), 21-35.

Reinbold, B., & Wen, Y. (2020). Is the Phillips curve still alive? *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3676533

Russell, B., & Rambaccussing, D. (2019). Breaks and the statistical process of inflation: the case of estimating the 'modern' long-run Phillips curve. *Empirical Economics, 56*, 1455-1475. https://doi.org/10.1007/s00181-017-1373-3

Salvati, L., & Tridico, P. (2024). Which Policies Against Inflation After Covid-19 and the War in Ukraine: The Italian Case. *Review of Political Economy*, *36*(4), 1420-1435. https://doi.org/10.1080/09538259.2023.2294296

Sirakovova, E. (2024). Behavioural macroeconomics: unveiling the psychology of inflation expectations. *Public Finance Quarterly*, *70*(2), 90-105.

Solarin, S. A., Lafuente, C., Gil-Alana, L. A., & González-Blanch, M. J. (2024). Persistence in the Unemployment and Inflation Relationship. Evidence from 38 OECD Countries. *Journal of the Knowledge Economy*, 1-22. https://doi.org/10.1007/s13132-024-02034-4

Statistical Office of the Slovak Republic. (2025). Retrieved from https://slovak.statistics.sk/

Szeiner, Z., Juhász, T., Hevesi, E., & Poór, J. (2023). HRM challenges in Slovakia generated by the Covid-19 pandemic. *Central European Management Journal*, *31*(2), 258-273. https://doi.org/10.1108/CEMJ-02-2022-0024

Trading Economics. (2025). Retrieved from https://tradingeconomics.com/

Verne, J. F. (2024). Estimating the trajectories of the Okun's coefficient and NAIRU with the rolling regression method: Evidence from Lebanon". *Economics Bulletin*, *44*(1), 140-153.

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