Identification and direction of changes in work-life balance dimensions in Visegrad Group countries

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A B S T R A C T
Objective: The article aimed to identify the dimensions and trajectories of work-life balance (WLB) across the Visegrad Group (V4) countries (Poland, the Czech Republic, Slovakia, and Hungary) during the period 2008-2022. We posed two research questions: which factors are most responsible for WLB and how do the dimensions of WLB evolve over time among the V4 countries?
Research Design & Methods: We employed a quantitative and interpretative approach. Based on statistical data, we identified WLB dimensions in the multiple factor analysis (MFA). The estimated factor values formed the basis for analysing the trajectories of changes in three indices (WORK, TIME, FAMILY) for each of the V4 countries over the 2009-2022 period.
Findings: Among the three WLB dimensions, WORK was the most explanatory for WLB. The eigenvalue of the first dimension explained 32% of the total variance, the second dimension eigenvalue contributed 26% of the variance, and the third extracted dimension explained 15% of the total variance. We demonstrated the status of three WLB dimensions over a period of 14 years across the V4 countries. We found the greatest stabilization of WLB in the FAMILY dimension, while the WORK dimension distinctly differentiated the V4 countries. Although all V4 countries showed an increasing trend in the WORK index alongside a decrease in the TIME index, they clearly followed different paths in the development of WLB, including the pursuit of diversification (WORK), similarity (FAMILY), and the maintenance of stationarity (TIME).
Implications & Recommendations: The findings may be valuable for planning future strategies aimed at enhancing the employees' WLB. Further research should focus, among other aspects, on the observation of WLB dimensions and the assessment of the trajectories identified in the article, including the impact of the V4 countries' decisions on the development of work-life balance policies.
Contribution & Value Added: The number of studies on WLB has increased significantly over the past ten years, revealing the complexity of the phenomena and presenting diverse research perspectives. The proposed study approach based on multiple-factor analysis allowed us to capture the state of WLB in terms of its dimensions (WORK, TIME, FAMILY) and its dynamics over a longer time frame (14 years) in countries originating from the same political-economic system. The differences identified at this level have led to the conclusion that the state of WLB of employees from the V4 countries is only partly determined by systemic-historical conditions. WLB in the V4 countries reveals national-level differences and prompts further comparative research.

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INTRODUCTION

Despite a 40-year history of work-life balance (WLB) research, there is still a deficit in its operationalisation and effective systemic solutions. The political transformation (1990s) within the borders of the

European continent has revealed different rates of development of labour markets and implementation of WLB-supportive solutions in post-communist countries.

The article distinguishes three groups of variables describing work-life balance issues: TIME (C), WORK (P), and FAMILY (R). Using the example of the Visegrad Group, it is shown how the complexity of these groups develops and what differences exist between countries in this respect. A dynamic analysis on an annual basis (2008-2022) makes it possible to observe trends and changes in the dimensions over time. We aimed to identify the trajectory of WLB across V4 countries, with two subsidiary objectives: to identify the latent dimensions underlying WLB (1) and to assess the dynamics of WLB across countries (2).

At the foundation of the goals lies the necessity for a systematic approach to the analysis and evaluation of WLB systems. Numerous studies demonstrate the complexity of these systems, primarily stemming from the need to consider a multitude of variables that enable the understanding and assessment of their effectiveness (Fernandez-Crehuet *et al.*, 2016). The efficiency of the WLB system signifies both the robust and diversified labour market resources (Ehrenberg & Smith, 2012), flexibility in time and work organisation (Ágota-Aliz, 2021; Marumpe *et al.*, 2023; Ralston & Flanagan, 1985) as well as the welfare of households in which both parents have the opportunity for professional development (Farré *et al.*, 2023; Goldin, 2015; Kurowska, 2020; Magda *et al.*, 2024; Petrongolo & Ronchi, 2020). Consequent to this foundation, we formulated the following research questions: (1) Which factors most significantly contribute to WLB, and (2) how do the dimensions of WLB evolve over time among the V4 countries?

A crucial contribution to the research on the specificity of WLB is the applied dynamic approach, which entails comparing the changing dimensions of WLB over time. This represents a valuable supplement to previous studies that compared variables across a single year (Fernandez-Crehuet *et al.*, 2016; OECD, 2021). In turn, focusing on the evolution of dimensions allows for a deeper understanding of the WLB trajectories within a specific geographical context (V4 countries), offering a more targeted insight into policy interventions under similar conditions of transformation. In this manner, it will be easier to comprehend how certain external factors (economic crisis, COVID-19) have impacted the work-life balance systems and how policy decisions have regulated this system.

The conducted analysis encompassed two significant research stages. Initially, through MFA, we identified variables that most characterise the WLB systems in the V4 countries. Based on this, we determined trajectories of WLB dimensions, enabling a deeper understanding of WLB dynamics and its impacts on the labour market.

The article's next chapter reviews the literature and develops hypotheses. The third chapter provides a methodology description. Policy implications, research constraints, and future research possibilities are indicated by empirical findings and discussion of results in the fourth chapter and the last section.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The origin of the work-life balance concept involves the conflict between work and family, first defined by Kahn *et al.* (1964). Subsequent research by Pleck (1977) introduced the theme of gender, analysing the work-family role system from the perspectives of men and women. Greenhaus and Beutell (1985) developed the issue of work-life conflict focusing their attention on the role of the family and women. It was not until the 1990s that a broader view of the issue emerged, encompassing both men and women, with or without children. As a result, the discourse on the work-family axis and family-friendly policies broadened towards everyone's work-life balance (Lewis *et al.*, 2007).

In the last decade, the number of studies on the topic of work-life balance has increased significantly, revealing the complexity of the phenomenon and presenting different research perspectives:

1. Individual – research interests focus on the struggles of individuals in the area of reconciling professional and personal roles (Anxo *et al.*, 2012; Brough & Timms, 2009; Darcy *et al.*, 2012; Fedakova, 2017; Newman, 2016; Roberts, 2007; Timms *et al.*, 2012). More recently, much research has also focused on the blurring of the boundaries between work and personal life as a consequence of the COVID-19 pandemic and technological transformation (Bencsik & Juhasz, 2023; Kusairi *et al.*, 2022).
2. Organisational – research in the area of management, relating to flexibility of place and time at work, the use of specific solutions to enhance efficiency and job satisfaction and quality of non-

work life (Ágota-Aliz, 2021; Alassaf *et al.*, 2023; Haeger & Lingham, 2014; Karim *et al.*, 2023; Van Hugten *et al.*, 2021).

3. Systemic – research is used to recognise how legal, political and cultural orders govern work-life balance opportunities at both the individual and organisational levels (Albanesi *et al.*, 2023). The subject of gender equality in the workforce and the persistent disparities between men and women in terms of work-life balance opportunities remain pertinent in this field of study (Farré *et al.*, 2023; Harman & Bartůsková, 2023; Petrongolo & Ronchi, 2020).

Work-life balance deficiencies in each of these areas lead to unfavourable outcomes. From a systemic perspective, which is the focus of this article, this issue manifests in the diminishing labour market resources, and deepening inequalities, particularly between women and men (Petrongolo & Ronchi, 2020). There is also an increase in the costs associated with sustaining individuals outside the labour market and rising healthcare expenses. A long-term deficit can lead to households' material deprivation (Hansen & Stutzer, 2022; Vignoli *et al.*, 2020). A particular group affected in this context are parents. Research in the domain of WLB confirms the influence of parenthood on the ability to maintain a balance between work and caregiving responsibilities (Feldman *et al.*, 2004; Gloor *et al.*, 2018; Greenhaus & Allen, 2011; Shanmugam, 2017). Becoming a parent leads to a reevaluation of life goals and priorities, often resulting in work being subordinated to new duties (LaTronica-Herb & Karalis Noel, 2022; Polizzi *et al.*, 2022). Maintaining family and employment becomes a significantly greater challenge. Mothers typically reduce their professional activity, whereas fathers (due to the necessity of securing income) increase their work intensity (Magda *et al.*, 2024; McMunn *et al.*, 2015; Rahmqvist, 2006; Wood *et al.*, 2018). As a result, having a child profoundly influences the work dimension and tips the scales in favour of a possible rise or fall in employment indicators (Hansen & Stutzer, 2022). Inadequate job security for working parents may also have demographic consequences. The fear of job loss or the fact of being unemployed influences the decision to delay parenthood, thereby reducing birth rates (Landaud, 2021; Miettinen & Jalovaara, 2020; Studer *et al.*, 2018). Therefore, we formulated the following hypothesis to determine the work-life balance dimension associated with employment (WORK):

H1: The employment rate of individuals with children holds a greater contribution in defining the WORK_WLB dimension, compared to the employment rate of individuals without children.

The second important dimension regulating Work-Life Balance is TIME, understood both as time devoted to work and time outside the professional sphere. The average number of weekly working hours directly affects the capacity to reconcile professional and personal life. The Visegrad countries deviate from the European Union average, which stood at 37.3 hours in 2022. In Poland, it was 40.4 hours, in the Czech Republic – 39.8 hours, and in Hungary and Slovakia – 39.6 hours (Eurostat, 2023). The Better Life Index, which is the main metric comparing OECD countries in terms of work-life balance, primarily bases its WLB assessment on data concerning long working hours, correlating higher rankings with a smaller percentage of individuals working over 50 hours per week. Research in Western European countries also supports the positive impact of shorter working hours (including part-time work) on WLB (Dillenseger *et al.*, 2023a; Hobson *et al.*, 2011). Conversely, extended working hours not only reduce the time employees can devote to rest and personal matters but also increase the risk of sickness absence (Ropponen *et al.*, 2019). Excessive absence diminishes productivity, decreases work engagement, and can lead to employee turnover (Bainbridge & Broady, 2017; Chadi & Goerke, 2018; Cucchiella *et al.*, 2014). Therefore, variables depicting the scale of workplace absence affect the assessment of the work-life balance system. However, given their often secondary nature to long working hours, we hypothesised (H2):

H2: Employee absenteeism has a weaker effect on explaining and contributing to the TIME_WLB dimension than working overtime.

As previously highlighted, a deficient WLB system can lead to reduced professional engagement or exclusion from the labour market, and consequently, to families' material deprivation (Hansen & Stutzer, 2022; Vignoli *et al.*, 2020). Therefore, in the analysis of the WLB issue, it is also essential to include variables that illustrate key aspects of life outside the professional sphere (referred to as the FAMILY dimension). For families with children, these include the availability and standard of public

daycare. The low percentage of children covered by the public care system, along with the accompanying high percentage of parents caring for children at home, indicates an insufficient fulfilment of WLB needs (Albanesi *et al.*, 2022; Greenhaus & Beutell, 1985). In the event of a work-family conflict, it is typically women who resign from professional activity in favour of childcare. This stems from culturally assigned roles to women and men, as well as existing inequalities in the labour market. One manifestation of these disparities is the gender pay gap, that is, the difference between men's and women's earnings. It is simply more economically feasible for a woman to leave her job if her income is lower for the family (Harman & Bartůsková, 2023; Petrongolo & Ronchi, 2020). In European Union countries, there has been a gradual narrowing of the gender pay gap (Cukrowska-Torzewska & Matysiak, 2020; Leythienne & Pérez-Julián, 2021; Newell & Reilly, 2001), which may imply that its importance in determining the dimensions of WLB will no longer be as significant as an effectively functioning childcare system. As a result, we hypothesised (H3):

H3: Institutional support for parental care contributed to the FAMILY_WLB dimension more than the reduction of the gender pay gap.

The subject of the analysis is the Visegrad countries, which, due to macroeconomic, historical and institutional similarities, present a similar level of economic development and are characterised by a similar employment structure. They also joined the European Union and made the switch from a planned to a free market economy at the same time (Bieszk-Stolorz & Dmytrów, 2020).

The agreement between the Visegrad Triangle countries was concluded in 1991 at the Hungarian castle in the town of Visegrad. After the break-up of Czechoslovakia in 1993, the formation became the Visegrad Group V4 and has since consisted of four countries, *i.e.*, Poland, Hungary, the Czech Republic, and Slovakia. The founding of the partnership was based not only on converging foreign policy objectives but also on similar implementation tools (Fedakova, 2017).

From the perspective of the WLB system study, it is significant to highlight the comparable socio-economic conditions that characterized these countries at the time of integration with the EU. The differences between the situation of women and men in the labour market largely determined the basis of the system supporting WLB during the integration of the V4 countries into the European Union. Women in the former communist bloc countries spent, on average, more time at work than their Western counterparts. The top-down wage and price-setting system created a situation in which both men and women had to work to maintain a basic standard of living for the family. Women were granted a wide range of rights and privileges at work. There was also a very extensive and accessible childcare system (Newell & Reilly, 2001). At the same time, women performed a very large proportion of domestic duties, which entailed a double burden and limited career development to a similar extent to men. Moreover, the Western revolution in the implementation of gender equality in the labour market, which brought a slow but fundamental change in the distribution of unpaid non-work labour, did not take place in communist countries (Harman & Bartůsková, 2023).

The high participation of women in the labour market began to decline sharply after 1989 as a result of the free market transition. The scale of the collapse of women's labour market participation varied across the V4 countries. The most affected country was Poland, where between 1989 and 1994 approximately one and a half million jobs previously held by women disappeared (Newell & Reilly, 2001). Declining employment in the Visegrad Group was compensated by higher average working hours (Szymańska, 2017), which negatively affected the ability to reconcile professional and personal responsibilities among the employed.

The democratization of the V4 countries varied the central approach in establishing conditions that allow for reconciling professional and personal life. Over the span of two decades, changing governments across the V4 countries – left-wing, centrist, and right-wing – differed in their emphasis on particular elements of the system supporting the balance between work and non-work life. Despite these differences in the development of WLB systems, V4 countries are characterized by some of the longest working hours in Europe, a sizable gender pay gap, insufficient female participation in the labour market, and a childcare system less developed than that of Western Europe. Therefore, determining the dynamics of WLB trajectories, we hypothesized (H4):

H4: The dynamics of WLB dimensions across V4 countries express parallel developmental trajectories.

With Hypothesis 4, we intended to confirm the assumption that historical and social factors determine the development directions of WLB systems. Furthermore, previous comparative WLB studies lack a dynamic perspective as the scholars based the evaluations on a single year (Anxo *et al.*, 2012; Fernandez-Crehuet *et al.*, 2016; McGinnity & Whelan, 2009; Rollnik-Sadowska & Dabrowska, 2018). Designating the trajectories of WLB dimensions in the Visegrád Group countries over a 20-year period will enable the identification of WLB systems development's main phases. It will also be possible to ascertain how differently the WLB systems in the studied countries have developed.

In conclusion, our research's hypotheses aimed to enable the verification of the adopted classification of WLB dimensions: P, C, and R, as well as the identification of the most significant variables contributing to the creation of effective WLB systems. In turn, determining the trajectories of dimensions will support a better understanding of how the WLB systems are shaped in countries with similar socio-economic conditions.

RESEARCH METHODOLOGY

Scope of the Study and Selected Variables

We used databases from Eurostat (Eurostat, 2023). The data covered all V4 countries from 2008 to 2022, which ensured continuity and comparability of the analysed variables. We chose the year 2008 as the beginning of the period under consideration, as data in all the analysed variables were available for that time. The end of the study period was 2022, the last year for which a full set of statistical data was available.

To analyse work-life balance systems in the group of V4 countries, we selected a number of variables and attributed them to three dimensions: WORK, TIME, and FAMILY. The selection of variables allows for a comprehensive identification of the relationship between the factors describing the work-life balance issue and the identification of those variables that regulate the work-life balance system to the greatest extent. The comparative analyses conducted so far in this research area use variable selection to develop work-life balance assessment indices.

One indicator for comparing countries is the OECD's proposed Better Life Index, consisting of eleven areas[1] assessing the quality of life in member countries. The OECD defines the area of work-life balance based on the following variables: the percentage of the workforce that works very long hours (more than 50 hours per week) and time spent on 'leisure and personal care.' Fernandez-Crehuet *et al.* (2016) extend this relatively narrow range of variables by proposing the National Work-Life Balance Index. The index includes five dimensions (time, work, family, health, politics) that rank the countries studied according to WLB conditions. Comparative studies based on secondary variables provided by public databases also use the results of the cyclical European Social Survey (McGinnity & Whelan, 2009). The survey concerns a subjective evaluation of different areas related to work-life balance issues. Other proposed measures for assessing work-family relationships are Work-Family Strains and Gains (Marshall & Barnett, 1993), the Work-Family Balance Scale (Wooden, 2003; Zhang *et al.*, 2012), and the overall well-being of working families (Kapteyn *et al.*, 2010).

We propose a set of variables that consider longitudinal data characterising the three dimensions of work-life balance: TIME, WORK, and FAMILY. In this way, it is possible to identify differences between V4 countries and capture the dynamics of change over time.

The first dimension proposed was TIME, which included four variables (C1-C4):

1. The average number of working hours per week (symbol – C1 in the MFA analysis results) is a key element influencing the possibilities of reconciling work and family life. The V4 countries deviate

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[1] Housing and related expenses (1), household income and financial health (2), earnings (3), job security and unemployment (5), quality of social support (6), education and skills (7), quality of the environment (8), civic engagement (9), health care (10), life satisfaction, personal security, work-life balance (11).

in this respect from the EU average, which was 37.3 hours in 2022. It was 40.4 hours in Poland, 39.8 hours in the Czech Republic, and 39.6 hours in Hungary and Slovakia (Eurostat, 2023).

2. Part-time employment (C2) – research in Western European countries shows that part-time employment promotes WLB (Dillenseger *et al.*, 2023; Hobson *et al.*, 2011), but in V4 countries it is infrequent and associated with reduced income, and labour market inequalities (Harman & Bartuskova, 2023).

3. Employed persons absent from work on a medium-quarterly basis (C3) – we may attribute work absences to sick leave, childcare needs, or annual leave, allowing for recognition of employees' need for non-work responsibilities.

4. The percentage of employed people working more than 50 hours per week (C4) – the variable used in the OECD indicator, shows the scale of the problem associated with excessive hours spent at work. It is lower than the OECD average in all the V4 countries. In 2022, it stood at 3% in Poland and Slovakia, 1.4% in Hungary, and 4.2% in the Czech Republic (OECD, 2023).

The next dimension, WORK, included five variables (P1-P5):

1. The employment rate for the whole population (P1) – the problem of WLB directly affects working people. High rates may be indicative of a system in place to support WLB opportunities but also of greater responsibility on the part of employers and governments, in particular, to promote and maintain gender equality (Petrongolo & Ronchi, 2020).

2. The employment rate of people with children (P2); the employment rate of people who have at least one child under 6 (P3); and the employment rate of people without children (P4) – having children reinforces work-life balance issues (Czerniak-Swędzioł & Kumor-Jezierska, 2021).

3. The unemployment rate (P5) – a variable indicating potential WLB constraints that prevent people from becoming economically active (Hansen & Stutzer, 2022). The variable serves to create indicators for assessing WLB (Fernandez-Crehuet *et al.*, 2016).

The last dimension, FAMILY, included the largest number (9) of variables (P1-P9):

1. Average annual income (R1) – higher incomes offer more resources for work-life balance goals like healthcare and leisure, while lower incomes may require more intensive work, reducing personal time and increasing stress. Individuals often face trade-offs between time and money when assessing work-life balance opportunities. Therefore, this variable is often considered when assessing work-life balance opportunities (Fernandez-Crehuet *et al.*, 2016; OECD, 2007).

2. Pay gap (R2); Adjusted pay gap (R3) – the difference between men and women earnings. It illustrates inequalities in the labour market and their impact on WLB (Harman & Bartůsková, 2023; Petrongolo & Ronchi, 2020).

3. The percentage of children under three in public care (R4); the percentage of children aged three attending school in public care (R5); the percentage of children under three cared for solely by their parents (R6); and the percentage of children aged three to school age cared for solely by their parents (R7) – insufficient effective childcare system affects limited WLB opportunities. The low percentage of children in the public childcare system and the high percentage of parents caring for their children at home are indicative of low satisfaction with WLB needs (Albanesi *et al.*, 2022; Greenhaus & Beutell, 1985).

4. Birth rate (R8) and fertility rate (R9) – WLB systems correlate with birth/fertility rates, but factors like social policy, childcare access, and financial support vary across V4 countries. Poland recorded the lowest birth rate (8.3) in 2022, while the Czech Republic had a higher fertility rate (1.33). The declining rate may be a signal to take measures to better protect young parents (Dlugosz & Raźniak, 2014; Matei *et al.*, 2014; Vignoli *et al.*, 2020).

A review of the differences between countries along the proposed dimensions will allow individual countries to better focus their public policy efforts on improving the WLB.

Multiple Factor Analysis Characterization and Trajectory Analysis

We identified the latent dimension of WLB based on multiple-factor analysis (MFA). It is a statistical technique that extends the principles of factor and correspondence analysis to the analysis of multiple data sets (block of variables) simultaneously (Escofier & Pagès, 1994). The method aims to identify and

interpret patterns and relationships within complex data structures, underlying patterns of variables, and insights into the data's multidimensional nature.

As a rule, scholars perform MFA in three steps (Abdi & Valentin, 2007). In the first stage, one performs the separate principal component analysis on each data table.

T data sets consist of

$$X_{[t]} = I \text{ x } J_{[t]} \tag{1}$$

rectangular matrices including quantitative or categorical data.

After that, one obtains the normalized data:

$$Z_{[i]} = 1\lambda_i \text{ x } X_i \tag{2}$$

in which: λ_i – the first singular value of data table.

Secondly, on concatenates the merged and normalized tables into I x T global data matrix Z:

$$Z = [X_1 X_2 \dots X_t] \tag{3}$$

Then, we must factorise the global data matrix using PCA and singular value decomposition:

$$Z = U\Delta V^T \tag{4}$$

in which U and V is the left and right eigenvectors and Δ is an eigenvalue.

In the last step, the individual data sets are projected onto the multidimensional component space:

$$F = M^{-1/2}U\Delta \tag{5}$$

in which: F – factor scores and M – importance weights of each observation (masses) as an inverse of the first eigenvalue.

Additionally in partial analysis, researchers can superimpose the groups of variables onto the sub-space created by PCA of global analysis.

We will present the trajectories of WORK, TIME, and FAMILY indices generated by principal component analysis (as weighted sumscores) across time points for analyzed countries using the lineplots.

RESULTS AND DISCUSSION

MFA results

In the first step, we used an MFA to reduce the data dimensionality and identify key factors describing the WLB issue. In this way, we identified the most differentiating aspects of the V4 countries in this area.

We analysed the explained variance by the next 10 principal components to assess the number of dimensions.
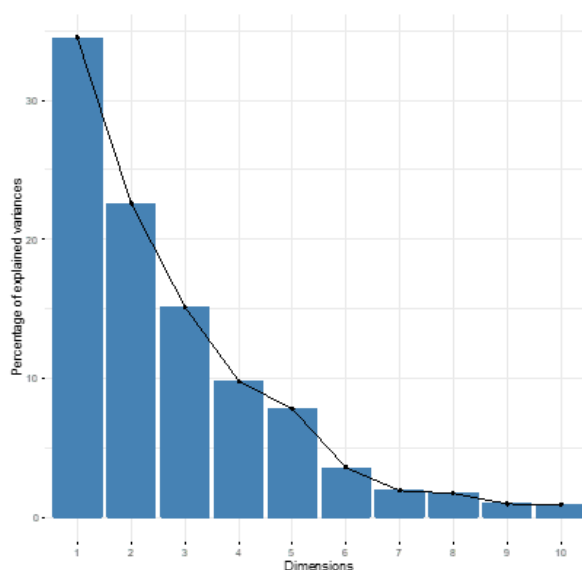

Figure 1. The proportion of variance of data explained by successive components (principal axes)
Source: own elaboration based on analysis results.

We identified three dimensions based on the extent of the explained variance, explaining a total of more than 72% of the variance in the variables structure. We then ranked these dimensions in descending order by the amount of variance explained, which means that the first dimension explained the most variance in the data, the second less, and so on.

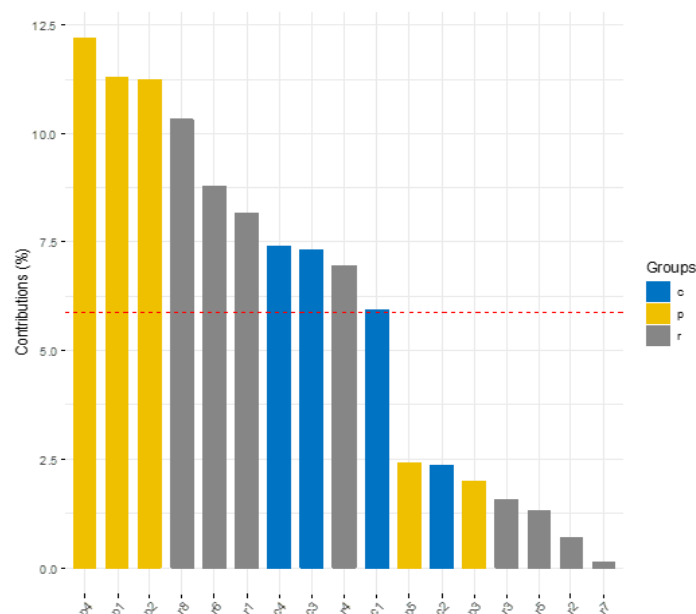Figure 2 shows the contribution of each quantitative variable to dimension 1:

Figure 2. Contribution of quantitative variables to Dimension 1
Source: own elaboration based on analysis results.

The WORK (P4, P1, P2) and FAMILY (R8, R6, R1; Figure 2) indicators contribute the most to the explanation of the first dimension.

Figure 3 illustrates how each variable contributed to the explanation of the second dimension (TIME).
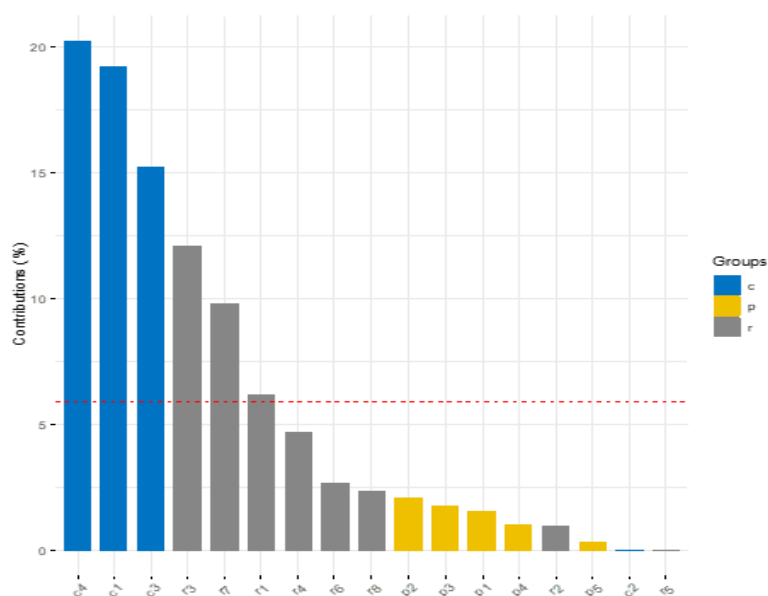

Figure 3. Contribution of quantitative variables to dimension 2
Source: own elaboration based on analysis results.

The greatest contribution to explaining dimension 2 comes from the TIME factor indicators (C4, C1, C3) followed by FAMILY (R3, R7, R1).

Figure 4 shows dimension 3:

Figure 4. Contribution of quantitative variables to dimension 3
Source: own elaboration based on analysis results.

The indicators of the FAMILY factor (R2, R5) and WORK (P3) make the greatest contribution to explaining dimension 3.

In summary, dimension 1 most strongly related to the WORK, the second to the TIME factors and the third to the FAMILY factors. The MFA allowed three main dimensions to be distinguished, explaining more than 72% of the variance in the data, related to groups of variables: Time, Work and Family (Figure 1).

This finding confirmed the notion that the assessment of WLB systems should be conducted comprehensively, considering at least three dimensions of WLB. This conclusion is consistent with the trend of cross-countries comparative analyses, which demonstrate that satisfaction with WLB is a result of individual capabilities, needs, and the regulatory framework governing the labour market, working hours, and social policy (Ágota-Aliz, 2021; Boghirnea, 2023; Fernandez-Crehuet *et al.*, 2016; Hobson *et al.*, 2011; Kohara & Maity, 2021). Simultaneously, this result does not support the individualistic approach that posits achieving a balance between professional and private life is a matter solely of personal endeavour and minimally (or not at all) dependent on socio-demographic factors or other external circumstances (Newman, 2016).

Moreover, the extracted components that explain the largest part of the variance allowed us to indicate which primary variables (WLB indicators) contribute most to the variance of each principal axis and, thus, which WLB indicators are most strongly associated (correlated) with each dimension. The variables that explain the largest part of Dimension 1 include three variables from the WORK group: P4 Employment rate of people without children (the strongest input), P1 Employment rate, P2 Employment rate of people with children.

Thus, the outcome of this part of the analysis contradicted hypothesis 1, which assumed that the employment rate of individuals with children (P2) plays a more significant role in defining the WORK dimension than the employment rate of individuals without children (P4). The analysis results indicated that the greatest contribution to explaining this dimension is indeed the employment level of childless individuals. Nonetheless, this does not imply that the employment of parents will be irrelevant in explaining the WLB system. MFA still qualifies this variable as highly descriptive of the WORK dimension, while also noting that the individuals without children are similarly affected by the WLB issue. This conclusion validates the development of WLB systems based not only on improving family

policies but also on implementing solutions that favour childless individuals (Darcy *et al.*, 2012). Research indeed confirms that unemployment can cause the postponement of decisions to have children, which has a detrimental effect on addressing demographic challenges (Landaud, 2021; Miettinen & Jalovaara, 2020; Studer *et al.*, 2018).

With a smaller but still significant contribution to explaining variance, dimension 2 consists of three variables from the TIME group: C4 Percentage of employed persons working more than 50h per week, C1 Average number of working hours per week, C3 Employed persons absent from work on average quarterly. Further variables from the FAMILY group were less important for this dimension (Figure 3).

Thus, the most significant variables in describing the second dimension were those associated with the amount of time spent working. The impact was highest if these hours surpassed 50 in a week. This supports hypothesis 2: overtime shapes the WORK_TIME_WLB dimension more strongly than employee absenteeism. This result also validates the rationale for including in comparisons of WLB systems a variable associated with working hours (OECD, 2004; 2021), which is crucial in evaluating the effectiveness of WLB systems and their quality in regulating time allocated to work and rest (Pullinger, 2014; Strzemińska *et al.*, 2014). The research also emphasizes the importance of workplace absenteeism in addition to the factors that are most descriptive of the TIME dimension. Even if working hours are a more significant aspect, this one should still be considered for assessment purposes. Monitoring absences connected to health leaves is crucial, as these may point to overwork, physical, and emotional stress, and hence suggest disturbances in the work-leisure balance (Ninaus *et al.*, 2021; Robichau *et al.*, 2023).

With the smallest contribution to the characteristics of the data structure, dimension 3 consists of two variables from the FAMILY group: R2 Pay gap, R5 Percentage of children from 3 years to school age in public care and one variable from the WORK group: P3 Employment rate of people who have at least one child under 6 years of age (Figure 4).

The conclusions from this part of the analysis did not support hypothesis 3, which posited that public childcare holds greater significance in describing the WLB system than the gender pay gap. This is a crucial finding, indicating the need for further action towards equalizing the situation of women and men in the labour market. It is also consistent with the direction of research showing that a more in-depth and detailed examination of the differences in wages between women and men still reveals significant disparities in certain industries or at high managerial positions (Keller *et al.*, 2023; Leythienne & Pérez-Julián, 2021; Petrongolo & Ronchi, 2020; Redmond & McGuinness, 2017).

In summary, work-related variables explained dimension 1 the most and contributed the most variation in the set of eighteen WLB variables. This may indicate that differences in employment policies or other work-related factors are what most differentiate the countries studied in the data set selected for WLB.

Analysis of WLB profiles over time: Changes in work, time and family indices across years and countries. Calculation of P, C and R indices

We calculated the indices for the P, C, and R dimensions as weighted linear combinations of the standardised indicators of P1, P2, P4 for WORK, C1, C3, C4 for TIME and R2, R4, R5 for FAMILY. We estimated the weights using the partial least squares analysis. Table 1 shows the structure of the weights of the individual variables.

These allowed for the estimation of factor scores for the WORK, TIME, and FAMILY dimensions.

Notation of the equations of the three dimensions of WLB (WORK, TIME, FAMILY):

$$Work \ = \ 0.337 \cdot P1 + 0.340 \cdot P2 + 0.335 \cdot P4 \qquad (6)$$

$$Time \ = \ 0.505 \cdot C1 + 0.057 \cdot C3 + 0.505 \cdot C4 \qquad (7)$$

$$Family \ = \ 0.543 \cdot R2 + 0.479 \cdot R4 + 0.260 \cdot R5 \qquad (8)$$

The estimated factor scores formed the basis for the analysis of the trajectories of changes in the index values for individual countries in the analysed years 2009-2022 (the actual time series was 2008-2022 but we shortened it by one year in the analyses due to data shortages). Note the low weight of the C3 variable (0.057) in the formation of the TIME index and the high weight of the R2 variable (0.543) in the FAMILY index. This provides more support for H2 and once more highlights

the necessity of including the pay gap factor in the evaluation of WLB systems (H3). The variables in the WORK index had the most equal importance (from 0.335 to 0.340), the variables in the TIME index showed the highest average importance (from 0.057 to 0.505), while the variables in the FAMILY index varied the most in importance (from 0.260 to 0.543).

Table 1. Factor weights of the three WLB dimensions PCA Weights

Latent	Indicator	Weight estimate
Work	P1	0.337
	P2	0.340
	P4	0.335
Time	C1	0.505
	C3	0.057
	C4	0.505
Family	R2	0.543
	R4	0.479
	R5	0.260

Source: own study based on analysis results.
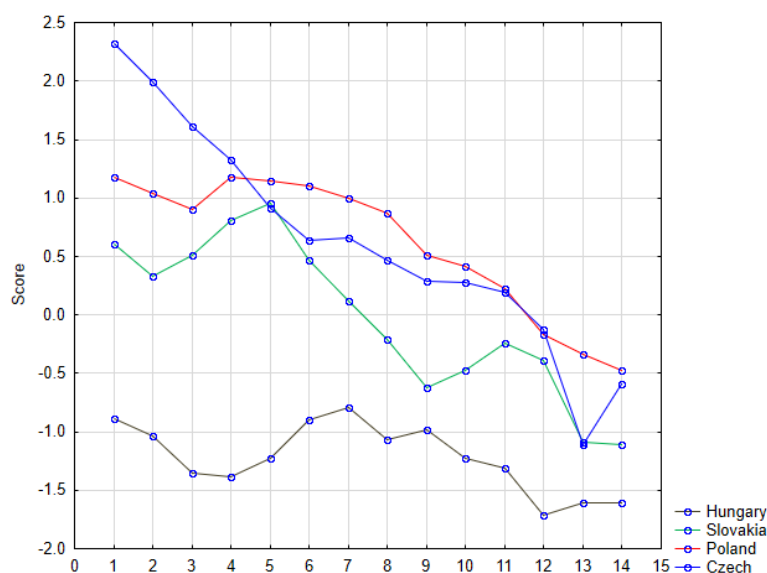
Figure 5. The TIME dimension index 2009-2022*
Note: *Periods from 2009 (1) to 2022(14)
Source: own elaboration based on analysis results.

In the case of the TIME index, we observed declining index values for all countries surveyed (especially the Czech Republic), alongside an increase in homogeneity in the final period (the profiles of the V4 countries are converging). Poland had the highest level (except for 2009-2012), and Hungary had the lowest level.

Regarding the WORK index, all countries (particularly Hungary) have increasing index values. The Czech Republic has the highest level and Poland the lowest level (except for the years 2009-2013).

Increasing work-related variables imply strong dynamics in the area of WLB. The increase in employment, also among those with children, suggests the existence of favourable conditions for combining work and non-work responsibilities. On the other hand, work activity increases the risk of work-life conflict. This poses major challenges for the state but also for employers, who are responsible for shaping favourable conditions for work-life balance.
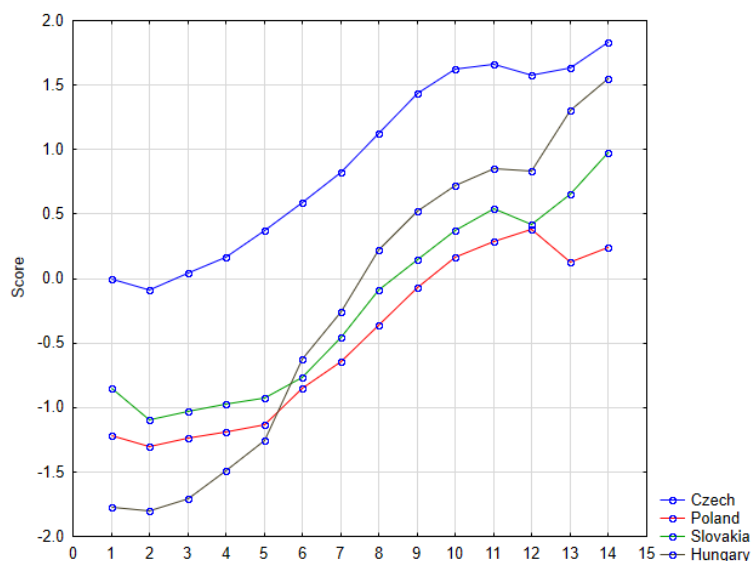
Figure 6. The WORK dimension index 2009-2022
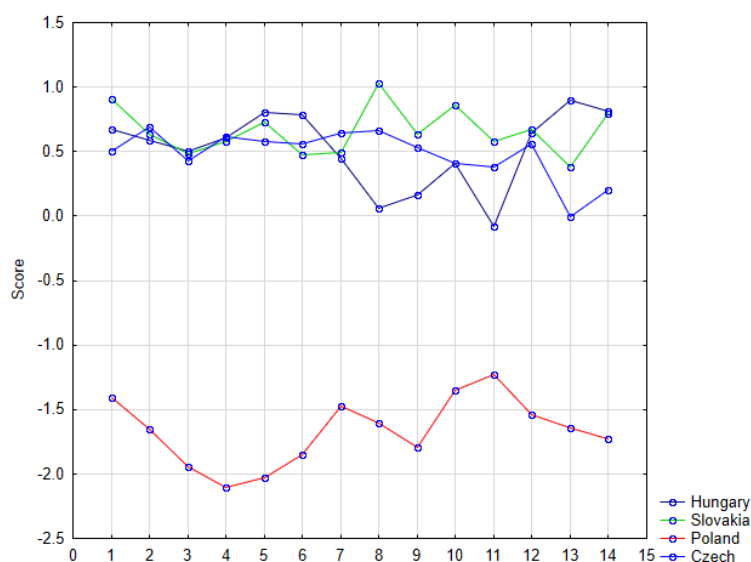Source: own elaboration based on analysis results.

Figure 7. The FAMILY dimension index 2009-2022
Source: own elaboration based on analysis results.

With the exception of Poland, all countries' FAMILY index values were steady until the halfway point of the study period, at which point there was an increase in heterogeneity until the last year of analysis. The Czech Republic, Slovakia, and Hungary are characterized by the highest levels, while Poland significantly had the lowest level.

The trajectory of the V4 countries was similar across every Work-Life Balance dimension (WORK, TIME, FAMILY), with only three types of changes occurring. In the TIME dimension, the trajectories are marked by homogeneity in index increments; in the WORK dimension, differences were stable. Meanwhile, in the FAMILY dimension, the trajectories tended towards heterogeneity (in the final stage). The trajectory for the FAMILY dimension for Poland significantly diverged from the rest of the V4 countries, showing indices below the average by 1-2 standard deviations (Figure 7).

Thus, we confirmed hypothesis 4, which postulates that the WLB systems of the V4 nations will develop similarly in several dimensions. This finding aligns with previous studies that emphasize the

similarities in WLB systems characteristic of countries with similar socio-cultural backgrounds (Fernandez-Crehuet *et al.*, 2016; Thévenon, 2011). We compared culturally similar countries that entered the European Union under nearly identical economic and social conditions. They also chose similar paths in the development of their WLB systems. The foundation of these choices were political and legal decisions that introduced various systemic solutions supporting employment flexibility, working time, and family support. Comparing the consequences of these decisions, which illustrate the variables of work, time, and family in the V4 countries, sheds additional light on the significance of the governing political options in shaping work-life balance.

CONCLUSIONS

The research allowed us to identify the dimensions underlying WLB and assess their dynamics. On this basis, we identified the trajectories of WLB in a cross-section of V4 countries between 2008 and 2022.

The most notable distinctions between V4 countries in the data set for their WLB related to employment policy or other work-related factors. This result also constitutes an important recommendation for the development of WLB systems, which should be based on labour market indicators as benchmarks for their evaluation.

We identified similarities in the trajectories of each dimension of WLB. The decline in the TIME index indicates a general trend towards fewer working hours, which we may see as a positive signal in the context of WLB. Nonetheless, in comparison with other EU countries, the V4 countries still record some of the highest weekly working hours (verification of hypothesis 2).

Rising WORK index values across the V4 countries underscore a significant dynamism within the domain of WLB, particularly suggesting favourable conditions for work-life integration, especially for those with children. This is evident as the Czech Republic showcased the most dynamic labour market development, indicated by the largest increase in the WORK index, whereas Poland experienced the least dynamic changes, reflecting varying degrees of labour force participation among these countries. However, this increased participation, while beneficial, also introduces potential work-life conflicts, challenging both nations and employers to create optimal WLB conditions. Despite these differences in labour market dynamism, we observed contrasting stability in the FAMILY index across all V4 countries. This stability signifies a slow pace of change in critical areas such as the gender pay gap and childcare provision underscoring a consistent approach towards family support across these nations despite the varying economic activities (verification of hypothesis 3).

The comparison of the analysed WORK and TIME indices yielded valuable insights as well. The increase in work indicators, coupled with a decrease in time-related indicators, is potentially beneficial for assessing the WLB system. It implies that more individuals are actively participating in the labour market, which positively affects the households' financial condition. Conversely, shorter working hours mean more time for personal life, translating into a higher sense of well-being. All V4 countries showed a trend of increasing WORK index while experiencing a decrease in working hours, revealing a similarity towards improving WLB through reduced working hours and increased employment (verification of hypotheses 1 and 2).

Prior comparative studies in the field of WLB have emphasized that efforts towards better balancing professional and private life in countries with relatively low outcomes should focus on family and health issues (Fernandez-Crehuet *et al.*, 2016). Proposals include increasing average earnings for individuals, reducing the gender pay gap, or expanding the reach of formal education that is free or subsidized for young children. While our research confirms the significance of the gender pay gap and public childcare up to the third year of life (verification of hypothesis 3), it also specifies that employment rates and working hours significantly determine WLB systems (verification of hypotheses 1 and 2). This is supported by additional studies showing that employment uncertainty is a crucial factor affecting the ability to balance work and personal life (Hobson *et al.*, 2011) and that this ability (also understood as satisfaction with WLB) is negatively correlated with weekly working hours (Fedakova, 2017).

Policy Implications

The results will be useful for developing future WLB improvement initiatives and for additional trend research. Such a long-term strategy can reduce gender inequality and increase the labour market's accessibility and flexibility (OECD, 2001). The intensity and directions of policy are largely regulated by the political option that governs a given country. It has an impact on the regulation of the labour market, including, among others, the number of working hours, the right to annual leave, the availability of flexible forms of employment, and also on the family support system – the right to family leave and benefits, support in the area of childcare, or finally, the general system of tax benefits (McGinnity & Whelan, 2009).

Liminations and Further Research

The conducted research has limitations that may encourage further exploration. Firstly, we based the study on aggregated data, not direct outcomes from respondent surveys. Secondly, a limitation could be the comparative analysis between the V4 countries and highly developed (European) countries. Thirdly, the absence of exploratory (regression) models with additional parameters (predictors) could broaden the interpretation of the WLB dimensions' trajectories.

There are multiple options for integrating variables into WLB dimensions. Hence, future research should focus on observing WLB dimensions and evaluate the trajectories outlined in the article, including the impact of decisions by V4 countries on the formulation of WLB policies. Research interest in WLB should continue to be sparked by the consequences of unemployment, and the situation of individuals (both women and men) in the labour market, regardless of whether they have children, including younger generations as well as seniors and migrants.

Moreover, an analysis of the relationship between governmental decisions (legislative acts, government programs) and the development of the labour market in the aspect of supporting work-life balance would be of particular interest.

REFERENCES

Ágota-Aliz, B. (2021). Flexible working practices in the ICT industry in achieving work-life balance. *Studia Universitatis Babes-Bolyai Sociologia*, *66*(1), 29-50. https://doi.org/10.2478/subbs-2021-0002

Alassaf, P., El-assaf, B.M., & Szalay, Z.G. (2023). Worker's Satisfaction and Intention toward Working from Home—Foreign Non-EU Citizens vs. National Workers' Approach: Case Study of Central European Countries (Visegrád Group (V4)). *Administrative Sciences*, *13*(3). https://doi.org/10.3390/admsci13030088

Albanesi, S., Olivetti, C., & Petrongolo, B. (2022). *Families, labor markets and policy*. *Handbook of the Economics of the Family*, *1*(1), 255-326. https://doi.org/10.1016/BS.HEFAM.2023.01.004

Anxo, D., Franz, C., & Kümmerling, A. (2012). *Working time and work-life balance in a life course perspective Click for contents A report based on the fifth European Working Conditions Survey*. Retrieved from www.eurofound.europa.eu on November 18, 2023.

Bainbridge, H.T.J., & Broady, T.R. (2017). Caregiving responsibilities for a child, spouse or parent: The impact of care recipient independence on employee well-being. *Journal of Vocational Behavior*, *101*, 57-66. https://doi.org/10.1016/J.JVB.2017.04.006

Bencsik, A., & Juhasz, T. (2023). Impact Of Technostress On Work-Life Balance. *Human Technology*, *19*(1), 41-61. https://doi.org/10.14254/1795-6889.2023.19-1.4

Bieszk-Stolorz, B., & Dmytrów, K. (2020). Influence of accession of the Visegrad group countries to the EU on the situation in their labour markets. *Sustainability (Switzerland)*, *12*(16). https://doi.org/10.3390/su12166694

Boghirnea, I. (2023). Legislative Mechanisms of the European Union and of Transposition into the Romanian Legislation Concerning the Problem of Work-Life Balance for Parents and Caregivers-Sociological Aspects. *Athens Journal of Law*, *2023*, 1-17. https://doi.org/10.30958/ajl.X-Y-Z

Brough, P., & Timms, C. (2009). *Measuring work-life balance: Validation of a new measure across five Anglo and Asian samples*. Retrieved from https://www.researchgate.net/publication/45109365 on November 16, 2023.

Chadi, A., & Goerke, L. (2018). Missing at work – Sickness-related absence and subsequent career events. *Journal of Economic Behavior & Organization*, *153*, 153-176. https://doi.org/10.1016/J.JEBO.2018.06.012

Cucchiella, F., Gastaldi, M., & Ranieri, L. (2014). Managing Absenteeism in the Workplace: The Case of an Italian Multiutility Company. *Procedia – Social and Behavioral Sciences*, *150*, 1157-1166. https://doi.org/10.1016/J.SBSPRO.2014.09.131

Cukrowska-Torzewska, E., & Matysiak, A. (2020). The motherhood wage penalty: A meta-analysis. *Social Science Research*, *88*, 102416. https://doi.org/10.1016/j.ssresearch.2020.102416

Czerniak-Swędzioł, J., & Kumor-Jezierska, E. (2021). Reflections on work-life balance for parents and guardians in the light of Directive (EU) 2019/1158 of the European Parliament and of the Council. *Roczniki Administracji i Prawa*, *specjalny II*(XXI), 189-207. https://doi.org/10.5604/01.3001.0015.6385

Darcy, C., McCarthy, A., Hill, J., & Grady, G. (2012). Work-life balance: One size fits all? An exploratory analysis of the differential effects of career stage. *European Management Journal*, *30*(2), 111-120. https://doi.org/10.1016/j.emj.2011.11.001

Dillenseger, L., Burger, M.J., & Munier, F. (2023). Part-time Parental Leave and Life Satisfaction: Evidence from the Netherlands. *Applied Research in Quality of Life*, *18*(6), 3019-3041. https://doi.org/10.1007/s11482-023-10218-4

Długosz, Z., & Raźniak, P. (2014). Risk of Population Aging in Asia. *Procedia – Social and Behavioral Sciences*, *120*, 36-45. https://doi.org/10.1016/J.SBSPRO.2014.02.079

Ehrenberg, R.G., & Smith, R.G. (2012). *Modern Labor Economics* (11th ed.). Pearson Education, Inc.

Escofier, B., & Pagès, J. (1994). Multiple factor analysis (AFMULT package). *Computational Statistics & Data Analysis*, *18*(1), 121-140. https://doi.org/10.1016/0167-9473(94)90135-X

Eurostat. *Eurostat Database*. Retrieved from https://Ec.Europa.Eu/Eurostat/Data-browser/View/LFSA_EWHUN2__custom_7296079/Default/Table on November 16, 2023.

Farré, L., Felfe, C., González, L., & Schneider, P. (2023). Changing Gender Norms across Generations: Evidence from a Paternity Leave Reform. *IZA Institute of Labor Economics*. Retrieved from https://docs.iza.org/dp16341.pdf on December 12, 2023.

Fedakova. (2017). *What does European Social Survey data say about work-life balance satisfaction, working time and work attachment in V4 countries?*. Retrieved from https://www.researchgate.net/publication/322618554 on November 3, 2023.

Feldman, R., Sussman, A.L., & Zigler, E. (2004). Parental leave and work adaptation at the transition to parenthood: Individual, marital, and social correlates. *Journal of Applied Developmental Psychology*, *25*(4), 459-479. https://doi.org/10.1016/J.APPDEV.2004.06.004

Fernandez-Crehuet, J.M., Gimenez-Nadal, J.I., & Reyes Recio, L.E. (2016). The National Work–Life Balance Index©: The European Case. *Social Indicators Research*, *128*(1), 341-359. https://doi.org/10.1007/s11205-015-1034-2

Gloor, J.L., Li, X., Lim, S., & Feierabend, A. (2018). An inconvenient truth? Interpersonal and career consequences of "maybe baby" expectations. *Journal of Vocational Behavior*, *104*, 44-58. https://doi.org/10.1016/J.JVB.2017.10.001

Goldin, C. (2015). Hours Flexibility and the Gender Gap in Pay. *Center for American Progress.* Retrieved from https://scholar.harvard.edu/sites/scholar.harvard.edu/files/goldin/files/goldin_equalpay-cap.pdf on January 4, 2024.

Greenhaus, J., & Allen, T.D. (2011). Work-Family Balance: A Review and Extension of the Literature A Meta-Analysis of the Antecedents of Work-Family Enrichment View. *Handbook of occupational health psychology*. Retrieved from https://www.researchgate.net/publication/259280583 on December 12, 2023.

Greenhaus, J.H., & Beutell, N.J. (1985). Sources of Conflict between Work and Family Roles. *The Academy of Management Review* (Vol. 10, Issue 1). Retrieved from https://www.jstor.org/stable/258214 on November 3, 2023.

Haeger, D.L., & Lingham, T. (2014). A trend toward Work-Life Fusion: A multi-generational shift in technology use at work-NC-ND license*. Technological Forecasting and Social Change, 89*, 316-325. (http://creativecommons.org/licenses/by-nc-nd/4.0/). https://doi.org/10.1016/j.techfore.2014.08.009

Hansen, K.F., & Stutzer, A. (2022). Parental unemployment, social insurance and child well-being across countries R. *Journal of Economic Behavior and Organization*, *204*, 600-617. https://doi.org/10.1016/j.jebo.2022.10.023

Harman, J., & Bartůsková, L. (2023). The gender pay gap in the Visegrad Groups. *Journal of Economic Studies*, *51*(4), 733-763. https://doi.org/10.1108/JES-02-2023-0072

Hobson, B., Fahlén, S., & Takács, J. (2011). Agency and capabilities to achieve a work-life balance: A comparison of Sweden and Hungary. *Social Politics*, *18*(2), 168-198. https://doi.org/10.1093/sp/jxr007

Kahn, R., Wolfe, D., Quinn, R., Snoek, J., & Rosenthal, R. (1964). *Organizational Stress: studies in role conflict and ambiguity*. John Wiley & Sons, Inc.

Kapteyn, A., Smith, J.P., & van Soest, A. (2010). Life Satisfaction. In E. Diener, J.F. Helliwell, D. Kahneman (Eds.), *International Differences in Well-Being* (pp. 70-104). New York: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199732739.003.0004

Karim, M., Rony, K., Numan, S.M., & Alamgir, H.M. (2023). The association between work-life imbalance, employees' unhappiness, work's impact on family, and family impacts on work among nurses: A Cross-sectional Study. *Informatics in Medicine Unlocked*, *38*, 2352-9148. https://doi.org/10.1016/j.imu.2023.101226

Keller, W., Molina, T., & Olney, W.W. (2023). The gender gap among top business executives. *Journal of Economic Behavior & Organization*, *211*, 270-286. https://doi.org/10.1016/J.JEBO.2023.04.017

Kohara, M., & Maity, B. (2021). The Impact of Work-Life Balance Policies on the Time Allocation and Fertility Preference of Japanese Women. *Journal of the Japanese and International Economies*, *60*, 101134. https://doi.org/10.1016/J.JJIE.2021.101134

Kurowska, A. (2020). Gendered Effects of Home-Based Work on Parents' Capability to Balance Work with Non-work: Two Countries with Different Models of Division of Labour Compared. *Social Indicators Research*, *151*(2), 405-425. https://doi.org/10.1007/s11205-018-2034-9

Kusairi, S., Muhamad, S., Razak, N.A., & Trapsila, A.P. (2022). The role of local wisdom "Ugahari" and the impact of internet and mobile technology on work-life-balance during COVID-19 outbreak: Data set from malaysian workers. *Data in Brief*, *40*, 107779. https://doi.org/10.1016/J.DIB.2021.107779

Landaud, F. (2021). From employment to engagement? Stable jobs, temporary jobs, and cohabiting relationships. *Labour Economics*, *73*, 102077. https://doi.org/10.1016/J.LABECO.2021.102077

LaTronica-Herb, A., & Karalis Noel, T. (2022). Identity, agency, parenthood, and balance: Examining influential factors on former practitioners' decisions to leave P12 education. *International Journal of Educational Research Open*, *3*. https://doi.org/10.1016/j.ijedro.2022.100172

Lewis, S., Gambles, R., & Rapoport, R. (2007). The constraints of a 'work–life balance' approach: an international perspective. *International Journal of Human Resource Management*, *18*(3), 360-373. https://doi.org/10.1080/09585190601165577

Leythienne, D., & Pérez-Julián, M. (2021). *Gender pay gaps in the European Union-a statistical analysis*. Publications Office of the European Union. Retrieved from https://fondazionecerm.it/wp-content/uploads/2022/03/Eurostat-Gender-pay-Gap-in-the-eu.pdf on December 20, 2024.

Magda, I., Cukrowska-Torzewska, E., & Palczyńska, M. (2023). What if She Earns More? Gender Norms, Income Inequality, and the Division of Housework. *Journal of Family and Economic Issues*. https://doi.org/10.1007/s10834-023-09893-0

Magda, I., Cukrowska-Torzewska, E., & Palczyńska, M. (2024). What if She Earns More? Gender Norms, Income Inequality, and the Division of Housework. *Journal of Family and Economic Issues*, *45*(1), 1-20. https://doi.org/10.1007/s10834-023-09893-0

Marshall, N.L., & Barnett, R.C. (1993). Work–family strains and gains among two-earner couples. *Journal of Community Psychology*, 64-78. https://doi.org/10.1002/1520-6629(199301)21:1%3C64::AID-JCOP2290210108%3E3.0.CO;2-P

Marumpe, D.P., Rosnani, T., Heriyadi, Fahruna, Y., & Jaya, A. (2023). Are Perceived Organizational Support and Flexible Working Arrangement Able to Influence Employee Engagement among Millennials?. *Asian Journal of Economics, Business and Accounting*, *23*(11), 28-44. https://doi.org/10.9734/ajeba/2023/v23i11976

Matei, A., Sănduleasa, B., & Ghenţa, M. (2014). Family Labour Participation and Reproductive Behaviour. *Procedia – Social and Behavioral Sciences*, *109*, 965-968. https://doi.org/10.1016/J.SBSPRO.2013.12.572

McGinnity, F., & Whelan, C.T. (2009). Comparing work-life conflict in Europe: Evidence from the European Social Survey. In *Social Indicators Research* (Vol. 93, Issue 3, pp. 433-444). https://doi.org/10.1007/s11205-008-9437-y

McMunn, A., Lacey, R., Worts, D., McDonough, P., Stafford, M., Booker, C., Kumari, M., & Sacker, A. (2015). Destandardization and gender convergence in work–family life courses in Great Britain: A multi-channel sequence analysis. *Advances in Life Course Research*, *26*(1), 60-75. https://doi.org/10.1016/J.ALCR.2015.06.002

Miettinen, A., & Jalovaara, M. (2020). Unemployment delays first birth but not for all. Life stage and educational differences in the effects of employment uncertainty on first births. *Advances in Life Course Research*, *43*. https://doi.org/10.1016/j.alcr.2019.100320

Newell, A., & Reilly, B. (2001). The Gender Pay Gap in the Transition from Communism: Some Empirical Evidence. *Economic Systems, 25*(4), 287-304.

Newman, D. (2016). Satisfaction with work-life balance issues among contemporary workers in Slovakia Republic. In *Updates in social pathology II*(I). Retrieved from https://scholar.googleusercontent.com/scholar?q=cache:PpmVa681p0UJ:scholar.google.com/&hl=pl&as_sdt=0,5&scioq=Newman,+D.+(2016).+Satisfaction+with+work-life+balance+issues+among+contemporary+workers+in+Slovakia+Republic.+In+Updates+in+social+pathology+II+(I).+ on December 20, 2023.

Ninaus, K., Diehl, S., & Terlutter, R. (2021). Employee perceptions of information and communication technologies in work life, perceived burnout, job satisfaction and the role of work-family balance. *Journal of Business Research*, *136*, 652-666. https://doi.org/10.1016/J.JBUSRES.2021.08.007

OECD. (2001). *Balancing work and family life: helping parents into paid employment*. Retrieved from www.oecd.org/els/education/ecec on December 20, 2023.

OECD. (2004). *Matching Work and Family Commitments Issues, Outcomes, Policy Objectives and Recommendations*. Retrieved from http://www.oecd.org/els/social/family on December 20, 2023.

OECD. (2021). *Work-life balance Index*. Retrieved from https://www.oecdbetterlifeindex.org/topics/work-life-balance/ on December 20, 2023.

Petrongolo, B., & Ronchi, M. (2020). Gender Gaps and the Structure of Local Labor Markets. *IZA Institute of Labor Economics Discussion Paper Series, 13143.* Retrieved from https://docs.iza.org/dp13143.pdf on November 13, 2023.

Pleck, J.H. (1977). The work-family role system. *Social Problems*, *24*(4), 417-427. https://doi.org/10.2307/800135

Polizzi, A., Struffolino, E., & Van Winkle, Z. (2022). Family demographic processes and in-work poverty: A systematic review. *Advances in Life Course Research*, *52*, 100462. https://doi.org/10.1016/J.ALCR.2022.100462

Pullinger, M. (2014). *Working time reduction policy in a sustainable economy: Criteria and options for its design*. https://doi.org/10.1016/j.ecolecon.2014.04.009

Rahmqvist, M. (2006). The close relation between birth, abortion and employment rates in Sweden from 1980 to 2004. *Social Science & Medicine*, *63*(5), 1262-1266. https://doi.org/10.1016/J.SOCSCIMED.2006.03.046

Ralston, D.A., & Flanagan, M.F. (1985). The effect of flextime on absenteeism and turnover for male and female employees. *Journal of Vocational Behavior*, *26*(2), 206-217. https://doi.org/10.1016/0001-8791(85)90019-3

Redmond, P., & McGuinness, S. (2017). The Gender Wage Gap in Europe: Job Preferences, Gender Convergence and Distributional Effects. *IZA Institute of Labor Economics Discussion Paper Series, 10933,* Retrieved from https://docs.iza.org/dp10933.pdf on November 13, 2023.

Roberts, K. (2007). Work-life balance – The sources of the contemporary problem and the probable outcomes: A review and interpretation of the evidence. In *Employee Relations, 29*(4), 334-351. https://doi.org/10.1108/01425450710759181

Robichau, R.W., Sandberg, B., & Russo, A. (2023). Beyond "psychic Income": An Exploration of Interventions to Address Work-Life Imbalances, Burnout, and Precarity in Contemporary Nonprofit Work. In *Nonprofit Policy Forum*. De Gruyter Open Ltd. https://doi.org/10.1515/npf-2023-0001

Rollnik-Sadowska, E., & Dabrowska, E. (2018). Cluster analysis of effectiveness of labour market policy in the European Union. *Oeconomia Copernicana*, *9*(1), 143-158. https://doi.org/10.24136/oc.2018.008

Ropponen, A., Koskinen, A., Puttonen, S., & Härmä, M. (2019). Exposure to working-hour characteristics and short sickness absence in hospital workers: A case-crossover study using objective data. *International Journal of Nursing Studies*, *91*, 14-21. https://doi.org/10.1016/J.IJNURSTU.2018.11.002

Shanmugam, M.M. (2017). Impact of parenthood on women's careers in the IT sector – a study in the Indian context. *Gender in Management: An International Journal*, *32*(5), 352-368. https://doi.org/10.1108/GM-11-2016-0177

Strzemińska, H., Bednarski, M., & Acermann, K.-F. (2014). Working Time Trends and Prospects in the New Economy. *Series "Studia i Monografie."*

Studer, M., Liefbroer, A.C., & Mooyaart, J.E. (2018). Understanding trends in family formation trajectories: An application of Competing Trajectories Analysis (CTA). *Advances in Life Course Research*, *36*, 1-12. https://doi.org/10.1016/J.ALCR.2018.02.003

Szymańska, A. (2017). The labour market in the Visegrad Group countries-selected aspects. *Olsztyn Economic Journal*, *3*, 12. https://doi.org/https://doi.org/10.31648/oej.2812

Thévenon, O. (2011). Family Policies in OECD Countries: A Comparative Analysis. *Population and Development Review*.

Timms, C., Brough, P., & Graham, D. (2012). Burnt-out but engaged: The co-existence of psychological burnout and engagement. *Journal of Educational Administration*, *50*(3), 327-345. https://doi.org/10.1108/09578231211223338

Van Hugten, J., El Hejazi, Z.-N., Brassey, J., Vanderstraeten, J., Cannaerts, N., Loots, E., Coreynen, W., & Van Witteloostuijn, A. (2021). What Makes Entrepreneurs Happy? Psychological Flexibility and Entrepreneurs' Satisfaction. *Journal of Business Venturing Insights*, *16*, 2352-6734. https://doi.org/10.1016/j.jbvi.2021.e00263

Vignoli, D., Mencarini, L., & Alderotti, G. (2020). Is the effect of job uncertainty on fertility intentions channeled by subjective well-being?. *Advances in Life Course Research, 46*, *100343*. https://doi.org/10.1016/j.alcr.2020.100343

Wood, J., Kil, T., & Marynissen, L. (2018). Do women's pre-birth relative wages moderate the parenthood effect on gender inequality in working hours?. *Advances in Life Course Research*, *36*, 57-69. https://doi.org/10.1016/J.ALCR.2018.04.002

Wooden, M. (2003). Balancing work and family at the start of the 21st century: Evidence from wave 1 of the HILDA survey. *Melbourne Institute Economic and Social Outlook Conference*. 13-14. Retrieved from https://melbourneinstitute.unimelb.edu.au/assets/documents/hilda-bibliography/conference-papers-lectures/2003/Wooden_Balancing_Work_and_Family.pdf on December 20, 2023.

Zhang, H., Yip, P.S.F., Chi, P., Chan, K., Cheung, Y.T., & Zhang, X. (2012). Factor Structure and Psychometric Properties of the Work-Family Balance Scale in an Urban Chinese Sample. *Social Indicators Research*, *105*(3), 409-418. https://doi.org/10.1007/s11205-010-9776-3

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Use of Artificial Intelligence

The authors declare that they have not used any type of generative artificial intelligence for the writing of this manuscript, nor for the creation of graphics, tables, or their corresponding captions.

Conflict of Interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.