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Model of setting the minimum wage preferred by employers and employees and its role

Abstract

This study examines the setting of minimum wages (MW) in Poland based on enterprise size. In this context a new theory of MW diversification is proposed, which explains the balance of benefits for employers, employees, the labour market, and the economy, which ultimately leads to maximizing the total added value resulting from differentiated MW rates. Based on research conducted between 2016 and 2023, the study presents the positive impact of MW on productivity, purchasing power, average wages, and GDP. This study also presents the results of surveys conducted among employees and employers in Poland to show their opinions on the needs and benefits of introducing differentiated MW rates. These studies confirmed that both employers and employees recognize this need and point to significant benefits for themselves, the labour market, and the economy as a whole.

Keywords: minimum wage, average wage, productivity, GDP, purchasing power, economic competitiveness, labour market, minimum wage theories, minimum wage diversification theory
JEL Classification: E44, F21, G11, G15, G23, G32

Introduction

The research study presented in this paper relates to the Polish labour market and the Polish economy, where enterprises and its workers are involved in business activities. This research study examines the approach to setting the minimum wage (MW) from the perspective of diversification theory and its importance for employers, employees, the labour market, and the economy (E2ME), which constitute a group of stakeholders, each of whom expects MW levels that maximize their benefits. These benefits are measured using different measures for each party. The question arises, therefore, how to balance the benefits of all parties in the MW rate setting process, that is, what model would be best in this context. The research question aims to determine, among other things, how practitioners assess the impact of diversifying MW, depending on company size, on maximizing the benefits of the E2ME group. In particular the expected benefits were to stop the outflow of workers from Poland, effective allocation of employees in the labour market, the ability to provide employees with greater financial satisfaction from work, improving the economic and financial position of the enterprise, reducing the negative phenomenon of excessively high staff turnover, increasing employee productivity, reducing enterprise costs as a result of increased employment stability.

The research problem under consideration has significant implications for Poland's economic development through its potential to reduce unemployment. It also poses a significant theoretical challenge aimed at changing the practical method of determining the minimum wage for work. The goal of such a change would be to improve economic conditions on the labour market and in individual sectors, increase the international competitiveness of the Polish economy, with a particular emphasis on increasing the purchasing power of statutory minimum wage rates, increasing the overall level of wages, increasing long-term national productivity levels, and improving the economic situation of households and enterprises, especially microenterprises and small and medium-sized enterprises.

Moreover, the study aims to present the opinions of employers and employees on the diversification of MW depending on company size. Another objective is to demonstrate the impact of MW on productivity, GDP growth, purchasing power, and the competitiveness of the Polish labour market compared to EU countries. One of the objectives is also to present the rationale for changes to the current mechanism for determining MW for work, contained in the Act of 10 October 2002 on the Minimum Wage [Journal of Laws of 2020, item 2207, as amended].

In order to achieve this goal, the following hypothesis was formulated: setting different minimum wage rates in Poland depending on the size of the enterprise could lead to increased labour productivity, curbing the outflow of workers from Poland, more efficient allocation of workers in the labour market, providing financial satisfaction to employees, and reducing staff turnover and the resulting costs for the enterprise. In the process of testing the hypothesis, the following research questions were posed:

- Does MW affect productivity and purchasing power and how?
- How does productivity translate into GDP growth?
- What is the MW diversification theory and how does it differ from other MW theories?
- What are the attitudes of employers and employees towards diversification of MW?
- What are the benefits perceived by employees and employers from MW diversification?

The following research methods were used to test the hypothesis: survey research, literature studies, statistical analysis, comparative analysis, and expert opinions.

Characteristics of various theories on MW and the diversification theory

The literature discusses various theories of MW, which are the subject of economic analyses and which address the impact of MW on selected microeconomic and macroeconomic factors. However, these theories fail to address the impact of MW on employers, employees, the labor market, and the economy adequately. Therefore, this study will attempt to fill this gap. MW aims to increase the income of low-wage workers, but it can also have other positive or negative effects depending on its method of determination, the economic context, and the situation of the national and international labour market. The research study made in the period 2014–2018 identified that in most of the analyzed sectors, minimum wage increases reduced wage inequalities [Strawiński, Majchrowska, 2025], but in the above-mentioned period the increases of MW in Poland were very moderate and were far away from MW in other European countries. In the period 2016–2023, MW in Poland was increased very fast, resulting in catching up the relative levels of MW to be close to those in the top European countries. Without the obligatory increases in wages among low-wage workers, the differences between low- and high-wage workers would be higher [Redmond, Doorley, McGuinness, 2021]. Existing MW theories differ in the factors that MW influences, and these theories typically focus on a single factor.

The neoclassical theory assumes that an increase in MW leads to a decrease in labour demand, particularly among lower-skilled workers whose wages have increased. Firms may reduce their workforce or replace lower-cost workers with more expensive, more productive ones [Włodarczyk, 2018]. Minimum wages could influence the generated surplus when leaving employment unaffected, and destroy jobs that generate relatively high levels of surplus when affecting employment [Thielen, Weinschenk, 2024]. An analysis of minimum wage reforms in the period 1993–2016 in the United States revealed an asymmetric impact on employment effects depending on age and professional experience [Chan, Zamanzadeh, 2025].

The labour cost theory focuses on the impact of MW on business costs. An increase in MW increases labour costs, which can lead to a decrease in the competitiveness of firms, especially those competing on price [Krajewska, 2015].

The labour demand theory examines the impact of MW on labour demand. An increase in MW may reduce labour demand because employers may choose to hire fewer workers or replace them with technology [Begg, Fischer, Dornbusch, 2007; Cahuc, Carcillo, Zylberberg, 2014; Haanwinckel, 2020].

The employment effect theory analyzes the impact of MW on employment. Some studies suggest that MW can lead to employment declines, particularly in sectors with low profit margins and intense price competition. This theory is addressed by the MW mechanism in a competitive labour market [Baskaya, Rubinstein, 2012; Stawarczyk, 2014]. There was found some evidence in the Lithuanian market suggesting that wage gains dominated employment losses [Garcia-Louzao, Tarasonis, 2022]. This finding rejects the hypothesis that there is a proportional impact of minimum wage increases on the employment decline. The evidence on the disemployment effect of minimum wages is contested, and clearly there are studies that find no employment effect – both in the United States and in other countries. However, the preponderance of evidence indicates that minimum wages reduce employment of the least-skilled workers [Neumarkt, 2019].

The price effect theory suggests that MW increases can lead to price increases because firms pass on the costs of wage increases to consumers [Sobel, 1999].

The sectoral MW theory assumes that the impact of MW on employment may vary across economic sectors. Some sectors may be more sensitive to MW increases than others, which may lead to different consequences, such as changes in employment, productivity, or prices. The sectoral MW theory addresses the fact that the effects of introducing or increasing MW are not uniform across the economy. This impact may vary depending on the characteristics of the sector, the level of the MW, the elasticity of labour demand and supply, and competition [Neumark, 2018].

Each of the aforementioned theories addresses the impact of MW on one of the following factors: labour demand, the cost of doing business, employment levels, product and service prices, and employment by economic sector. No theory has been found in the literature that addresses holistically the role of MW in balancing the interests of various parties, particularly employers and employees. Protecting the most vulnerable people, reducing poverty, improving workers' living conditions, and stimulating consumer demand are crucial issues, but they cannot be implemented without considering the risk of employment decline, price increases, reduced business competitiveness, and disruptions to economic growth. Policies for determining MW should, among other things, protect the most vulnerable while simultaneously taking into account the risk of employment decline, since employment decline would also affect the most vulnerable. As this example demonstrates, both elements – protection of the most vulnerable and the risk of employment decline – should be treated complementarily.

The analysis of the presented theories leads to the conclusion that considering the impact of MW on the areas and factors mentioned therein should be considered from the perspective of balancing the benefits of all parties, so as to maximize economic growth and the benefits of entities involved in economic and social life. It seems that the concept of socio-economic

solidarism, as advocated by Leopold Caro and Robert Schuman, and developed in the social teachings of the Catholic Church, may have extremely important applications in this area.

The employment effect theory analyzes the impact of MW on employment levels. In this theory, the global setting of MW across the entire economy can lead to a decline in employment, particularly in sectors with low profit margins and intense price competition. Therefore, by evolving this theory, the author proposes the introduction of several MW rates depending on the size of the enterprise, measured by the number of employees. The sectoral private wage theory attempts to justify that applying a single MW wage rate does not lead to optimal employment and productivity levels in capital and economically weaker entities, regardless of the sector. However, it does not propose diversification of MW rates and ignores the enterprise size, which is strongly linked to the economic potential of businesses.

Current theories do not recommend linking MW rates to enterprise size, broken down into groups such as micro, small, medium-sized, large, and very large enterprises. The author proposes filling the existing gap by introducing the concept of setting MW rates based on enterprise size and integrating this solution within the MW diversification theory. This would expand the scope of existing theories and, it seems to reflect better the micro and macroeconomic nature of the business and economic environment.

Methodological approach for modeling the diversified minimum wage

The author's proposed theory of MW diversification aims to explain the impact of MW, determined by enterprise size, on maximizing benefits for all parties in the E2ME group, in such a way that a certain balance of these benefits occurs for each E2ME stakeholder. This means that MW determined in this approach aims to maximize the E2ME group's benefits. If the total benefit (TB) presented in Formula 1 for the E2ME group is a function of the individual component benefits of each stakeholder, then the maximum of this function will be at the point where the partial derivatives equal zero, as shown in Formulas 2.

$$TB = f(b_{er}, b_{ee}, b_{im}, b_{we}) \tag{1}$$

$$\frac{\partial TB}{\partial b_{er}} = 0 \quad \frac{\partial TB}{\partial b_{ee}} = 0 \quad \frac{\partial TB}{\partial b_{im}} = 0 \quad \frac{\partial TB}{\partial b_{we}} = 0 \tag{2}$$

where:

TB = total maximum benefit for entire group of E2MP

$b_{er} = g(MW)$ = employer benefit; $b_{ee} = h(MW)$ employee benefit

$b_{im} = z(MW)$ = labour market benefit; $b_{we} = x(MW)$ = whole economy benefit

mwm = minimum wage for a micro enterprise

mws = minimum wage for a small enterprise

mwm = minimum wage for a medium-sized enterprise

mwl = minimum wage for a large enterprise
mwv = minimum wage for a very large enterprise
$MW = (mwm, mws, mwm, mwl, mwv) =$ matrix composed of minimum wages of micro, small, medium-sized, large, and very large enterprises MW.

Employer benefits resulted from increased productivity, employee benefits are due to increased purchasing power, labour market benefits are created by increased income to social security budget due to a decline in the unemployment rate, and the whole economy benefits are reflected in the increased GDP.

In the process of estimating TB, which is beyond the scope of this study, various combinations of MW should be selected in the MW domains for enterprises of different sizes (micro, small, medium-sized, large, very large) and then the TB function should be maximized using a tool such as Excel's Solver. MW for companies of different sizes are initially established in certain ranges based on the additional models, based on the change in the productivity and the change in the average wage in the groups of enterprises of a different size, and as well based on the inflation.

This study asks whether applying different MW rates based on enterprise size increases the benefits of the E2ME group more than setting a uniform MW for all enterprises, regardless of their size. The impact of varying MW on the growth of economic benefits will be assessed from a micro perspective, i.e. the enterprise and the employee, and from a macro perspective, i.e. from the perspective of the entire economy and its competitiveness compared to other countries, the labour market, and the unemployment rate.

It seems that the role of MW in increasing economic efficiency at both the micro and macro levels is greatly underestimated. MW is often treated as a form of social security for employees who, for various reasons, are unable to secure adequate remuneration for themselves. Considering that approximately 3 million people in Poland work for MW, it plays a significant role in shaping economic outcomes such as productivity for employers, the purchasing power of employee wages, the supply of skilled workers for the labour market, and the unemployment rate in the economy as a measure of competitiveness relative to other countries in Europe and the world, which may be related to the risk of valuable workers leaving the country. This context creates a much broader scope for analyzing the added value of diversified MW than would otherwise be the case, i.e. a single private equity rate applied by all enterprises and economic organizations. It seems that viewing MW from the perspective of diversification theory introduces researchers to the multidimensional role that MW diversification can play. Figure 1 illustrates the role of MW in maximizing benefits for employers, employees, the labour market, and the economy, as postulated by the diversification theory. From a theoretical perspective, the simultaneous and positive impact of MW on all four areas, as presented in Figure 1, would be highly desirable. The question then arises as to how this is perceived by stakeholders in economic life.

The assessment of the role and importance of MW generally differs significantly from the perspective of the four groups listed in Figure 1. These entities appear to overlook an integrated

and holistic view of the role of MW. However, the functioning of these groups is linked by specific relationships and intertwined dependencies resulting from the nature and specificity of business operations and economic processes. Therefore, the role of MW should be viewed from a synergy perspective, meaning simultaneous and balanced benefits for all groups. In some research studies it was found that economic and industrial relations variables – such as lower economic growth, higher inflation, and declines in unionization and collective bargaining coverage – primarily explain the shift towards greater governmental discretion [Cova, 2025]. This supports the importance of the role of the government in establishing MW, which has the best knowledge of the entire economy.

Figure 1. The role of MW from the perspective of diversification theory

Source: own elaboration.

Adopting the approach shown in Figure 1 leads to the need for establishing MW rates for enterprises based on their size, which would maximize the total benefit for all parties together and individually, creating a kind of balance in the equitable distribution of global added value among the four parties. Such a system could be compared to a group of stakeholders whose individual benefits cannot be achieved without the participation, involvement, and satisfaction of other entities. This means that such a system should seek a balance in the form of a differentiated level of MW that maximizes added value for all parties. Expert opinions from the communities represented in Figure 1 indicate that the current system for determining MW rates in Poland does not maximize their benefits. In practice, it will not be possible to maximize benefits for all parties, but the goal is to ensure that the resulting benefits are as close as possible to those expected or possible.

Reasons for diversifying the minimum wage in Poland

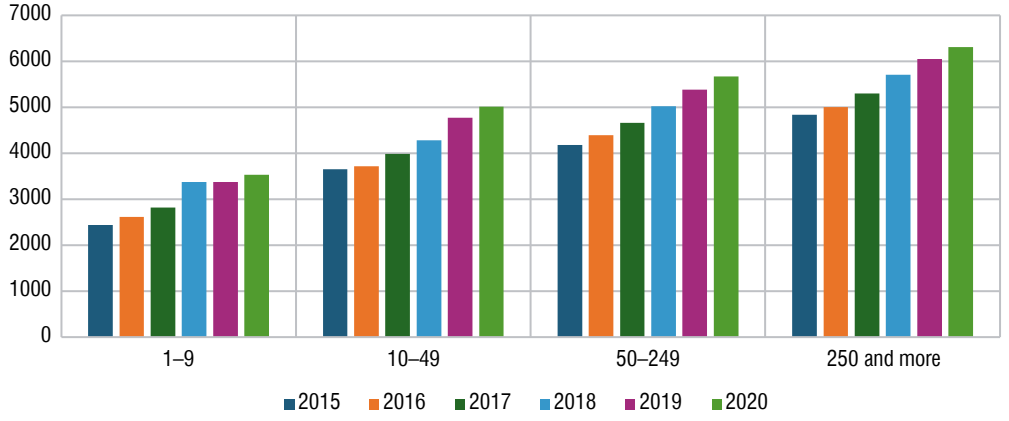
Diversifying MW means setting MW rates based on the size of the entity or organization, measured by the number of employees. Micro-enterprises employ up to 9 employees, small enterprises employ 10 to 49 people, medium-sized enterprises employ 50 to 249 people, large enterprises employ 250 to 1,000, and very large enterprises employ more than 1,000.

Of about 17 million people employed in the Polish economy by 2023, approximately 3 million people work for MW, representing a significant portion, approx. 18% of all employees. In the distant past, individuals paid MW were considered low-skilled, a perception that was largely untrue. In Poland, significant progress has been observed in recent years in improving professional qualifications, which also applies to those working for MW. Therefore, such individuals should not be treated as generating higher costs for employers, as their work contributes to increased productivity, which is the ratio of the value of goods produced to the inputs of specific production factors used to produce those goods. Human labour is an important production factor, and its productivity increases with higher professional qualifications, knowledge, and skills in the use of tools and machines, and the application of methods and procedures in the production of goods and services.

Polish businesses employ a total of approximately 10 million people, while the small and medium-sized enterprises (SME) sector employs approx. 6.8 million workers, of whom 4.19 million work in microenterprises, 1.05 million in small enterprises, 1.54 million in medium-sized enterprises, and 3.22 million in large and very large enterprises [PARP, 2022, p. 6]

The significant variation in wage levels depending on enterprise size is a key factor in implementing a diversified SME model. Setting the same minimum wage for micro and small enterprises like for medium-sized and large enterprises may be too burdensome for them. Consequently, excessive burdening of the high minimum wage on microenterprises can lead to employee layoffs and even business closures. Particular attention should be paid to the condition and development of micro and small enterprises for two reasons: first, since 2016, over 0.5 million micro enterprises have been established, and second, micro enterprises in Poland employ currently as many as 4.19 million people, which has contributed significantly to the decline in unemployment in Poland in recent years.

Figure 2. Average salary in PLN for enterprises depending on their size in 2015–2020



Source: PARP, 2022, p. 23.

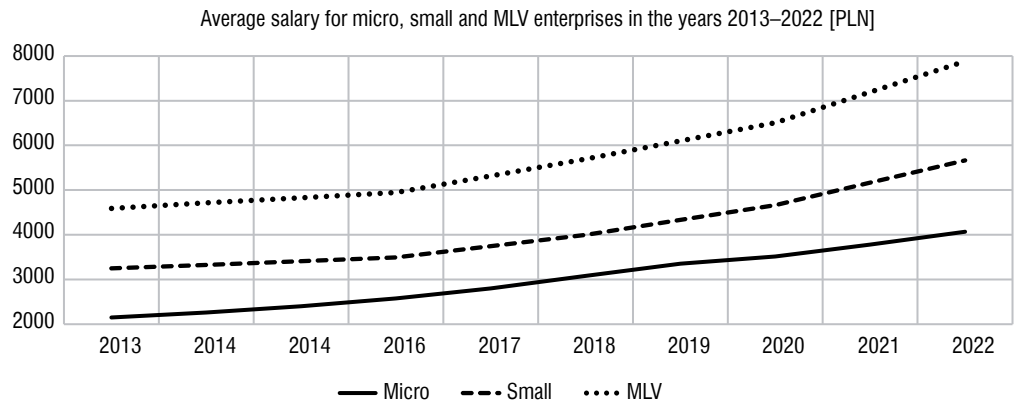
Figure 2 presents the average wage (AW) in Polish enterprises by size from 2015 to 2020. In subsequent years, until 2025 these proportions remained essentially unchanged. Wages in the micro and small enterprises group are significantly lower than in the other groups, which supports the need for diversification of MW.

Table 1. Diversification of AW depending on the size of the enterprise in period 2013–2022

	Differences in Average Wage between enterprises of different sizes [PLN]					
	Small minus Micro	Medium-sized minus Micro	(Large and Very Large) minus Micro	Medium-sized minus Small	(Large and Very Large) minus Small	(Large and Very Large) minus Medium-sized
2013	1,100	2,190	2,570	1,090	1,470	380
2014	1,066	2,212	2,579	1,145	1,513	368
2014	1,010	2,203	2,546	1,193	1,536	343
2016	913	2,154	2,472	1,241	1,559	317
2017	942	2,280	2,634	1,338	1,691	353
2018	916	2,350	2,740	1,435	1,824	389
2019	980	2,476	2,885	1,496	1,905	408
2020	1,152	2,711	3,138	1,558	1,985	427
2021	1,384	3,105	3,565	1,721	2,182	460
2022	1,603	3,487	3,981	1,884	2,378	494
Differences between AW in different size of enterprises	**1,107**	**2,517**	**2,911**	**1,410**	**1,804**	**394**

Source: own work based on the data from GUS.

Figure 3. AW for micro, small, and MLV enterprises in the years 2013–2022



Source: own work based on the data from GUS.

Another reason for implementing a diversified model of MW is the significant differences in pay between micro and small enterprises and the medium-large-very-large group. These pay differences are illustrated in Table 1. On average, small enterprises pay PLN 1,107 more than

micro enterprises, medium-sized enterprises pay PLN 2,517 more than micro enterprises, large and very large enterprises pay up to PLN 2,911 more than micro enterprises, medium-sized enterprises pay PLN 1,410 more than small enterprises, and large and very large enterprises pay PLN 1,804 more than small enterprises.

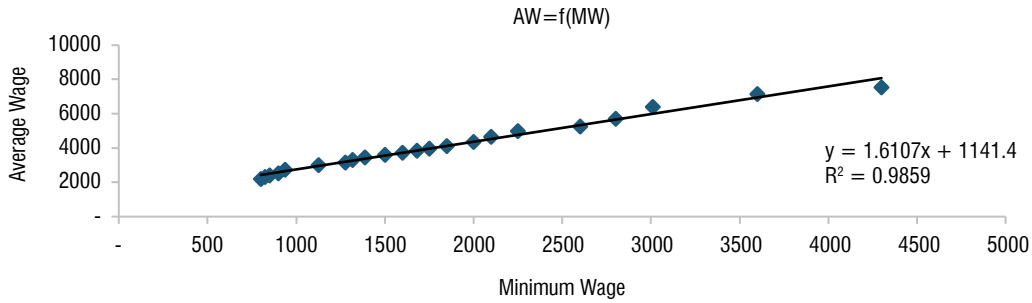
Figure 3. presents the AW for micro, small, medium-large-very-large (MLV) enterprises for the years 2013–2022. The AW for MLV is computed as the average of the AW values for medium-sized, large, and very large enterprises. The significant and increasing difference in AW between enterprises of different sizes, as shown in Figure 3, is an argument for introducing three MW rates, separately for micro, small, and MLV.

Impact of MW on productivity, purchasing power, AW, and GDP growth

An important issue in the process of setting MW rates is assessing their qualitative and quantitative impact on productivity, private equity, and GDP growth. The observations and analyses conducted in this study seem to indicate the existence of such a relationship, and its strength appears to depend on the level of MW relative to AW.

Figure 4 presents the relationship between AW and MW, which indicates that changes in AW are explained by the influence of MW at a rate of $R^2 = 0.98$. This leads to the conclusion that the higher the growth rate of MW, the higher the AW growth. This statistically strong relationship with p-Value less than 0,01 can be considered a rather rigid wage-setting mechanism, which may indicate the need to make the current MW regulatory model more flexible by introducing multiple rates separately for entities of different sizes and with respect to the MW values within each group.

Figure 4. Dependence of AW on MW in Poland in the years 2003–2023

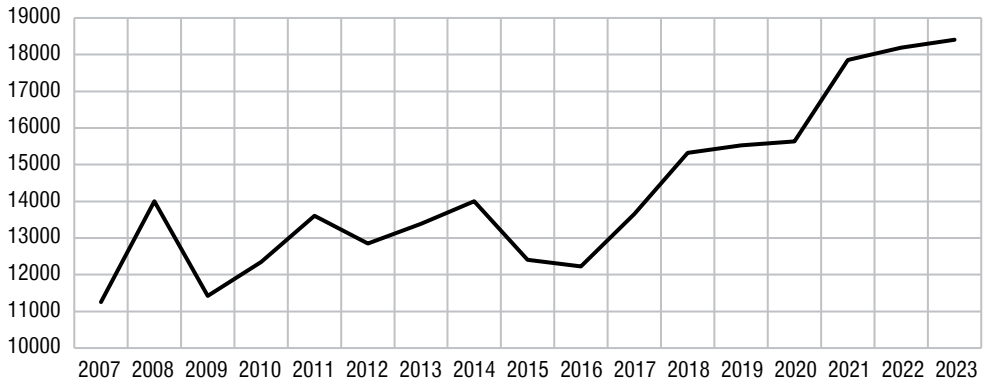


Source: own work based on the data from GUS.

The growing earning potential of Poles in 2016–2023 translated into a significant increase in household wealth, expressed as GDP per capita, which can be objectified by measuring this parameter in dollars, which represents the purchasing power of GDP per capita in an

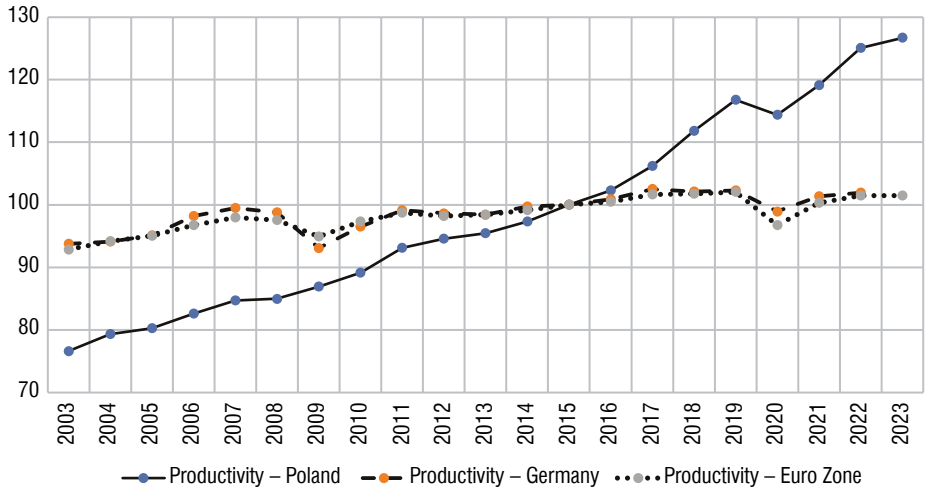
international context. The GDP per capita presented in Figure 5 indicates that in the 2008–2015 period, GDP per capita was relatively flat, while in the 2016–2023 period, a significant increase was observed, from approximately USD 12,000 at the end of 2015 to USD 18,500 at the end of 2023. It can be assumed that the strong growth of MW in 2016–2023 influenced GDP growth and also stimulated the growth of AW, which resulted from increased productivity.

Figure 5. Changes of the GDP per capita in Poland in the years 2008–2023



Source: own work based on the data from the OECD.

Figure 6. Productivity changes in Poland compared to Germany and the Eurozone



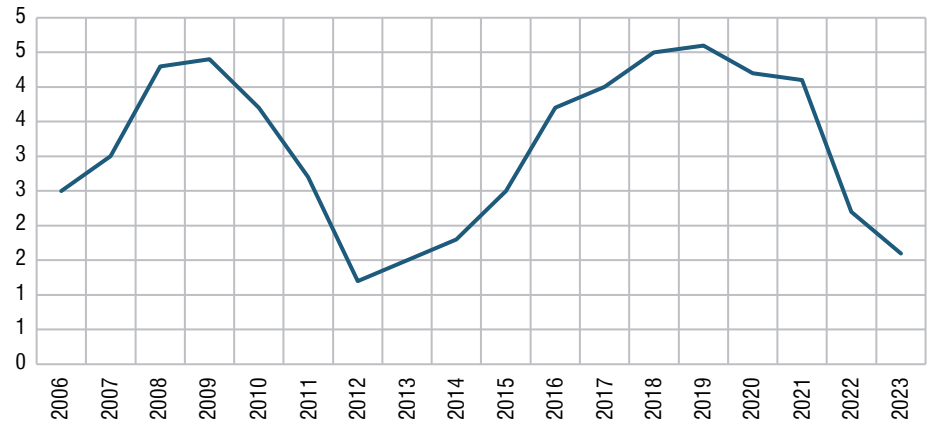
Source: own work based on the data from the OECD.

Between 2016 and 2023, Poland experienced a strong growth in MW, which resulted, on the one hand, from the government's economic policy and, on the other, from a significant increase in productivity. MW is a cost for businesses that should be covered by increased productivity, i.e. increased profits, from which businesses, after covering the cost of MW growth, may receive additional income. Figure 6 shows the strong growth in productivity in Poland

compared to Germany and the Eurozone. This exceptionally dynamic and strong productivity growth, significantly exceeding the levels in Germany and the Eurozone, occurred from 2016 and continued until the end of 2023.

An important condition for rising MW, especially for employers, is increased productivity. However, the related increase in purchasing power is equally important for employees. Productivity growth, on the one hand, creates profits for the employer and funds for salary increases. However, on the other hand, employees expect compensation for the added value they generate in the form of a salary increase. This increases the purchasing power of their salary, allowing them to purchase more goods and services, and also increases their capital. Implementing such a mechanism enables sustainable development for both employers and employees and maintains adequate competitiveness in the labour market and in the national and international economies. In Poland, a strong increase in purchasing power was observed between 2016 and 2023, while a significantly weaker increase was observed between 2008 and 2015, as shown in Figure 7.

Figure 7. Purchasing power index in Poland in 2003–2023



Source: own work based on the data from GUS.

Productivity growth, which created greater purchasing power for Polish households, was a significant factor in GDP growth. Figure 8 presents the impact of productivity on the rate of economic growth in Poland from 2016 to 2023. This relationship is statistically significant, reaching p-Value = 0.001, and the degree to which GDP changes are explained by changes in productivity is very high, at R^2 = 0.90. The period of 2016–2023 saw a strong increase in MW, likely contributing to increased productivity and thus GDP growth. Subsequently, rising productivity created a larger fund for enterprises to increase wages, including MW.

The results of the conducted research indicate that MW has a positive impact on AW, productivity, purchasing power, and GDP. This research also points to global effects on the economy, which results from the effects of individual groups of enterprises of varying sizes. In this context, it is important to ensure maximum efficiency across all sectors based on

employment size. The positive impact of a uniform MW rate for all entities on micro and macroeconomic factors, as demonstrated in the study, ultimately does not lead to maximizing the total added value for entities in the E2ME group, which could be achieved by varying MW rates based on enterprise size.

Figure 8. Dependence of GDP changes on changes in productivity in the years 2016–2023

Source: own work based on the data from the OECD and GUS.

A uniform MW rate for all entities would, on the one hand, be too low for large enterprises, which would result in the distribution of benefits from increased productivity between employers and employees being unfavourable for the employee. On the other hand, such MW would place an excessive burden on micro and small enterprises, resulting in increasing unprofitability for employers, leading to layoffs or business closures. The above leads to the conclusion that a uniform MW is not optimal for all businesses of varying sizes, as it does not maximize benefits for both employers and employees. In conclusion, introducing a diversified model for determining MW based on company size poses an extremely significant challenge not only for employers and employees, but also for the government, regulators, institutions responsible for economic policy, employee unions, and employer organizations.

Research methodology of MW diversification

To gather the opinions of employees and employers on the justification for the need to diversify MW based on company size, a survey was conducted in Poland. The first stage of this research aims to provide a preliminary assessment of the degree to which the theory of MW diversification is of interest to employees and employers, as well as the wage levels they propose and the benefits they perceive.

The survey was addressed to respondents operating within micro (employing 0 to 9 employees), small (employing 10 to 49 employees), medium-sized (employing 50 to 249 employees),

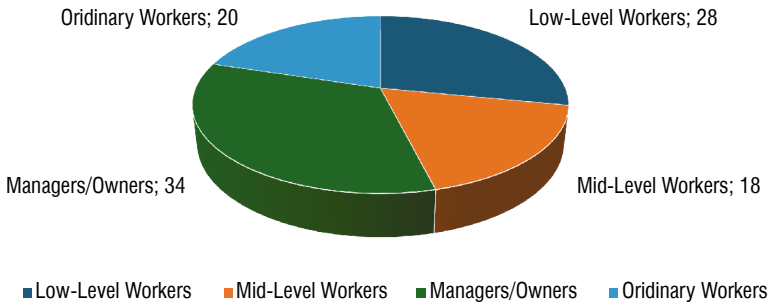
large (employing 250 to 1,000 employees), and very large (employing over 1,000 employees) enterprises. Particular attention was paid to industries such as mining, manufacturing, agriculture and forestry, energy, construction, transportation, telecommunications and IT, finance, real estate, and healthcare. Survey respondents included low-level employees, middle-level management, senior managers, owners, and others. The benefits cited by respondents are as follows:

- stopping the outflow of workers from Poland, especially those with the highest qualifications;
- more effective allocation of capital and employees in the labour market, in line with current trends and taking into account the dynamics of economic changes in various sectors of the economy, which will translate into improved performance of the Polish economy;
- the ability to provide employees in leading industries with greater financial satisfaction from work and a greater sense of fair remuneration for their personal contribution to improving the economic and financial position of the enterprise and the industry in which it operates;
- reducing the negative phenomenon of excessively high staff turnover;
- increasing employee productivity within the enterprise due to increased financial satisfaction;
- reducing enterprise costs due to increased employment stability.

Research results

The research survey was sent to around 800 people, out of them around 100 responded. In Figure 9 the structure of respondents' professional positions is presented. This seems to be satisfactory since almost an equal number of all positions are represented.

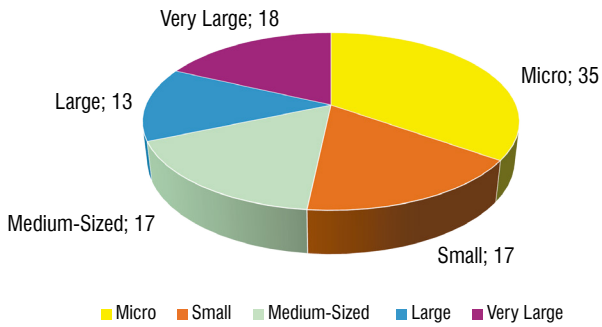
Figure 9. Structure of professional positions of respondents



Source: own elaboration.

Figure 10 reflects the structure of enterprises in respect of their size represented by respondents. Most of them are micro enterprises, whose number in the economy is the biggest. This structure reflects the entire economy representation very well in respect of different sizes of enterprises, which will support a more objective diagnosis of the stated research problem.

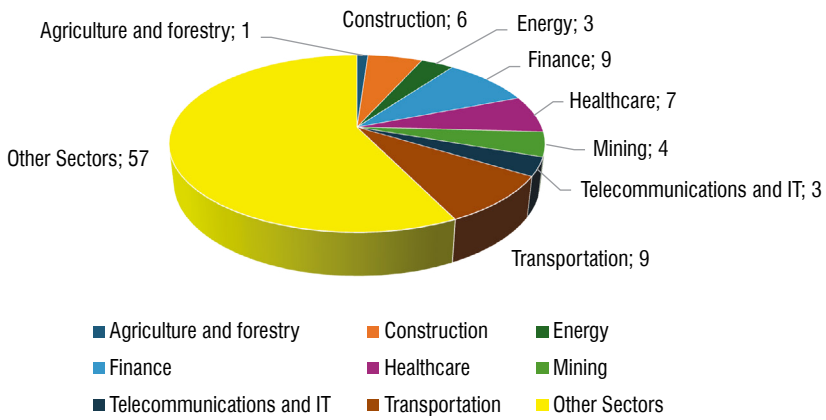
Figure 10. The structure of enterprises in respect of size represented by respondents



Source: own elaboration.

Figure 11 embraces the structure of economic sectors represented by respondents. Apart from sectors like energy, mining, transportation, construction, respondents represent 57% of other sectors, which is beneficial for the better quality of this research study, as a wider scope of opinions may help to draw more objective conclusions.

Figure 11. The structure of economic sectors represented by respondents



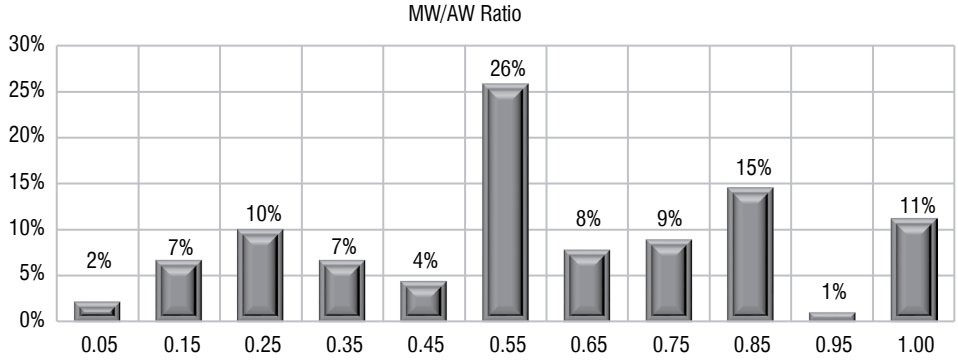
Source: own elaboration.

Figure 12 shows respondents' MW/AW ratios in their enterprises. The ratio of 0.55 was reported with a frequency of 26%. Lower ratios than 0.55 were reported with a frequency of 30%, and higher than 0.55 with a frequency of 44%. The aim of the research study was to prove that employers and employee favour diversification of MW depending on the size of the enterprise, and the graph in Figure 12 supports that the diversified MW is expected by companies and workers, because, as they indicate, it delivers substantial benefits for both parties.

The research results were used to calculate average MW/AW ratios for enterprises of different size, which is shown in Table 2. For micro enterprises the average MW/AW ratio equals 0.56; for small 0.52; for medium-sized 0.57; for large 0.48; and for very large 0.54. These

ratios were applied to compute MW in 2020 based on the known AW in 2020, which again was shown in Table 2. In 2020 the MW was flat for all enterprises, equalling 2,600 PLN. This approach led to MW for micro enterprises equalling 1,983 PLN, for small 2,608 PLN, medium-sized 3,228 PLN, large 3,049 PLN, and very large 3,838 PLN. If such an approach of the diversified MW were to be used, then MW for micro enterprises in 2020 would be lower than 2,600 PLN by 617 PLN, for small enterprises higher by 8 PLN, for medium-sized higher by 628 PLN, for large higher by 449 PLN, and for very large much higher by about 1,238 PLN.

Figure 12. Reported by respondents MW/AW ratios in their enterprises



Source: own study based on the survey research.

Table 2. MW in 2020 assessed for different size of enterprises based on the research results

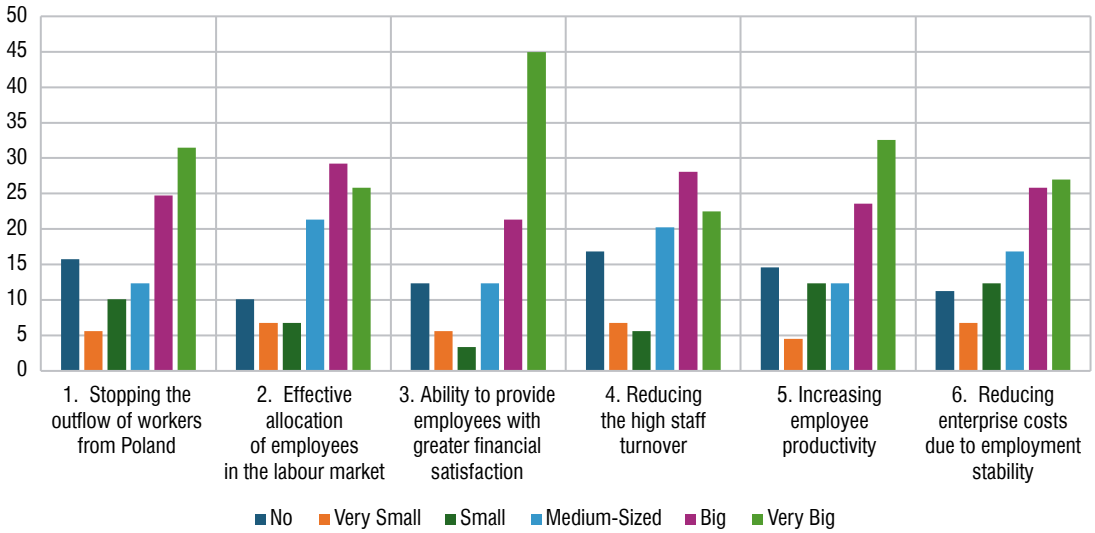
Size of the enterprise	Average MW/AW ratio based on the respondents' opinions	AW in 2020 [PLN]	What the MW should be based on the respondents' opinions in 2020 [PLN]	The difference between the MW=2600 PLN in 2020 and the MW computed for 2020 based on the MW/AW Ratio obtained from the respondents' opinions
Micro	0.56	3,533	1,983	617
Small	0.52	5,015	2,608	(8)
Medium-sized	0.57	5,664	3,228	(628)
Large	0.48	6,309	3,049	(449)
Very Large	0.54	7,100	3,838	(1,238)

Source: own elaboration.

Figure 13 presents respondents' opinions on the benefits of MW diversification. All types of benefits were highly appreciated. Most highly assessed benefits are the ability to provide employees with greater financial satisfaction and increasing employee productivity within the enterprise due to increased financial satisfaction. As already said in this paper, when discussing added value of the diversification theory of MW, there is a certain common interest for employees and employers through establishing diversified MW. This commonality in benefits 3 and 5 shown in Figure 13 highly supports the importance in practical application of the MW diversification theory. Furthermore, respondents most frequently indicated that

appropriate diversification of MW depending on company size would contribute to: slowing the outflow of employees from Poland, especially those with the highest qualifications; and providing employees in leading industries with greater financial satisfaction from their jobs and an increased sense of fair compensation for their personal contribution to improving the economic and financial position of the company and the industry in which it operates. Other benefits were also highly rated, indicating that the established list of six benefits in the survey was of key importance to respondents.

Figure 13. Respondents' opinions on the benefits of MW diversification



Source: own study based on the survey research.

This first of that kind of surveys presents results which seem to suggest that the diversification theory of MW depending on company size is well justified. The survey research presented here will be continued, as collecting a much larger number of responses will allow for a more plausible thesis regarding the validity of MW diversification and, in particular, its levels relative to the AW in specific groups of enterprises.

Summary

The research study presented in this paper relates to the Polish labour market and the Polish economy, where enterprises and their workers are involved in business activities. This research study examines the approach to setting MW from the perspective of diversification theory and its importance for employers, employees, the labour market, and the economy, which constitutes a group of stakeholders, each of whom expects MW levels that maximize their benefits. The literature discusses various theories of MW, which are the subject of economic analyses and

which address the impact of MW on selected microeconomic and macroeconomic factors. However, these theories fail to address the impact of MW on employers, employees, the labour market, and the economy adequately. Therefore, this study took an attempt to fill this gap.

Current theories do not recommend linking MW rates to enterprise size, broken down into groups such as micro, small, medium-sized, large, and very large enterprises. The author proposes filling the existing gap by introducing the concept of setting MW rates based on enterprise size and integrating this solution within the MW diversification theory. This would expand the scope of existing theories and, it seems to reflect better the micro- and macroeconomic nature of the business and economic environment.

The conducted research appears to verify positively the hypothesis that shaping the MW in Poland in an appropriate proportion to AW depending on the size of enterprises can lead to increased productivity, GDP growth, and reduced employee outflows. A series of analyses based on the research provide numerous and strong arguments supporting the theory of a diversified MW. An appropriate MW is an important determinant of productivity, average wage, and GDP growth.

The opinion collected from respondents in the research survey proved that both employees and employers through the diversification of MW obtain many mutual benefits like: stopping the outflow of workers from Poland, especially those with the highest qualifications; more effective allocation of capital and employees in the labour market, in line with current trends and taking into account the dynamics of economic changes in various sectors of the economy, which will translate into improved performance of the Polish economy; the ability to provide employees in leading industries with greater financial satisfaction from work and a greater sense of fair remuneration for their personal contribution to improving the economic and financial position of the enterprise and the industry in which it operates; reducing the negative phenomenon of excessively high staff turnover; increasing employee productivity within the enterprise due to increased financial satisfaction; reducing enterprise costs due to increased employment stability. These all benefits listed above create the added value for the labour market and entire economy as well.

The preliminary results of the survey suggest that the diversification theory of MW depending on enterprise size will be justified. The survey research presented will be continued, as collecting a much larger number of responses will allow for a more plausible thesis regarding the validity of diversifying MW and, in particular, its levels in relation to AW for each group of the same size of enterprises.

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