

## LABOUR MARKET REGULATION OF INDIVIDUAL COUNTRIES UNDER AN APPLIED INTERPRETATION OF KEYNES AND FRIEDMAN'S THEORIES

Alishli A., Alili A., Teymurova V., Huseynov R.\*

**Abstract:** The study intends to analyse the realities of labour market regulation in the transition economies of Eastern Europe, the Caucasus, and Central Asia using Keynesian theory and the monetary approach. The research methods included the identification of key indicators of economic activity within the context of macroeconomic development features and comparative analysis of statistical data on economic performance and labour market development based on international databases for countries in the region. Keynesian theory and the monetary approach were incorporated into the study design to discover and reevaluate labour vulnerabilities concerning objective economic impact possibilities. The novelty of the study lies in the determination of a model of government intervention that is more adequate for the development of the labour market and human capital based on the policy experience of the countries of the EECCA region as transition economies. The result of these studies is an assessment of the economic results and state of the labour market of the countries of the region. This assessment is based on international statistical data. It suggests that the optimal model is a policy distant from the extremes of high or minimal government intervention. Additionally, the use of a high degree of financial openness of the economy in the short term is recommended as an incentive for investment and market development, labour, and its integration into the global division of labour. This would offer a thorough examination of the overall economic interactions in the employment sector in light of the country's national features.

**Keywords:** economic theory, employment protection, humanitarian crisis, institutional architectonics, pandemic

---

\* **Aynur Alishli**, PhD, Department of Business Management, Azerbaijan State University of Economics (UNEC), Baku, Azerbaijan;

✉ email: aynuralishli6@gmx.com,

ORCID: 0009-0009-6263-2971

**Amil Alili**, PhD, Department of Business Management, Azerbaijan State University of Economics (UNEC), Baku, Azerbaijan;

✉ email: amilalili@outlook.com,

ORCID: 0009-0008-5238-4225

**Vusala Teymurova**, PhD, Department of Mathematics and Statistics, Azerbaijan State University of Economics (UNEC), Baku, Azerbaijan;

✉ email: vusalateymurova@outlook.com,

ORCID: 0009-0005-8453-6914

**Rashad Huseynov**, PhD, Department of Economics and Technological Sciences, Scientific Research Institute of Economic Investigation under Azerbaijan State University of Economics (UNEC), Baku, Azerbaijan;

✉ corresponding author: rashadhuseynov5@outlook.com,

ORCID: 0009-0006-3371-5231

DOI: 10.17512/pjms.2024.29.1.02

*Article history:*

*Received* December 20, 2023; *Revised* February 14, 2024; *Accepted* March 12, 2024

## **Introduction**

In Eastern Europe, the Caucasus, and Central Asia (EECCA), the employed population has seen the gains made to resolve the labour market issues caused by the COVID-19 crisis overturned. Significant socioeconomic suffering has been brought to the EECCA region as a result of severe exclusionary measures, such as employment closures, interruptions to global supply networks, and a general slowdown in economic activity (ILO, 2022). The recession has significantly impacted the leisure services industry and associated retail businesses. This had a devastating effect on jobs in the informal economy, which was often ignored by job retention programmes that instead prioritised safeguarding the formal economy (United Nations, 2022).

An already struggling labour market will feel the effects of fresh obstacles such as the war between Russia and Ukraine, the armed conflict on the Kyrgyz-Tajik border, and the armed struggle between Armenia and Azerbaijan beginning on the 22nd of February 2022 (Canecca, 2022). Unresolved conflicts among countries in the EECCA region have caused global inflationary pressures, especially for food and energy prices; increased financial stress; tighter monetary policies that threaten global employment recovery; massive refugee influxes into neighbouring countries; and deteriorating economies that exacerbate employment issues (ILO, 2022).

It is important to highlight that labour markets in the EECCA region are highly diverse. For instance, the population of working age is increasing rapidly in the Caucasus and Central Asia, while it is decreasing in Eastern Europe. Significant issues for “ageing” nations are the increasing proportion of seniors and the declining labour force, which creates incentives for labour migration within the EECCA region (Vinokurov et al., 2016). In 2022, the global employment-to-population ratio is projected to reach 55.9%, up from 57.3% in 2019. In 2022, there will be 207 million unemployed persons, up from 186 million in 2019 (Ryder, 2022). Conflict and political instability are anticipated to diminish the economic outlook for employment recovery in labour markets, particularly in the transition countries of the EECCA region (OPHI, 2021; Steiner, 2021).

The problem of sustainable economic efficiency comes to the fore in connection with the need to maintain social stability in developed and developing countries. Overcoming or avoiding economic crises associated with economic cycles requires, first of all, maintaining an efficient labour market and maintaining social stability requires high employment (Armantier et al., 2021). In developed countries, there is also a need to maintain relatively high wages, which does not always correlate with the real needs of enterprises. These changes also find solutions in the addition and development of Keynesian theory and the Friedman Theory (Aganbegyan, 2022).

Keynesianism departs from its previous disregard for changes in productive forces resulting from technological advancements. Instead, it incorporates approaches such as considering R. Harrod's "capital ratio" or the accelerator theory, aiming to complement J. M. Keynes' multiplier theory (Simonova, 2022). Technological development leads to a faster expansion of capital and noticeable changes in the dynamics of the employment market. The role of the state as a regulator of economic cycles is also growing and acquiring the role of a regulator of the social state of society and a predictor of the implementation of human capital.

### Literature Review

The macroeconomic view of the labour market refers to the demand and supply of labour in a system of economic, legal, social, etc. relationships between employees and employers (Kenton, 2022). Geographical location and the set of rules governing who can participate and under what conditions vary across labour markets (Carmody, 2020; Lemanova, 2014). The labour market has unique characteristics due to its social aspect, which calls for regulation and management (Carmody, 2020). Within this paradigm, employment (Lemanova, 2014) is the most significant socioeconomic sphere of society and is always the focal point of economic theories. Currently, the labour market is a phenomenon that includes a much larger number of factors and significant variables. They include the international labour market and labour migration. Given globalization, it must be considered that no country can be considered a closed object with a labour market with a constant number of participants and the number of offers. In many countries in Central and Eastern Europe, labour migration is circular in nature and involvement in the international division of labour determines the state of most sectors of the economy (Papp et al., 2019). All Central Asian countries are labour donors; a similar situation is observed for Ukraine, which supplies most of the labour resources to Europe, Russia is a donor to a lesser extent, but acts as an acceptor of labour resources (Carmody, 2020; Levanda, 2021; ILO, 2022). The second most important factor is the role of human capital, which includes skills, knowledge, education, as well as communication influence and other components (Betcherman, 2022). Human capital can influence the nature of the distribution of labour resources within the country, the attraction of labour resources or their outflow. The labour market can be considered a marker of the level of development of human capital and connects it with the competitiveness of the country at the level of the influence of social capital on financial and non-financial indicators of the competitiveness of enterprises and the connection of social capital to key indicators of the macroeconomic level (Mishchuk et al., 2023). The third significant new factor is the level of technology penetration, which affects the structure of employment. In some cases, in the countries of Central Asia, engineering or IT specialities may be filled by migrant workers from other countries, and the local population may occupy lower social niches for a long time (ILOSTAT, 2022b). On the other hand, countries that have powerful manufacturing or extractive enterprises have a more balanced labour market (Karagezova, 2018). All these

macroeconomic changes must be taken into account by economic theories that model the labour market.

The researcher refers to the following economic theories: the classical employment theory (the equilibrium between labour supply and demand is achieved through wage flexibility); the Marxist labour market and the unemployment theory (labour markets are always characterised by an imbalance between labour supply and demand, which contributes to an excessive working population in the form of current, hidden, and stagnant unemployment); and the institutional employment theory (the equilibrium between labour supply and demand is achieved through the employment function). All these theories are more or less effective models reflecting the patterns of the real labor market, but for each of them, there is extensive criticism that demonstrates the shortcomings of each (Lioudis, 2022). As a rule, the theory shows good predictive power in some conditions and has much worse results in others. Some modern researchers tend to see the limitations of each of the theories of employment in that they choose a limited set of variables to explain the equilibrium of employment and supply and deliberately discard other variables. These discarded variables in a different situation may be of decisive importance, and then the theory does not describe reality well enough. Thus, the classical theory of employment ignores the phenomena of monopoly, the influence of technology, and a number of other factors that can lead to a lack of wage flexibility (Rada et al., 2023).

Campolmi and Gnocchi (2016) studied definitions of the labour market idea and discovered that the labour economy encompasses households with employed, unemployed, or non-participating people (not in the labour force). The employed are involved in market production, the jobless are engaged in home production during the time they are not actively seeking employment, and the non-participants are entirely engaged in family tasks. Based on the highlighted definitions, the researchers came to the following conclusions: participation, which is the maximum value of household production that measures the coverage of non-labour activities, is pro-cyclical and dependent on productivity spikes in the market; employment promotion must be considered within the framework of inflation stabilisation policies rather than as an invariant of monetary policy rules for the volatility of labour market variables, in particular unemployment control. Paley (2019) investigated the severity of the unemployment situation. To address the researcher's highlighted practice issue, Harrod's 1939 Keynesian growth theory was reinforced by a function of technological advancement in the Kaldor-Hicks progress term. In this manner, the Kaldor-Hicks function illustrates how the supply responds to an increase in demand. The hypothesis posits that increased demand growth leads to a reduction in unemployment, subsequently fostering the expansion of the labour force, technological advancements, and an overall rise in supply.

The practical experience of the early 21st century can challenge this hypothesis in many ways, as demonstrated by the experience of some of the largest companies on which decision employment depends. An increase in demand may or may not lead to a decrease in unemployment, which is associated with a demand for high-tech and

trained specialists. The absence of such creates a long-term unsatisfied demand in the market and high demand in some sectors with high unemployment at the same time (Akaev and Sadovnichiy, 2021). Technology stimulation is not necessarily parallel or even linked to workforce expansion in a high-demand environment: we see mass layoffs in most cutting-edge companies with high demand and a new wave of technology that no longer involves human participation. Hence, it appears probable that the theories being examined will necessitate fresh revisions and expansions in the near future.

Another researcher (Burya et al., 2022) who used a monetary strategy to study unemployment concluded that when measuring labour, it is more important to focus on actual employment outcomes across the distribution than the natural rate of unemployment. In this scenario, with an expanded workforce, monetary policy can promote favourable employment conditions without substantially increasing wages. Thus, government intervention in the labour market raises the household members' ratio of inflation to unemployment, which is consistent with previous research by Armantier et al. (2021). Bergman et al. (2022) looked at how the social and demographic makeup of the population affected the effects of labour market power on monetary policy. They conducted a quantitative analysis to create a new Keynesian model. In this vein, the model suggests that, first, piecemeal approaches to employment facilitation are ineffective. Second, less-attached workers benefit from a monetary policy aimed at reducing inflation and maximizing the achievement of keeping it within a given corridor. Third, employment becomes more inclusive if rates remain low for an extended period. Mourão and Popescu (2023) demonstrate the impact of Keynesian and Samuelsonian multiplier-accelerator models on economic growth in the European Economic Area and examine the role of investment in influencing the labour market. To summarise the predictions of the model sustained expansionary monetary policy that tightens labour conditions leads to economic growth and more jobs for people who are not as attached to their jobs. However, higher asset prices also increase inflationary pressures and property inequality.

Lane (2022) investigates the category of worker vulnerability in the labour market. The researcher contends that a labour bottleneck scenario can occur if there is an unexpected, large-scale increase in aggregate labour demand or a significant deficit in aggregate labour supply. On the other hand, supply-side constraints arising from the COVID-19 crisis hindered the economic recovery and caused inflation to rise in 2021 (Celasun et al., 2022). The challenge for policymakers, according to researchers, is to support economic recovery without allowing high inflation to take hold and to ensure sustainable economic efficiency (Karagezova, 2018).

Differentiate Keynesian theory and the Friedman Theory approach to the labour market and employment was formed as a result of the penetration of human capital theory from sociology through the dissemination of the ideas of Bourdieu (Marginson, 2019). Older economic theories, to a significant extent, according to many researchers, may not take into account the reality that has changed under the

pressure of technology. Previously, these theories regarded human knowledge as a factor influencing the size of wages but not as a factor with broader implications. It is hypothesized that higher qualifications may lead to greater productivity and faster capital accumulation and market advantages, as well as requiring higher pay (Lemanova, 2014; Rada et al., 2023). However, the realities of the information age radically change these ideas because the work of an influencer, an influential blogger, a famous actor or a professional lobbyist generates powerful advantages, a noticeable movement of capital and other market effects, and at the same time is in no way connected with the usual understanding of qualifications and wages. To understand the role of these new factors in the labour market, one can use the concept of human capital and its variants, for example, social capital and its other types (Hamadamin and Atan, 2019). Job security, from this point of view, is a factor that suppresses well-being and inhibits the development of human capital in many of its dimensions at the same time (Aliyev, 2022).

In contrast to the papers mentioned above, this one attempts to evaluate labour market regulation in the context of Keynesian theory and monetarist methodology to theoretically capture and explain the socioeconomic processes of employment in the EECCA region's transition economies.

The practical contribution of the study is the development of a macroeconomic analysis tool for evaluating the management of the labour market, based on the relationship between the variables included in the Keynesian and monetarist market views.

The purpose of this study is to evaluate the models of labour market regulation in EECCA transition economies using Keynesian theory and the monetary approach.

Research objectives:

- Analysis of the EECCA region's macroeconomic development and identifying key indicators of population economic activity;
- Examining and comparing the methodological foundations of Keynesian theory and the monetarist approach to identify and reassess labour vulnerabilities in light of objective economic consequences;
- Assess the reality of labour market regulation using Keynesian theory and the monetary approach in the transition economies of the EECCA region.

As a hypothesis, the study considers the statement that in the regulation of the labour market in post-Soviet countries (the EECCA region), a more optimal choice is a policy away from the extremes of government regulation or deregulation, based on the Keynesian model of the labour market, emphasizing the aggregate money supply, which increases the value of the openness of financial markets and the importance of investment in the economy.

The structure of the study is as follows. Section 1 looks at global issues and trends in the practice area under study, followed by local issues. Section 2 describes the research methodology and design, as well as the materials on which it is based. Section 3 presents the author's interpretation and vision of the research objectives. Section 4 compares the results to those of other similar studies. In section 5, the



authors highlight the target conclusions, describe how to practically use them, and lay out the general framework for further research.

### **Research Methodology and Materials**

This study is concerned with the analysis of labour demand and supply in the transition economies of the EECCA region on key indicators of macroeconomic development in the framework of the Keynesian theory and monetarist approach model. The theoretical part of the study focuses on the concepts of Burya et al. (2022), Celasun et al. (2022), and Lemanova (2014). The empirical part of the study is based on ILOSTAT (2022a, 2022b), Our World in Data (2022), and World Bank (2022). The analysis is based on the labour markets of Eastern Europe, the Caucasus and Central Asia. The sample of countries is chosen to reflect the objective versions of the economic shocks caused by the COVID-19 crisis and the unresolved conflicts between Azerbaijan and Armenia, Kyrgyzstan and Tajikistan, Russia and Ukraine. The analysis of the study covers the period before and during the pandemic: 2018 - 2022. The findings are summarised and interpreted using the method of analysis, comparison and contrast, and descriptive statistics using Excel and Visio software. At first, a macro-level analysis of the labour markets in the EECCA countries is done in terms of key indicators of economic activity of the population: employment-to-population ratio (youth, adults 15+) (%), unemployment rate, average monthly wage (in USD), economic income (Atlas method), and population vaccination rate (%). Based on a review of previous studies (Burya et al., 2022; Celasun et al., 2022; Lemanova, 2014) and data from ILOSTAT, (2022a, 2022b), Our World in Data (2022), and World Bank (2022), the key labour market regulation indicators are found. Excel's conditional formatting is used to perform the analysis and the rule that looked for values that were higher than the mean applied to cells. The analysed labour market data from the EECCA region's transition economies benefit from conditional formatting, which highlights patterns and trends. A conceptual framework of labour market macroeconomic conditionality is built by analysing and comparing the methodological foundations of Keynesian theory (Lemanova, 2014) and the monetary approach (Burya et al., 2022). This is done to emphasise and review labour market weaknesses in the face of the COVID-19 pandemic, and a growing humanitarian crisis caused by unresolved disputes among EECCA members. The English economist John Keynes is recognised as the founder of Keynesian theory. The identity is expressed as the aggregate  $AE(Y)=Y$ , which includes real aggregate expenditure and planned aggregate income. The American economist Milton Friedman is credited as being the father of the monetary approach. He popularised the equation  $M=Y+P$ , in which M stands for the annual rate of money circulation, Y for the physical output of goods and services, and P for the price level that maintains the money market in a state of short-term equilibrium. To give the conceptual framework an empirical focus, these economic indicators are used to monitor and evaluate the reality of labour market regulation in the EECCA countries under study:

- The Keynesian annual growth rate of output per employee (GDP at constant 2017 PPP international prices) (ILOSTAT, 2022), which describes labour productivity;
- Broad money (% of GDP) under the monetary approach (World Bank, 2022), capturing the confidence of economic agents in the national currency. The data used for monitoring and estimation span the years 2018 through 2021. The result offers an explanation for socioeconomic relationships in the job market in light of labour policy indicators.

The object of the study is the socioeconomic relationships that result from labour market regulation.

The subject of the study is how social and economic relationships change as a result of a changing regulatory paradigm (Keynesian and monetarist market visions).

The study has two limitations: the focus is on EECCA countries that are in an unresolved conflict situation; the labour market analysis does not include measurements of the informal economy due to a lack of data access.

### **Research Results**

The study of opinions on the labour market regulation system revealed that the efficiency of employment utilisation is determined by macroeconomic policies. It has been discovered that the interests of the economically active population are more important in political terms than those of the unemployed. In this regard, this market is oriented toward state intervention via macroeconomic policy instruments in the EECCA economies in transition. Table 1 examines labour markets in the EECCA region using key macroeconomic indicators against the backdrop of social and economic changes caused by the coronavirus pandemic and unresolved conflicts between Azerbaijan and Armenia, Kyrgyzstan and Tajikistan, Russia and Ukraine.



Table 1. Labour Markets in the EECCA Region, 2022

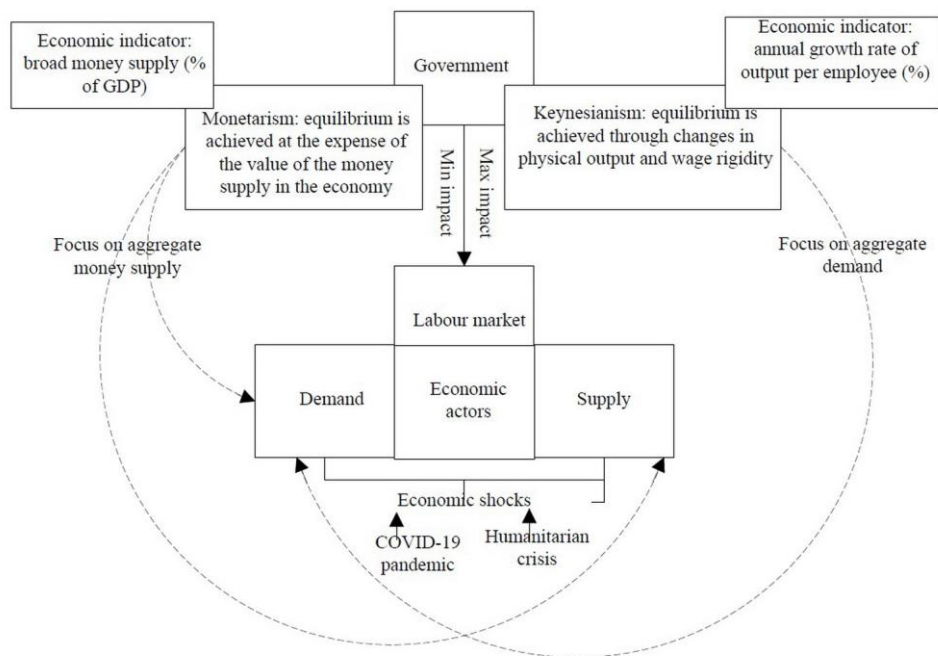
EECCA region / country / conditional formatting function		Employment-to-population ratio (%)	Unemployment rate (%)	Size The average wage (monthly average), in USD	Economy income group	Vaccine introductions (%)
Caucasus	Azerbaijan (rule > above average $\sum 4$ )	63.1	6.0	328.72	Upper-middle-income countries	40.05
	Armenia (rule > above average $\sum 3$ )	58.4	12.2	250.01	Upper-middle-income countries	23.12
Central Asia	Kyrgyzstan (rule > above average $\sum 1$ )	61.8	4.6	202.83	Lower-middle-income countries	14.88
	Tajikistan (rule > above average is unacceptable)	39.5	6.9	131.82	Lower-middle-income countries	29.09
Eastern Europe	Russia (rule > above average $\sum 4$ )	59.4	4.7	601.41	Upper-middle-income countries	45.5
	Ukraine (rule > above average $\sum 3$ )	49.3	9.8	425.92	Lower-middle-income countries	34.65

**Source:** ILOSTAT (2022a, 2022b), Our World in Data (2022), World Bank (2022)

**Note:** According to Excel's conditional formatting function, cells with values greater than the average are highlighted in the selected range

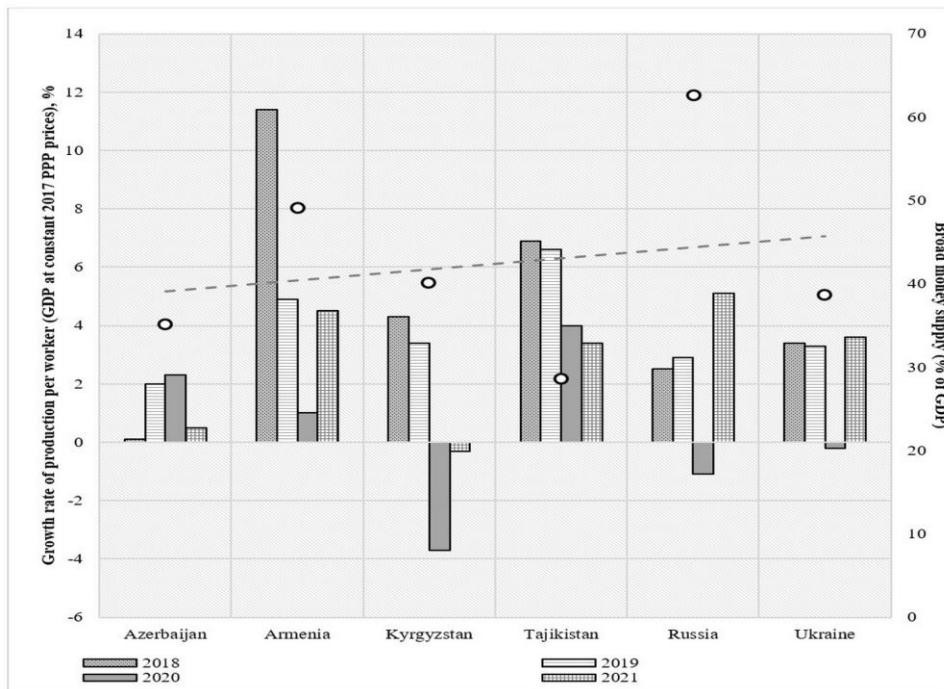
According to Table 1, there are significant differences in the labour economic activity of the population between the EECCA markets considered. Azerbaijan and Russia, whose economies are associated with the upper middle-income bracket, have the best labour market regulation. In a macroeconomic development context, these labour markets have the highest employment protection, as evidenced by high employment-to-population ratios (63.1% and 59.4%), average monthly wages (USD 328.72 and USD 601.41), rapid deployment (40.05% and 45.5%), and low unemployment (6.0% and 4.7%). Tajikistan's labour market has the opposite dynamic. Regional labour market differences can thus be explained by national

macroeconomic development. In this regard, the study and comparison of the Keynesian employment theory methodology and the monetary stimulus approach, followed by the modelling of the literature into a conceptual comparison scheme, served as the foundation for the analysis of labour market regulation (Figure 1). The diagram shows how Keynesian theory proposes to solve the problems of macroeconomic regulation of labour supply and demand by increasing government intervention in the labour market to achieve aggregate demand stabilisation. Under these conditions, the growth of labour productivity would be encouraged. To achieve the value of the money supply, the monetary approach proposes using minimal government intervention in the national economy within the boundaries of a self-organising market system. Under these circumstances, the economic activity of all labour market participants will reflect the credibility of economic policies. To that end, data on labour market policy, when put into the context of economic theories, will show how much the government affects the labour market, which is meant to make it work better and eliminate imbalances. Because of this influence, certain groups are given preferential treatment in the labour market.



**Figure 1: Conditionality of Macroeconomic Labor Market Regulation under a Keynesian Theory and Monetary Approach Model: A Conceptual Framework**  
 Source: Burya et al., 2022; Lemanova, 2014

As seen in Figure 1, the role of government is to influence the labour market through regulation to safeguard employment and boost its effectiveness in reevaluating economic vulnerability. The annual growth rate of output per employee (%) is the variable for labour market regulation in Keynesian theory. This indicator characterises the economic standard of living and provides comprehensive insights into the efficiency and quality of human capital in the production processes within social and economic contexts. The broad money supply indicator (% of GDP) is used in the monetary approach. The function of the broad money supply is to reveal future changes in nominal demand and inflation. It makes it possible to understand how economic agents interact in the market and how their activities change in response to different economic shocks. Labour markets in the EECCA region are assessed and monitored as decisions on setting employment rules should be based on quantitative analysis of their likely impact (Figure 2). As part of the monitoring, the average values of the analysed indicator broad money (% of GDP) and the analysed annual growth rate of output per employee (%) for the period between 2018 and 2021 are used. In this study, the labour market dynamics are measured using an approximating function graph - a linear trend line (cf. value 2018-2021). This gives a current estimate that considers recent developments in the state of the labour market. The estimation is based on global comparisons to obtain a balanced set of panel data by region, taking into account the situation for nations with limited data on the labour market against the backdrop of the identified economic impacts. The results indicate that a paradigm shift in labour market regulation establishes rules that are unique across the EECCA region.



**Figure 2: EECCA Region Labour Market Regulation Monitoring and Evaluation, 2018–2021**

Source: World Bank, 2022

Within the EECCA region, the interplay between labour supply and demand exhibits both favourable and adverse impacts, as illustrated in Figure 2 based on monitoring and evaluation. Various factors such as employment rates, unemployment rates, wage details, geographic location, and economic income groups in a social and economic context may influence these dynamics. A Keynesian economic indicator, in particular, highlights Armenia and Tajikistan as being at the extremes of strict regulation, with average labour productivity of 5.45% and 5.22% over the studied period. Russia and Ukraine are in the middle zone, where the average value of labour efficiency is 2.37 and 2.52%, respectively. It can be argued that the labour regulations developed in these countries can mitigate the economic vulnerabilities of market failures and provide employment protection without incurring significant economic costs. Azerbaijan and Kyrgyzstan have insufficient labour market regulation (1.22 and 0.92%, respectively). Overall, it is safe to assert that the countries at the extremes, such as Armenia and Azerbaijan; Kyrgyzstan and Tajikistan are paying both economically and socially. Another viewpoint, according to a monetary approach to economics, emphasises that confidence in the national currency is typical of the economies of Russia and Armenia, which have established optimal employment rules in the present circumstances and have strengthened labour market regulation. Thus, a trend toward state regulation can be seen in light of the

coronavirus pandemic and ongoing disputes between EECCA nations. The Keynesian market visa model captures this trend, but instead of emphasising aggregate demand as in the monetarist model, it focuses on the aggregate money supply.

### Discussion

The analysis in this study about how the labour market is regulated in the transition economies of the EECCA region shows that the economies of Azerbaijan and Russia are characterised by high employment, protection of the average monthly wage, and low unemployment. This is the case against the backdrop of the rapid introduction of vaccines among the population. According to the classification used by the World Bank, these nations have an income level that falls into the upper middle group. Tajikistan, whose economies are similar to the lower-middle income group, has low macroeconomic development in terms of employment in the labour market.

Many studies in developing countries indicate that fuller employment in this stage of the transition economy can in most cases be accompanied by lower average incomes and large income gaps between the richest and the majority. In this case, social stability or maintaining the sustainability of economic development is ensured by guarantees of employment and earnings from the state, which in many respects corresponds to the proposed models of Russia and Azerbaijan. In any case, transition countries should rely on a significant role of the state in labour market regulation (Akaev and Sadovnichiy, 2021).

Moldicz (2021) looked at labour market regulation in a way that was similar to this study. He did this by looking at indicators like employment and unemployment rates, wages, and some government actions.

The researcher concluded that macroeconomic employment policies should focus on stimulating labour rather than protecting jobs and raising the minimum wage, particularly in the face of economic shocks, which is consistent with Barua's (2022) post-pandemic labour market review. Existing labour laws will compel businesses to raise the quality of their goods and services, resulting in more value-added and raising the output's competitiveness in global markets (Levanda, 2021). By fostering institutional flexibility, Betcherman (2022) asserts that labour market regulations, particularly in transition economies (Liotti, 2022), should work to enhance the efficiency of labour markets while preserving employment in the face of economic structural changes (Cazes and Verick, 2013).

Transitional economy countries, as the researchers point out, have several challenges at the same time (Paley, 2019; Moldicz, 2021). These challenges encompass structural changes, the expansion of involvement in the international division of labour mechanisms, alterations in the financial structure of national capital attributed to foreign investment, technological hurdles, and challenges related to the advancement of human capital. Institutional flexibility is a requirement closely related to the development of human capital because it requires an increase in the efficiency and quality of state regulation and interaction between the state and

business. Some researchers consider openness to be the most important aspect of financial market development in the short term and, at the same time, contribute to the long-term implementation of human capital (Alomari et al., 2024). These aspects are outside the scope of this study but are also important. It is within the framework of the Keynesian methodology that the role of the state and the quality of its institutions comes to one of the first places when addressing issues of sustainable development (Lioudis, 2022). According to some researchers, the monetarist methodology can be effectively used in the regulation of financial markets and interaction with international capital markets, which often play a decisive role in developing countries (Kenton, 2022; Lane, 2022).

Keynesian and monetarist methodological frameworks should be examined and compared to identify and reassess economic vulnerabilities. This should be done with the macro-level analysis of labour markets in the EECCA region in this study taken into consideration. Both types of frameworks have limitations, and a certain degree of tolerance should be accepted in macroeconomic analysis. The acceptable level of efficiency for models can be considered, as in this study, the compliance of the model with the available statistical data and key evaluation criteria. When assessing economic vulnerabilities, it is more important to assess the fact of vulnerability and identify predictors of its implementation, for example, in the labour market (Ahuja and Pandit, 2020). This approach allows the field of state regulation to achieve relief of socio-economic problems before their full implementation. In the analyzed region, achieving this was infrequent, making the significance of such studies particularly noteworthy (Karagezova, 2018; Levanda, 2021; Stockhammer, 2023).

The results of Lioudis (2022) are supported by the analysis of the literature modelled into the conceptual description, which indicates that Keynesian theory examines the economy from the aggregate demand stimulus side and the monetary approach examines the economy from the aggregate money supply side. The researcher comes to the following conclusions in his paper: 1) The application of monetarism is restricted to monetary control in the context of the state's role as a regulator in the economy; 2) Keynesianism places a strong emphasis on boosting overall demand through government intervention and monetary injections; 3) Monetarists use the money supply control rule to limit the growth of the money supply; 4) Keynesians acknowledge the value of money supply regulation designed to prevent unanticipated aggregate shifts. The results obtained by Aganbegyan (2022) regarding the use of the economic theories of Keynesianism and monetarism in policy show that in a global economy, using any one theory is insufficient. According to the researcher, and in line with the results of this study, the two approaches currently represent two perspectives that serve as the foundation for economic policy. Aganbegyan (2022), on the other hand, suggests relying on the monetary approach in the case of transition economies, which have a reputation for being state-oligarchic due to their high levels of statehood and lack of developed, growth-enhancing capital markets. Monitoring and analysis of the labour markets in the



EECCA region served as an empirical test of the proposed conceptual framework developed in this study. The findings show that the Keynesian and monetarist regulatory paradigm shifts in market visions have both positive and negative effects. On the Keynesian front, the countries of Eastern Europe (Russia and Ukraine) have more solid socioeconomic linkages in the labour market than the countries of the Caucasus (Azerbaijan and Armenia) and Central Asia (Kyrgyzstan and Tajikistan). On the monetary front, however, Armenia and Russia are the only countries with fact-based economic judgements on labour market regulation, as indicated by the high level of economic agent confidence in their respective national currencies. According to the results of this study, economic shocks caused by the COVID-19 pandemic and the escalating humanitarian crisis are causing supply and demand mismatches in the labour market, particularly in Armenia, Azerbaijan, Kyrgyzstan, Tajikistan, and, to a lesser extent, Ukraine.

The labour market's demand imbalances were predominantly triggered by technological lag and an unprepared infrastructure for the digital environment. This has necessitated a deeper restructuring of supply chains and even more service delivery and logistics organization. All these countries have a specific labour market structure, which includes a large sector of unskilled or low-skilled and low-paid labour, which has been hit harder by the pandemic and subsequent consequences (Marek et al., 2020; Rada et al., 2023). The solution to this problem, in accordance with the results of the proposed study, was highly dependent on the confidence and stability of the national currency, as the role of imports increased, and purchases of consumer goods and production components increased. Specific decisions varied from country to country, and they had, as indicated, both positive and negative effects.

Birinci et al. (2022) have suggested using quantitative research to find solutions to the mismatch between the factors that determine the labour market. Nonetheless, this occurs within the context of the interaction between fiscal and monetary policy. According to researchers, a modern economy's labour market valuation model should be flexible, allowing it to integrate additional exogenous variables while considering the constraints of data accessibility and availability. It is important to draw attention to the positions taken by the researchers Mansoor et al. (2021) and Sumner (2022). Mansoor et al. (2021), in particular, used World Bank statistics to examine the causal relationship between money, income, and prices among Keynesians and monetarists.

Additional exogenous variables are extremely important for understanding the real labour market in its constant changes. These unforeseeable variables, which are now essential for understanding the ever-changing labour market, can act as a catalyst for further enhancing economic development models and existing economic theories (Ahuja and Pandit, 2020). As the results of the proposed study demonstrate, Keynesian and monetarist models reflect the state of the labor market rather well and can be successfully used to regulate it. Researchers based on the experience of different countries warn that the applicability of such models is nevertheless limited

(Simonova, 2022; Stockhammer, 2023). The expansion of these models will occur due to the introduction of exogenous variables into consideration, the content of which can now only be guessed.

The researchers concluded that both the monetarist and Keynesian schools' points of view are correct. However, the monetarist role of money supply and income is favoured because it is essential to accelerating economic growth. Sumner (2022) agrees, arguing that in the future, the monetarist analysis will play a critical role in shaping and evaluating a country's macroeconomic policy. To sum up the results of this study, the practical result is a macroeconomic policy tool that takes into account the different types of labour markets in the EECCA region and controls for changes in volatile and uncertain situations. It does this by using Keynesian economic theory and a monetarist approach to monitor and evaluate changes.

### **Conclusion**

Using data from six transition economies in the EECCA region that are in a state of conflict, this study analysed labour market regulation for the years 2018 to 2022. It is discovered that there are significant differences in the level of labour market regulation across countries in the EECCA region concerning employment, unemployment, wages, economic income, and vaccination implementation—key indicators of the economically active population in the context of macroeconomic development features. The regulation of the labour market is most effective in Azerbaijan and Russia, while it is less effective in Tajikistan. In the economic literature, Keynesianism is seen as proposing a state-led solution to macroeconomic regulation of the labour market to boost aggregate demand, while monetarism operates within the constraints of a market system that organises itself with minimal government intervention. The conceptual description that is presented in a comparative scheme provides support for the assumptions that are revealed in the design of both the Keynesian and monetarist methodological frameworks. The government's approach to boosting aggregate demand, particularly focusing on the ultimate outcomes of monetary policy in times of economic unpredictability and uncertainty, demonstrates how the economy's performance impacts the effectiveness of macroeconomic policies. This is accomplished by empirically estimating the probable consequences of macro-level labour market policies. A comparison of the annual growth rate per worker of production (GDP at constant 2017 PPP international prices) in Keynesian theory and the broad money supply in the monetary approach showed that, against the backdrop of the COVID-19 pandemic and the growing humanitarian crisis, there is a growing trend toward the state having more control over the demand and supply of labour. To some extent, it may be argued that the classical Keynesian model is still relevant today. That said, in the real world today, the government has to focus not on demand as such, but on the total amount of money in circulation. This is in line with the monetarist model, which asserts that the government should control confidence in the national currency so that economic actors can have stable finances. With the empirical evaluation data in mind, it is

possible to argue that the variables in the modified Keynesian and monetarist paradigm for market regulation should be used to strengthen the implementation of policies that regulate the labour market. When the results are put to use, they will help policymakers develop employment, compensation, and productivity laws. With the knowledge they have gained from how these rules operate, they will be able to combat any adverse economic effects. The creation of an environment that encourages economic growth is suggested as the next step in light of these determined objective economic effects.

## References

- Aganbegyan, A. G., (2022). The two main macroeconomic theories of Keynes and Friedman and their use in the economic policy of the world's major countries and Russia. *Studies on Russian Economic Development*, 33(5), 471–479.
- Ahuja, D., Pandit, D., (2020). Public expenditure and economic growth: Evidence from the developing countries. *FII Business Review*, 9(3), 228–236.
- Akaev, A. A., Sadovnichiy, V. A., (2021). Revisited economic theory or how to describe the processes of disequilibrium and instability of modern economic systems. In T. Devezas, J. Leitão, & A. Sarygulov (Eds.). *The Economics of Digital Transformation: Approaching Non-stable and Uncertain Digitalized Production Systems* (pp. 25–43).
- Aliyev, K., (2022). Well-being costs of perceived job insecurity: Mediating role of financial satisfaction, subjective healthiness and institutional trust. *Journal of International Studies*, 15(2), 140–156.
- Alomari, M. W., Hailat, M., Alyousef, A. M. and Alghazali, A., (2024). Do financial markets in developed countries continue benefiting from economic openness? An evidence from G10 Group. *Montenegrin Journal of Economics*, 20(1), 155–164.
- Armantier, O., Kosar, G., Pomerantz, R., Skandalis, D., Smith, K., Topa, G. and van der Klaauw, W., (2021). How economic crises affect inflation beliefs: Evidence from the Covid-19 pandemic. *Journal of Economic Behavior & Organization, Elsevier*, 189(C), 443–469.
- Barua, A., (2022). *The labour market is recovering but unevenly so*. Deloitte Insights.
- Bergman, N., Matsa, D. and Weber, M., (2022). *Inclusive monetary policy: How tight labor markets facilitate broad-based employment growth*. Working paper No. 2022-03. Becker Friedman Institute.
- Betcherman, G., (2022). *Designing labour market regulations in developing countries*. University of Ottawa, Canada, and IZA, Germany.
- Birinci, S., Karahan, F., Mercan, Y. and See, K., (2022). *Labor market shocks and monetary policy*. Federal Reserve Bank of St. Louis Working Paper.
- Burya, A., Mano, R., Timmer, Y. and Weber, A., (2022). *Monetary policy under labor market power*. International Monetary Fund.
- Campolmi, A., Gnocchi, S., (2016). Labour market participation, unemployment and monetary policy. *Journal of Monetary Economics*, 79, 17–29.
- Caneecca., (2022). *Press release: Consumption and damages of EECCA countries are rising due to military action in the region*. Climate Action Network International Eastern Europe, Caucasus and Central Asia.

- Carmody, R., (2020). Labor market. In *International encyclopedia of human geography (second edition)* (pp. 65–70). Elsevier.
- Cazes, S., Verick, S., (2013). Labour market regulations for development: Enhancing institutions and policies in emerging economies. In *The labour markets of emerging economies* (pp. 63–105). Palgrave Macmillan.
- Celasun, O., Hansen, N., Mineshima, A., Spector, M. and Zhou, J., (2022). *Supply bottlenecks: Where, why, how much, and what next?* International Monetary Fund.
- Hamadamin, H. H., Atan, T., (2019). The Impact of Strategic Human Resource Management Practices on Competitive Advantage Sustainability: The Mediation of Human Capital Development and Employee Commitment. *Sustainability*, 11(20), 5782.
- ILO., (2022). *Global employment trends for youth 2022: Europe and Central Asia*. ILO.
- ILOSTAT., (2022a). *Data country profiles - Armenia, Azerbaijan, Russian Federation, Tajikistan, Kyrgyz Republic, Ukraine*. ILOSTAT.
- ILOSTAT., (2022b). *Profile country*. ILOSTAT. International Labour Office.
- Karagezova, N., (2018). Analysis of the dynamics of consumer price index, poverty and settlement in Azerbaijan. *Journal of International Economic Relations*, 8(2), 233–246.
- Kenton, W., (2022). *Labour market explained: Theories and who is included*. Investopedia.
- Lane, P., (2022). *Bottlenecks and monetary policy*. European Central Bank.
- Lemanova, P. V., (2014). Overview of key concepts of the functioning of the labor market. *Bulletin of the Taganrog Institute named after A. P. Chekhov*, 1, 97–103.
- Levanda, E., (2021). *Determining the influence of socio-economic factors on Ukraine consumer market development*. National Academy of Sciences of Ukraine.
- Liotti, G., (2022). Labour market regulation and youth unemployment in the EU-28. *Italian Economic Journal*, 8, 77–103.
- Lioudis, N., (2022). *Keynesian economics vs. monetarism: What's the difference?* Investopedia.
- Mansoor, A., Hussain, S., Rais, S., Bashir, M., Tariq, Y. and Kausar, M., (2021). The dynamics of monetarists versus Keynesians perspectives and their role in economic growth of Pakistan. *Journal of Asian Finance, Economics and Business*, 9(2), 61–69.
- Marek, D., Patrik, R., Veronika, G. and Marina, F., (2020). Economic impacts of Covid-19 on the labor market and human capital. *Terra Economicus*, 18(4), 78–96.
- Marginson, S., (2019). Limitations of Human Capital Theory. *Studies in Higher Education*, 44(2), 287–301.
- Mishchuk, H., Bilan, Y., Androniceanu, A. and Krol, V., (2023). Social capital: Evaluating its roles in competitiveness and ensuring human development. *Journal of Competitiveness*, 15(2), 1–17.
- Moldicz, S., (2021). Hungary social briefing: Labour market in 2021. *China-CEE Institute*, 46(3), 1–5.
- Mourão, P. J. R. Popescu, I. A., (2023). Investment, growth and competitiveness: The multiplier-accelerator in the 21st century. *Journal of Competitiveness*, 15(3), 60–78.
- OPHI., (2021). *Global Multidimensional Poverty Index / 2021*. Oxford Poverty and Human Development Initiative.
- Our World in Data., (2022). *Coronavirus (COVID-19) vaccinations*. Our World in Data.
- Paley, T., (2019). Unemployment and growth: Putting unemployment into post Keynesian growth theory. *Review of Political Economy*, 31(2), 194–215.
- Papp, I. C., Bilan, S. and Dajnoki, K., (2019). Globalization of the labour market--Circular migration in Hungary. *Journal of International Studies* (2071-8330), 12(2), 182–200.

- Rada, C., Tavani, D., von Arnim, R. and Zamparelli, L., (2023). Classical and Keynesian models of inequality and stagnation. *Journal of Economic Behavior & Organization*, 211, 442–461.
- Ryder, G., (2022). *World employment and social outlook: Trends 2022*. International Labour Office.
- Simonova, M. D., (2022). *Digitalization of economy: From neo-Keynesianism to blockchain in health care*. Springer.
- Steiner, A., (2021). *United Nations development programme. Annual report*. UND.
- Stockhammer, E., (2023). Macroeconomic ingredients for a growth model analysis for peripheral economies: A post-Keynesian-structuralist approach. *New Political Economy*, 28(4), 628–645.
- Sumner, S., (2022). Whither monetarism? *Economic Affairs*, 42(2), 275–287.
- United Nations., (2022). *World economic situation and prospects*. Global Economic Outlook.
- Vinokurov, E., Balas, P., Emerson, M., Havlik, P., Pereboev, V., Rovenskaya, E., Stepanova, A., Kofner, J. and Kabat, P., (2016). Labour market and migration across the Eurasian continent. In *Challenges and opportunities of economic integration within a wider European and Eurasian Space, 13-14 April, 2016* (pp. 1–25). IIASA.
- World Bank., (2022). *Broad money (% of GDP) - Armenia, Azerbaijan, Russian Federation, Tajikistan, Kyrgyz Republic, Ukraine*. World Bank.

## REGULACJA RYNKU PRACY W POSZCZEGÓLNYCH KRAJACH W ŚWIECIE PRAKTYCZNEJ INTERPRETACJI TEORII KEYNESA I FRIEDMANA

**Streszczenie:** Badanie ma na celu analizę rzeczywistości regulacji rynku pracy w gospodarkach przejściowych Europy Wschodniej, Kaukazu i Azji Środkowej z wykorzystaniem teorii keynesowskiej i podejścia monetarnego. Metody badawcze obejmowały identyfikację kluczowych wskaźników aktywności gospodarczej w kontekście cech rozwoju makroekonomicznego oraz analizę porównawczą danych statystycznych dotyczących wyników ekonomicznych i rozwoju rynku pracy na podstawie międzynarodowych baz danych dla krajów regionu. Teoria keynesowska i podejście monetarne zostały włączone do projektu badania w celu odkrycia i ponownego oceny wrażliwości rynku pracy w odniesieniu do obiektywnych możliwości wpływu ekonomicznego. Nowością badania jest określenie modelu interwencji rządowej, który jest bardziej adekwatny dla rozwoju rynku pracy i kapitału ludzkiego, oparty na doświadczeniach politycznych krajów regionu EECCA jako gospodarek przejściowych. Wyniki tych badań to ocena wyników gospodarczych i stanu rynku pracy krajów regionu. Ocena ta opiera się na międzynarodowych danych statystycznych i sugeruje, że optymalny model to polityka oddalona od skrajności wysokiej lub minimalnej interwencji rządowej. Dodatkowo zaleca się stosowanie wysokiego stopnia otwartości finansowej gospodarki w krótkim okresie jako bodźca do inwestycji i rozwoju rynku pracy oraz jego integracji z globalnym podziałem pracy. To pozwoli na dogłębną analizę ogólnych interakcji gospodarczych w sektorze zatrudnienia w świetle cech narodowych danego kraju.

**Słowa kluczowe:** teoria ekonomii, ochrona zatrudnienia, kryzys humanitarny, architektura instytucjonalna, pandemia