



## Analysis of Potential Effects of Raising Minimum Wage in Federation of BiH

Centre for Policy and  
Governance  
July 2021



Title:

Analysis of Potential Effects of Raising Minimum Wage in the Federation of BiH

Author:

Adnan Muminović

Peer-reviewed by:

Lejla Dragnić

Editor:

Adis Muhović

Publisher:

Center for Policies and Governance

Year:

2021

Publisher's address:

Antuna Branka Šimića 2b, 71000 Sarajevo, Bosna i Hercegovina

Contact:

info@cpu.org.ba; www.cpu.org.ba

This publication is produced by the Center for Policies and Governance within the project  
„Promoting Responsible Economic Policies“, supported by the  
**Centre for International Private Enterprise - CIPE.**

Views and opinions expressed in this document are fully those of the Centre for Policies and  
Governance and do not necessary reflect the views and opinions of the CIPE.



## Content

Summary .....	2
Background .....	2
What is the significance of minimum wage? The purpose and potential negative effects.....	3
Minimum wage in the Federation of BiH.....	4
How minimum wage is determined in FBiH?.....	4
Comparison with other systems .....	4
Effects of minimum wage increase .....	6
What does raising minimum wage mean for private sector?.....	6
What does raising minimum wage mean for employers and export sector?.....	7
What does raising minimum wage mean for public revenues? .....	9
What does raising minimum wage mean for workers' purchasing power? .....	11
What does raising minimum wage mean for wages in public companies?.....	12
The case of Slovenia.....	12
Conclusion.....	12
References .....	13

## Summary

The last time the minimum wage was determined in the Federation of Bosnia and Herzegovina was in 2016, and there is no doubt that it needs to be raised. However, an excessive and sudden increase may lead to undesired consequences and jeopardize the very groups of workers this help is intended for. Inter alia, it may lead to the rise in youth and women unemployment, threaten the competitiveness of private sector and lead to significant rise in wages in public companies, even in cases of workers who currently earn significantly above the minimum wage. Therefore, the key question is how to strike a balance between real needs and unrealistic demands and this analysis is aimed at offering several guidelines to that effect.

## Background

Last time minimum wage was determined in the Federation of Bosnia and Herzegovina (hereinafter: FBiH) was in 2016 in the amount of 406,56 KM. Ever since then, average wage has increased by slightly above 130 KM, while prices (According to the Consumer Price Index) rose by 4.5 per cent.

Therefore, there is no doubt that there is a need to update, or rather raise, the minimum wage in the FBiH. However, the key question is by how much? At the moment this analysis is published, there is media reporting on demands to raise minimum wage to 1,000 KM, i.e. the rise of slightly above 100 per cent of the average wage currently paid in FBiH, which shows that such proposals are both unsustainable and populist. This analysis aims to look, in an impartial and objective manner, into the issue of minimum wage in the context of economic trends in the Federation of BiH, and to offer several guidelines as well as to point at potential negative effects of the increase of minimum wage in FBiH.<sup>1</sup>

## What is the significance of minimum wage? The purpose and potential negative effects

Although minimum wage regulations have existed for several centuries, it was only by the end of the 19<sup>th</sup> century that they became a part of national legislation, first in New Zealand and Australia, followed by the rest of the world. At the beginning of this year, 21 of 27 European Union's member countries, have regulated minimum wage at the national level, whereas in Denmark, Finland, Sweden, Italy, Austria and Cyprus it is decided in the process of collective bargaining between trade unions and employers.

Historically, minimum wage was both an economic and a political issue. Its aim is to protect workers from inadequately low wages, enable them to have a decent living and to reduce poverty and inequality in a society. On the other hand, however, it is linked with significant consequences, including rise in unemployment of the very categories of society to which it is intended as help. It also influences profitability, international competitiveness, as well as prices and incentives in labour market, which are just some of the factors that need to be taken into account when deciding on the amount of minimum wage.

Why is the increase of minimum wage linked to the rise in unemployment? Without government's intervention, the price of labour is determined on the market by balancing between supply and demand with labour. If the level of minimum wage is determined above the balanced level, there will be more people ready to work for higher hourly rate, but consequently there will be fewer employers ready to offer jobs at higher hourly rates, which results in the rise in unemployment. In other words, minimum wage increases the income of those who are employed, while at the same time it decreases the income of those looking for job, i.e. those who have become jobless because of its increase. Nevertheless,

---

<sup>1</sup> We need to mention that this Analysis is done within the framework of the legislation currently on force, including the Law on Contributions and the Law on Income Tax that might be amended in the forthcoming period.

for some, the loss of job will be the price that needs to be paid to achieve an increase of income of the poorest workers.

In economic science there has been consensus for quite some time that raising minimum wage inevitably leads to rise in unemployment, particularly among young people. Thus, about three decades ago, OECD published an important *Jobs Study* Report wherein it presented its own view of desirable labour policies recommending to countries to “reassess the role of statutory minimum wages as an instrument to achieve redistributive goals, and switch to more direct instruments (OECD, 1994).”

Furthermore, we need to have in mind that the impact of minimum wage is not the same for all persons on labour market. For example, according to the *Analysis of Required Skills for Software Industry in Bosnia and Herzegovina*, published last year, average net wage in the IT sector in the Federation of BiH amounted to 1,607 KM. Therefore, determining a minimum wage has no effect on highly qualified workers and those with significant work experience who are earning higher income anyway. On the other hand, minimum wage has far-reaching consequences on those with insufficient skills and who are lacking work experience. This is, inter alia, valid for young people who would gladly accept to work for lower hourly rate to acquire work experience and enter the labour market.

Still, belief that raising minimum wage always leads to the rise in unemployment began changing by mid-1990s, with the new wave of studies known as *New Minimum Wage Research*. Thus, several years ago, OECD (2018) updated its aforementioned 1994 Report, where it emphasised that minimum wage, if it is moderate and well conceived, does not necessarily have a detrimental effect on employment. Before that, IMF, the World Bank, OECD and ILO came to similar conclusion in their report published in 2012. However, there are still disagreements among economists.

Finally, in a research paper that was published this year, one of the leading economists specialised in labour market in Europe, Alan Manning (2021, p. 22) points out that, regardless of the fact that the effects of minimum wage on employment are still undefined, “there, is, of course, a certain level of minimum wage with which employment will significantly drop”. Therefore, the key question is, actually, which is the level of minimum wage and how to determine it in FBiH. The example from Slovenia that is shown at the end of this analysis needs to serve as a warning of sorts.

Since minimum wage is closely linked to social justice, determining its amount is not a mere empirical question. One of the ways to determine it, and to position it in a social context, is comparison with other countries and regions. Before we do that, let us briefly present the way in which minimum wage is currently determined in FBiH.

### Minimum wage in the Federation of BiH

#### How minimum wage is determined in FBiH?

Article 3 of the Convention No. 131 of the International Labour Organisation (ILO), which is ratified by Bosnia and Herzegovina, defines the elements to be taken into consideration in determining the level of minimum wage, which include; (a) the needs of workers and their families, taking into account the general level of wages in the country, the cost of living, social security benefits, and the relative living standards of other social groups, (b) economic factors, including the requirements of economic development, levels of productivity and the desirability of attaining and maintaining a high level of employment. This way, ILO has also acknowledged the existence of clash between minimum wage and employment.

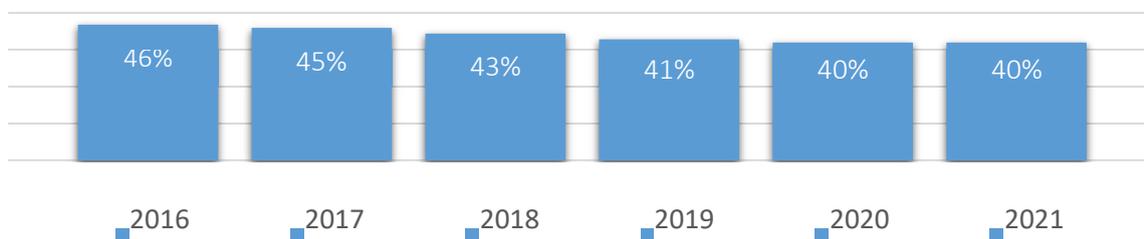
More importantly, pursuant to Article 78 of the Labour Law, the Government of the Federation of BiH determines its minimum wage after consultations with the Social and Economic Council. When doing it, the Government adopts a regulation, at the proposal of the Federal Ministry of Finance and in

collaboration with the Federal Institute for Development Programming, by which it determines the methodology of calculation and harmonisation of the minimum wage. The Government of the Federation of BiH has not adopted this methodology yet. According to the information available to the author, its framework does exist and it includes various economic indicators, such as the situation at labour market, the poverty threshold, etc. which is all aimed at de-politicising the issue of minimum wage, and at containing it by keeping it within the real economic framework.

### Comparison with other systems

As stated in the introductory part of this analysis, minimum wage in the Federation of BiH currently amounts to 406,56KM<sup>2</sup> (about 208€) and the last time it was determined was in February 2016, within General Collative Agreement for the territory of FBiH. Given that, since then, there was an increase of average wage in FBiH, the share of minimum wage in the average wage dropped from 46 to 40 per cent, which indicates that there is a need for its updating.

Graph 1: The share of minimum wage in the average wage in the Federation of BiH from 2016 till today



Source: The Federal Institute of Statistics

Data on minimum wage in the European Union and in candidate countries are published twice a year by Eurostat. According to the latest data, minimum wages in the countries of the region are: 242€ in Albania, 282€ in Northern Macedonia, 331€ in Montenegro and 366€ in Serbia. To be able to properly compare FBiH with the countries of the region, we need to have in mind two things.

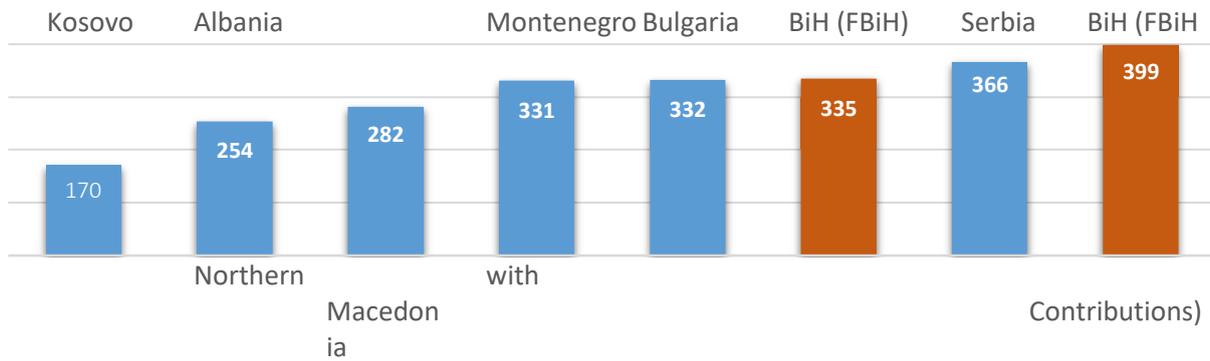
Firstly, the aforementioned Eurostat data are gross figures; therefore, they include all taxes and contributions that are calculated on minimum wage. Secondly, FBiH is specific since non-tax contributions (such as food allowance, transportation allowance, and recourse) are still paid; due to this fact the total workers' income is actually above the determined minimum wage.<sup>3</sup> Therefore if we calculate, for the sake of comparison with the countries of the region, the minimum wage in the Federation of BiH as gross income, then it currently amounts to about 335€, which means that it is higher than those in Albania, Northern Macedonia, Montenegro and Bulgaria. If we add to this the average non-tax contributions (about 64€), it is also higher than the minimum wage paid currently in Serbia.

Graph 2: Comparison between average minimum gross wage in the

<sup>2</sup> In all the calculations presented below it is important to note that minimum wage includes income tax, so that what the minimum wage workers get is actually less, and amounts to 395.90 KM. The total gross wage costs on this amount, i.e. the contributions paid by employers and employees, income tax and other contributions, together amount to 658 KM (335€).

<sup>3</sup> According to the data available to the author, average meal and transportation allowances paid in FBiH is 224 KM per month. However, this amount is valid only for those workers who receive these non-tax contributions. Therefore, the author applies here the most conservative assessment according to which these contributions amount to about 125 KM, and are applied on all employed persons in FBiH.

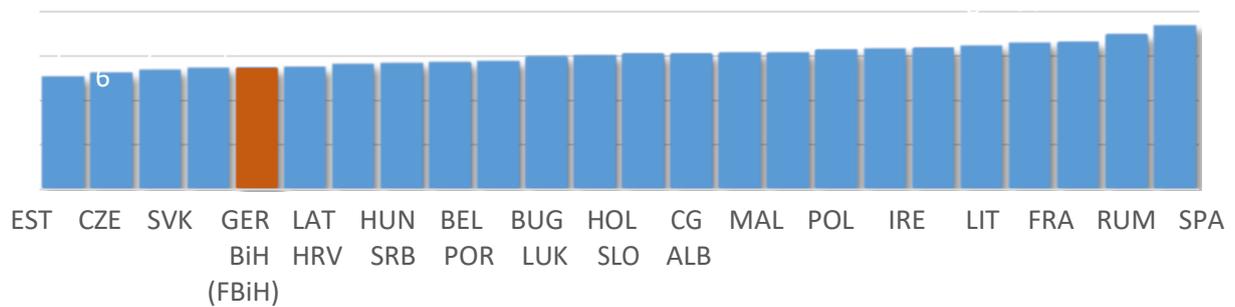
### Federation of BiH and the region



Source: Eurostat and the Federal Institute of Statistics  
 Calculations of average cost of minimum gross wages is done by the author

Another way of comparing minimum wage is to view it in relation to the average wage paid in a country, i.e. with the productiveness of its economy. Last year, for example, the minimum wage in Luxembourg amounted to €2.202, but its share in average monthly wage, which amounted to €4.916 was 45 per cent.

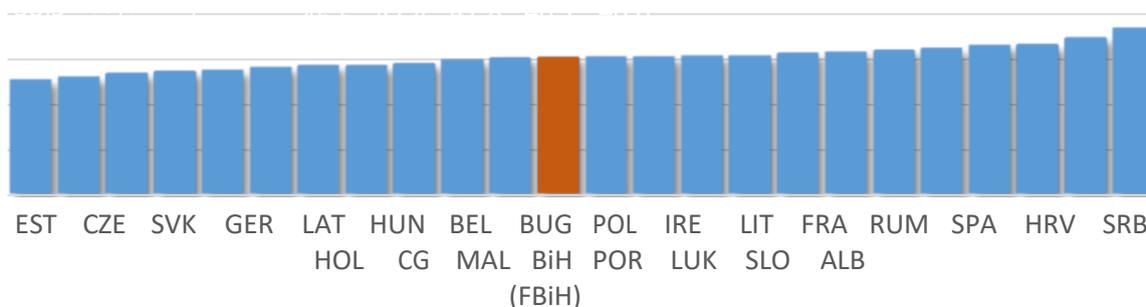
Graph 3: Comparison of relation between minimum gross wage and average wage in FBiH, Europe and the region in 2019, without contributions



Source: Eurostat and the Federal Institute of Statistics

Generally, according to the official Eurostat data from 2019 (the last data that can be compared), the share of minimum wage in average wage in Europe ranged from 38 per cent in Estonia, to 55.5 per cent in Albania. In the Federation of BiH, this share in 2019 (including the non-tax contributions) amounted to 46.1 per cent, which is close to the European average.<sup>4</sup>

Graph 4: Comparison of relation between minimum gross wage and average wage in FBiH, Europe and the region in 2019, with contributions included



Source: Eurostat and the Federal Institute of Statistics

Thus, the aforementioned data indicate that the minimum wage in the Federation of BiH is in line with those in the countries of similar level of economic development and productiveness, which, of course, does not mean that it is adequate and sufficient for a normal living. However, these data also show that some demands for a minimum wage amounting to 1,000 KM, or else, to more than it is now the average wage in FBiH, which is not the case in any of the European countries, are not justified.

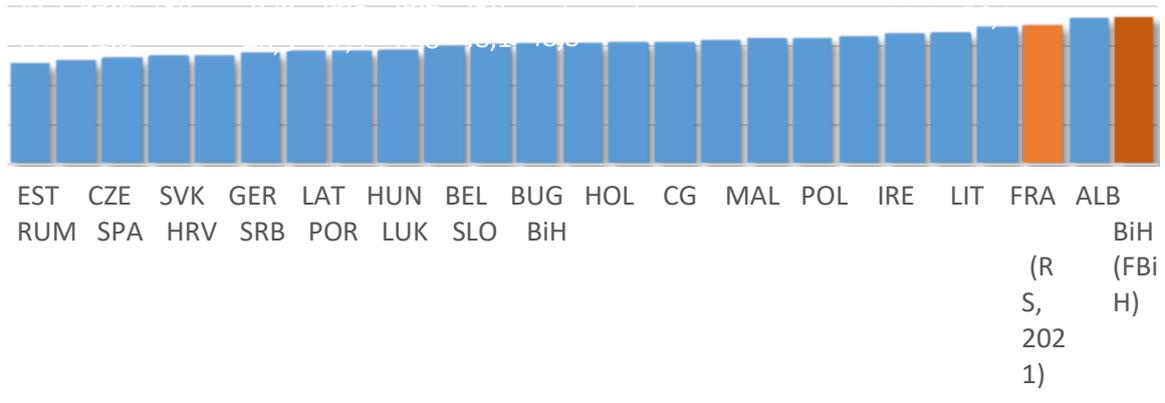
Below, you will find the effects of raising minimum wage on private sector, employers, public revenues and public companies.

#### Effects of raising minimum wage

Below, you will find the calculation of costs for different scenarios of raising minimum wage, but with special focus on the scenario of raising minimum wage to 570 KM, which is also one of the demands put forward by trade unions that is often mentioned in the media.

Graph 5: Comparison of relation between minimum gross wage and average wage in FBiH, the EU, and the region in 2019, if minimum wage is 570 KM

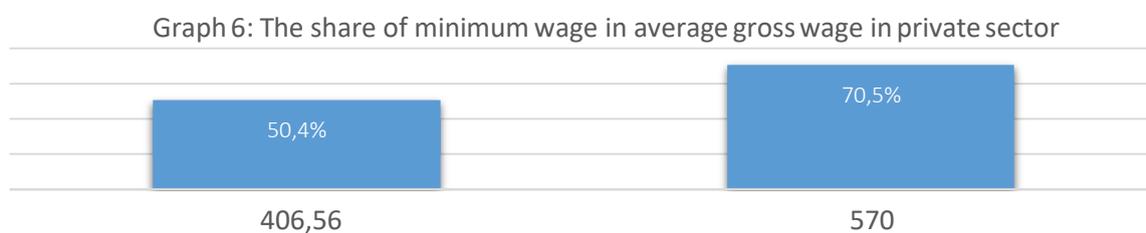
<sup>4</sup> The share is calculated in relation to average gross wage in the Federation of BiH during entire 2019, which amounted to 1,427 KM. This is the gross wage officially published by the Federal Institute of Statistics and it does not include the employer's costs. That is the reason why minimum wage is calculated to this gross amount of 589 KM.



If FBiH would increase minimum wage from 406 to 570 KM, its share in the gross wage, as it amounted in December 2020, would rise by 56.1 per cent. Thus, in the whole of the European Union and the region, there would be no administrative unit with the higher share of minimum wage in average gross wage. In May 2021, the minimum wage in the Republika Srpska was increased from 520 to 540 KM (803.57 KM gross - 411€). In relation to this year's average gross wage in the Republika Srpska (1,518 KM in March) it amounts to 53 per cent.

#### What does raising minimum wage mean for private sector?

At the outset, it is important to have in mind that wages in private sector are lower than those in public sector and, on average, they amount to about 757 KM net (or 1.171 gross).<sup>5</sup> This means that the share of minimum wage in average gross wage in private sector is actually even higher so that any increase would primarily jeopardise this sector. At the moment, the share of minimum wage in average gross wage in private sector amounts to 50 per cent. If it gets increased to 570 KM, its share would be as high as 70 per cent of average gross wage in private sector.



Therefore, an excessive increase of minimum wage would jeopardise especially those sectors where average net wage is below 600 KM. The sectors shown below currently employ about 81,000 workers (37.000 of them women). These are the sectors where, most probably, employees would be first to be laid-off in case of sudden and excessive increase of minimum wages. They include, inter alia, tourism and catering industry, furniture production, textile production and building construction. Furthermore, the share of women working in these sectors is 45.6 per cent, which is higher than the share of women in overall private sector (39 per cent).

Table 1: Sectors with net wage below 600 KM

SECTOR	NUMBER OF EMPLOYEES	NUMBER OF WOMEN	Ø NET WAGE
Fisheries and aquaculture	185	43	584
Auxiliary service in mining of ore and stone	391	19	542
Textile production	4.609	2.992	499
Clothing production	9.588	7.860	445
Production of leather and related products	7.565	5.285	420
Wood processing and production of production of wood and and cork product, except for furniture	7.820	1.220	525
Furniture production	6.778	1.555	588
Building construction	9.086	864	564
Accommodation	3.811	2.055	564
Economic activities of preparation and serving of food and drinks	20.662	9.817	477
Travel agencies, travel organisation and tour	783	378	515

<sup>5</sup> Agencies of statistics in Bosnia and Herzegovina do not have this data officially. The author calculates the data by looking at wages in those sectors that are prevalingly privately owned and they represent a rough approximation.

operators, etc.			
Protection and investigation economic activities	4.524	289	458
Betting and lottery	5.505	4.695	534
Total	81.307	37.072	

Source: The Federal Institute of Statistics

### What does raising minimum wage mean for employers and export sector?

Any increase of minimum wage inevitably means a rise in labour costs for employers. Below, you will find the rise in potential costs of labour for employers for different options of increase of minimum wage. <sup>6</sup>

Table 2: Rise in costs for employers in case of rise in minimum wages

Minimum wages	Total costs for employer	Rise in total costs in relation to current minimum wage
406,56	658,42	
500	809,15	150,73
520	841,50	183,08
540	873,85	215,43
560	906,21	247,79
580	938,55	280,13
600	970,92	312,50

Calculations are done by the author

This rise in costs is potentially good news for public sector in terms of higher revenues from taxes and contributions (more about this later), but it is lethal for private sector and for minimum-wage workers, because there would probably be lay-offs, particularly of the most vulnerable categories (see the table below).

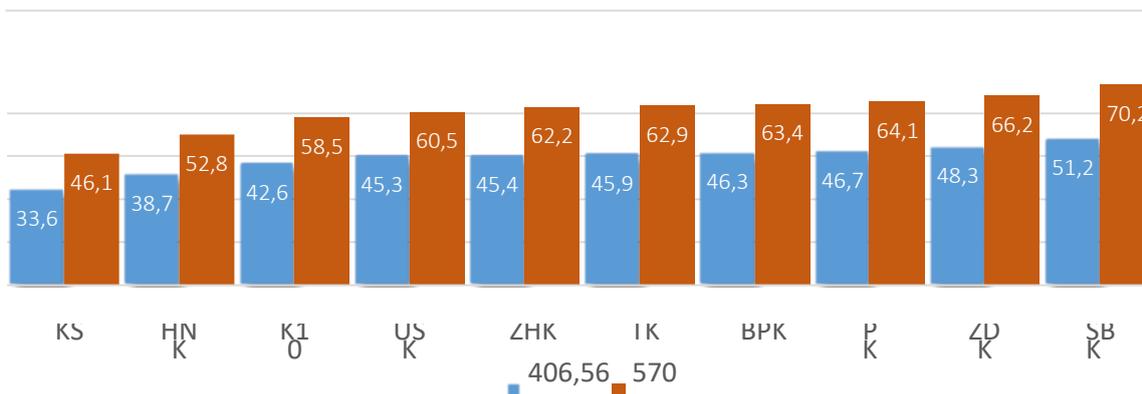
UNEMPLOYMENT RATE IN FBiH (Q4 2020, ARS)	UNEMPLOYMENT EAR+RATE AMONG WOMEN	UNEMPLOYMENT RATE AMONG YOUTH (15-24)
17,5%	22,3%	40,4%

Source: Agency of Statics of BiH –Labour Force Survey for the 4<sup>th</sup> quarter of 2020

This problem is potentially more acute in the cantons and municipalities with lower average wages. For example, in FBiH there are currently 23 municipalities with average net wage below 750 KM. This includes some of the municipalities that show significant export results, such as Gračanica (649 KM), Visoko (663 KM), Tešanj (652 KM), and Gradačac (719 KM). It is clear that an excessive increase of minimum wage would jeopardise the competitiveness of companies active in these parts of the country. Differences among cantons are shown below.

Graph 7: Ratio between minimum wages and average net wages by cantons (2020)

<sup>6</sup> For comparison, when calculating the total costs of minimum wages, the first presented amount is income tax (10 per cent, reduced by 300 KM). For example, if new minimum wage is 500 KM, its net amount is actually 480 KM with employer's costs calculated on that amount.



Source: The Federal Institute of Statistics

Table 3: Overview of municipalities with current average net wage below 750 KM

MUNICIPALITY/ CITY	AVERAGE NET WAGE
Doboj-Istok	591
Domaljevac-Samac	610
Gračanica	649
Tešanj	652
Visoko	663
Zepče	677
Bugojno	679
Celić	688
Gornji Vakuf-Uskoplje	691
Citluk	691
Drvar	694
Glamoč	700
Vitez	714
Doboj-Jug	717
Gradačac	719
Olovo	720
Odžak	726
Srebrenik	726
Kiseljak	729
Ilijaš	730
Kalesija	735
Kladanj	738
Maglaj	739

Source: The Federal Institute of Statistics

### What does raising minimum wage mean for public revenues?

FBiH and cantons collect the total of 255 KM of contributions and taxes on current minimum wage of 406.56 KM. Below, you will find calculations of public revenues in case minimum wage is increased to 570 KM, which is approximately 60 per cent of average net wage in FBiH in 2020.<sup>7</sup> Since, due to the COVID 19 pandemic, there was a change in the number of employed persons, the number of workers observed here is the number of those whose wage in 2019 was up to 570 KM. According to the data available to the author, there were 194.463 of those workers in total.

Related to this number of employed persons, the increase of minimum wage to 570 KM would potentially mean an increase of public revenues of approximately 205 million KM ( $\approx$  107 million for FBiH and  $\approx$  98 million for cantons). However, one can expect that, due to the increase of minimum wage and

<sup>7</sup> This is also one of the demands put forward by trade unions, which is often reported in the media. We need to emphasise, once again, that there is no country in Europe with the share of minimum wage in average wage above 55.5 per cent (Albania).

the rise in the costs for employers, there would be lay-offs and, consequently, a drop in public revenues.

Table 4: Situation in 2019 (minimum wage 406.56 KM)

Amount of wage (KM)	do 400*	400 – 420	421 – 440	441 – 440	461 – 480	481 – 500	501 – 520	521 – 540	541 – 560
No. of workers receiving wage	26.247	39.129	47.361	22.560	14.528	13.840	10.448	11.261	9.089
Contributions									
Pension Fund	126,66	136,66	143,33	150,00	156,67	163,33	170,00	176,67	183,34
Healthcare	90,87	98,05	102,83	107,61	112,40	117,18	121,96	126,74	131,52
Unemployment	11,01	11,88	12,47	13,04	13,63	14,20	14,79	15,36	15,95
Income tax	8,00	11,00	13,00	15,00	17,00	19,00	21,00	23,00	25,00
Total annual income	74.501.585	120.950.869	154.376.021	77.331.168	52.248.499	52.100.957	41.091.984	46.184.064	38.807.485
Total	657.592.632 KM annually								

\*Since we do not know the exact distribution of workers receiving less than 400 KM, it is realistic to assume that a great majority of them receive somewhat less than that amount, so that taxes and contributions for this group of workers are calculated as if their average wage is 380 KM.

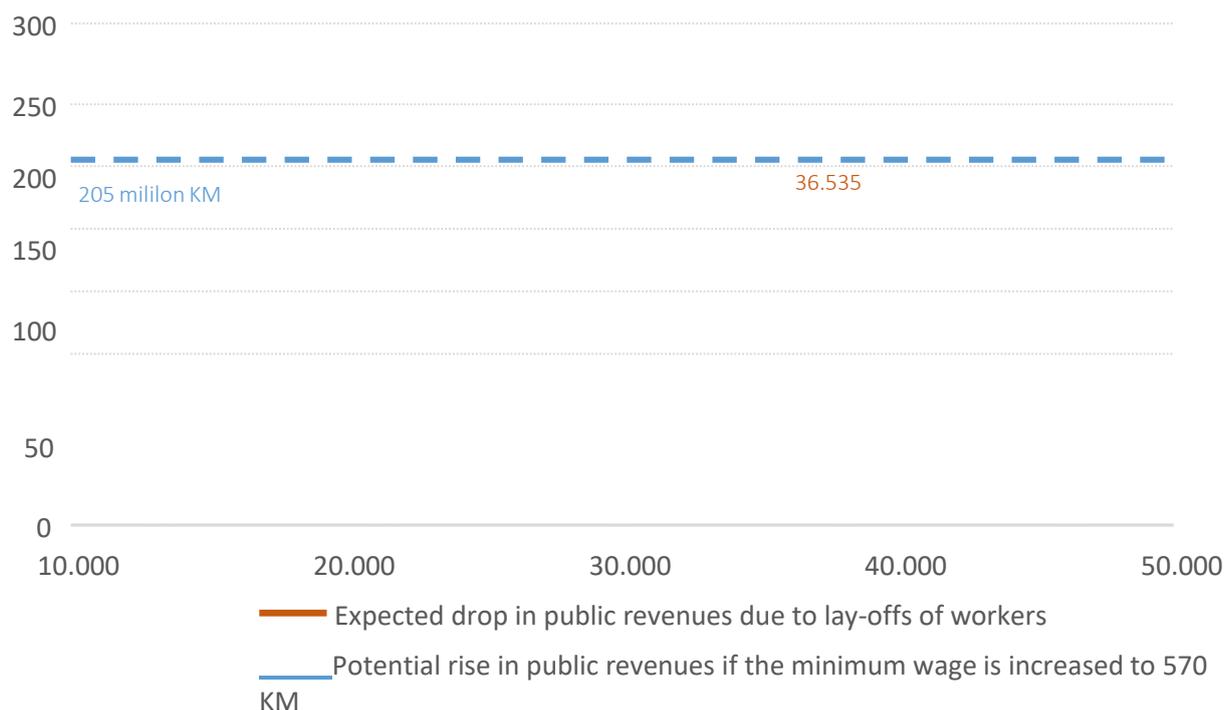
Table 5: Situation if minimum wage is 570 KM

Wage (KM)	do 400	400 – 420	421 – 440	441 – 440	461 – 480	481 – 500	501 – 520	521 – 540	541 – 560
No. of workers receiving wage	26.247	39.129	47.361	22.560	14.528	13.840	10.448	11.261	9.089
Contributions									
Pension Fund	190,01	190,01	190,01	190,01	190,01	190,01	190,01	190,01	190,01
Healthcare	136,30	136,30	136,30	136,30	136,30	136,30	136,30	136,30	136,30
Unemployment	16,52	16,52	16,52	16,52	16,52	16,52	16,52	16,52	16,52
Income tax	27,00	27,00	27,00	27,00	27,00	27,00	27,00	27,00	27,00
Total annual income	116.483.136	173.652.936	210.186.223	100.120.377	64.474.682	61.421.366	46.367.806	49.975.867	40.336.618
Total	863.019.015 KM annually								
Difference	+205.426.383 M								

Below (Graph 8) you will find calculations of potential drop in public revenues if, after the increase of minimum wage, there would be the lay-off of between 10.000 and 50.000 workers. In short, with every lost workplace after the increase of minimum wage to 570 KM, the state would lose 4.438 KM of revenues per year. According to the most conservative assessment, this represents the cost of 1.173 KM per laid-off worker.<sup>8</sup>

<sup>8</sup> Unemployment insurance is paid for the period from 3 to 24 months, depending on the length of service of the person who loses job. Since the rise in unemployment due to the increase of minimum wage would mainly affect young persons, the assessment was done in the most conservative way so that all those who lose jobs receive the insurance for 3 months only. The real costs would certainly be higher.

Graph 8



Number of laid-off workers	Drop in public revenues per worker	Rise in the costs of unemployment insurance	Total annual drop in public revenues
10.000	4.438	1.173	56,11 million KM
20.000	4.438	1.173	112,22 million KM
30.000	4.438	1.173	168,33 million KM
40.000	4.438	1.173	224,44 million KM
50.000	4.438	1.173	280,55 million KM

Therefore, if due to the increase of minimum wage, 50.000 workers would be laid-off, as it is being announced by employers, the loss of public revenues due to the rise in unemployment would be significantly higher (280 million KM) than the rise in public revenues based on higher taxes and contributions due to the increase of minimum wage (205 million KM).

With as few as 37.000 laid-off workers, the rise in public revenues becomes equal due to the rise in minimum wage and the drop in public revenues caused by the rise of unemployment. In addition, there would be a drop in VAT due to decreased private consumption, or, in more simple terms, if every third worker who currently receives minimum wage loses job due to the increase of minimum wage to 570 KM, public revenues would remain at the same level as before the increase.

Besides, the increase of minimum wage would burden cantonal and FBiH budgets in several other ways. Firstly, at all levels of government the increase of minimum wage would lead to greater expenditures on wages paid from the budget, which are currently below the level that would be determined. Secondly, Article 6 of the Law on Salaries and Other Compensations in the Government Bodies of FBiH, stipulates that the basic wage cannot be below 70% of average net wage in FBiH, so that there would be higher expenditures on this basis as well, if, due to the increase of minimum wage, there occurs a rise in average wage in FBiH.

Thirdly, the rise in minimum wage would inevitable lead to the rise in average wage in FBiH, and

consequently, to higher expenditures on different contributions that are linked to it, such as meal allowance, compensation in case of death and serious illness, and numerous others. In addition, in some cantons the refunding of the costs of sick leave is linked to minimum wage.

Finally, a long-term cost for society due to the emigration of workforce, loss of skills and declined international competitiveness would be extremely high.

#### What does raising minimum wage mean for workers' purchasing power?

In an ideal case, the rise in minimum wage leads to the rise in purchasing power and living standard of the poorest workers. The table below presents the potential rise in aggregate purchasing power in FBiH, if minimum wage is increased to 570 KM, and if there would be no lay-offs (which is utterly unrealistic). Furthermore, having in mind that, by the rule, persons with lower income have greater marginal affinity toward consumption, and that they would probably spent most of their revenues, it can be assumed that the multiplicative effect on gross domestic product in FBiH would actually be even greater.

Table 6: Rise in purchasing power in case minimum wage is increased to 570 KM as compared to current minimum wage (related to the number of workers in 2019)

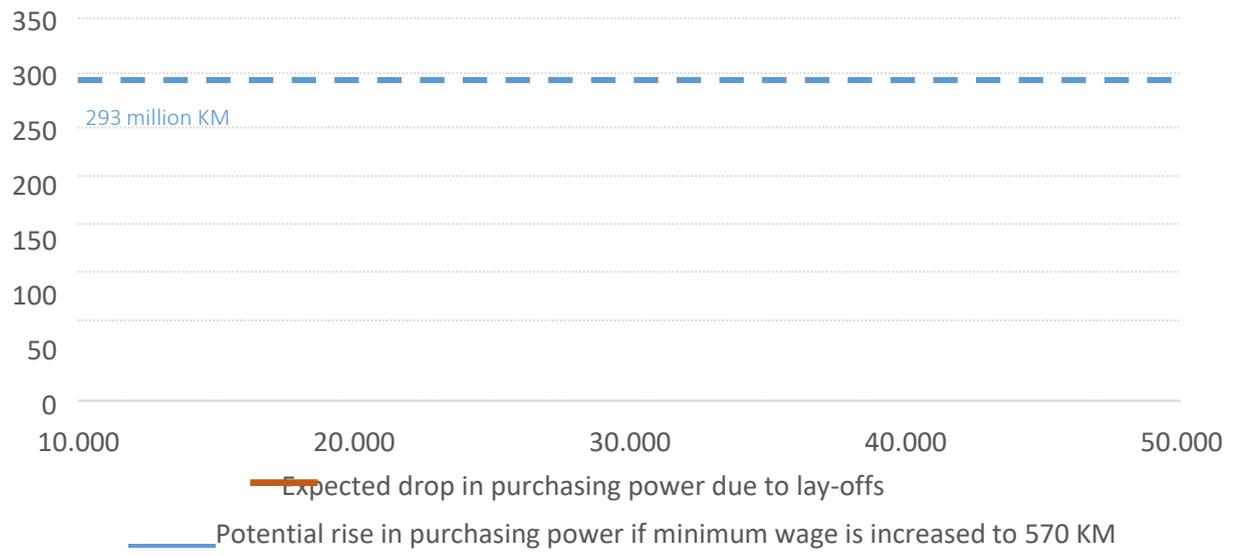
Wage (KM)	to	400 –	421 –	441 –	461 –	481 –	501 –	521 –	541 –	
	400*	420	440	440	480	500	520	540	560	
No. of workers receiving wage	26,247	39,129	47,361	22,560	14,528	13,840	10,448	11,261	9,089	
Rise in purchasing power per workers related to current minimum wage	≈190 KM	≈160	≈140	≈120	≈100	≈80	≈60	≈40	≈20	
Total monthly rise in purchasing power	4.986.930	6.260.640	6.631.380	2.707.200	1.452.800	1.107.200	626.880	450.440	181.780	
Total	292.863.000 KM annually									

\*As in the previous case, since we do not know the exact distribution of workers whose wage is below 400 KM, it is realistic to assume that a great majority receives somewhat less than this amount, so that the rise in purchasing power for this group of workers is calculated as if their average wage is 380 KM.

We repeat, however, that the increase of minimum wage would lead to a certain drop in employment, so that there would be people who would be left without any income. Since it is not possible to determine a priori who are those workers and what are their incomes, the most conservative assessment is that the loss of monthly income per worker would amount to 520 KM (minimum wage plus other contributions), although it would surely be somewhat higher.

Below (Graph 9), you will find calculations of possible drop in purchasing power if between 10.000 and 50.000 workers would be laid-off after the increase of minimum wage. In this regard, we need to have in mind that, for a certain period of time, at least a part of the income would be compensated through unemployment insurance. Therefore, as it can be seen in the table and graph below, although even with 50.000 laid-off workers, in the first year the rise in purchasing power due to the increase of minimum wage is higher than the rise in purchasing power due to the loss of jobs, the long-term damage for society is priceless. If people would not be able to find jobs for a longer period of time, they would lose the skills they had acquired, while some would certainly leave the country, which is the problem both for economy and for society.

Graph 9



Number of laid-off workers	Drop in annual purchasing power per laid-off worker	Income compensation through unemployment insurance	Net annual drop in purchasing power per worker	Total annual drop in public revenues
10.000	6.240	1.173	5.067	50,67 million KM
20.000	6.240	1.173	5.067	101,34 million KM
30.000	6.240	1.173	5.067	152,01 million KM
40.000	6.240	1.173	5.067	202,68 million KM
50.000	6.240	1.173	5.067	253,35 million KM

### What does raising minimum wage mean for wages in public companies?

Pursuant to Article 78, paragraph (2) of the Labour Law, “Minimum salary shall be defined based on minimum labour price defined in the collective agreement and Rulebook on labour.” This means that, in case of the increase of minimum wage, the lowest hourly rate, which would then be applied on collective agreements in public companies, would also be increased.<sup>9</sup> When multiplying a higher hourly rate with coefficients, we would have the increase of wages in public companies of 20 to 40 per cent, including those that are currently under-performing, while at the same time workers in private sector would lose jobs, which would bring about deformations in the labour market of the Federation of BiH.

Collective agreement	Current minimum hourly rate	Calculated minimum hourly rate if Minimum wage is increased to 570 KM	Rise in wages in public companies
Elektroprivreda	2,72		22%
Mines	2,70		23%
Postal services	2,60	3,3	27%
Railways	2,35	1	41%

### The case of Slovenia

The Slovenian example needs to serve as a warning for FBiH when it comes to the increase of minimum wage. In March 2010, Slovenia increased its minimum wage by 23 per cent — from €597 to €734 gross. Of all the countries that increased minimum wage in the period from 2008 to 2012 (Slovakia, Latvia and Bulgaria), Slovenia opted for a far greater increase.

At the same time, Slovenia was one of the three European member countries that recorded the greatest drop in gross domestic product.<sup>10</sup> In concrete terms, a research (Vodopivec, 2015) shows that the increase of minimum wage had significant negative effect on employment, particularly of

<sup>9</sup> Why does this exactly happen? If minimum wage is increased to 570 KM, it means that minimum hourly rate would amount to 3.31 KM. Since, the collective agreement in public companies currently define the minimum hourly rate paid to workers, it is very probable that the new minimum hourly rate would have to be applied also on collective agreements, even for those workers who earn minimum wage.

<sup>10</sup> On the other had, the greatest rise in GDP in those years was achieved by Poland that took the opposite direction and decreased minimum wage.

young and unskilled workers. In addition, it led to a decline of international competitiveness of Slovenian economy.

## Conclusion

- Taking into account that minimum wage has not been updated since 2016, it needs to be increased, and this is an issue around which there is a full agreement between trade unions and employers, as well as the Government of the Federation of BiH. The key question, however, is by how much it should be increased, and how to strike the right balance between real needs and unrealistic demands.
- In view of the experiences of some countries, the case of Slovenia included, it is clear that sudden and excessive increase of minimum wage may jeopardise those very persons for whom it is intended, lead to lay-offs of the most vulnerable groups, such as women and youth, and additionally increase the presence of grey economy in Bosnia and Herzegovina. This would additionally discourage young people to stay in the country, while, in the long run, it would threaten the sustainability of the whole economic system. Its consequences would be suffered mostly by private sector, taking into account the protection enjoyed by those employed in public sector.
- To make some savings, due to a significant increase of costs of running business, it can be expected that employers in private sector would reduce some contributions, such as meal allowances, so that workers would not necessarily see any rise in their real wage, despite the increased minimum wage, which means that, in the current legislative framework, the increase of minimum wage would not fulfil its intended aim.
- In addition, we need to have in mind that the increase of minimum wage, according to currently valid regulations, may lead to the increase of wages in public companies, including the wages of those workers who are currently earning significantly above the minimum wage.
- In view of significant economic differences that exist in FBiH, it is necessary to think about determining minimum wages per sectors and/or cantons, instead of prescribing a single minimum hourly rate for the whole FBiH. One of the ways to determine minimum wage is through bargaining between sectoral trade unions and employers, as it is done in some of the European Union countries.
- The increase of minimum wage does not necessarily lead to a rise in public revenues, in case it brings about significant loss of jobs. Besides, and taking into account the fact that public revenues in the first six months of 2021 are higher than those in the record year 2019, it is questionable why would the government, i.e. the state, need additional revenues at all.

## References

ILO. (2012). *Boosting Jobs and Living Standards in G20 Countries: A Joint Report by the ILO, OECD, IMF and the World Bank*. Geneva: ILO.

Manning, A. (2021). The elusive employment effect of the minimum wage. *Journal of Economic Perspectives*, 35(1), 3-26.

OECD. (2018). *Good Jobs for All in a Changing World of Work: The OECD Jobs Strategy*. Paris:

OECD. (1994). *The OECD Jobs Study: Facts, Analysis, Strategies*. Paris: OECD.

Vodopivec, M. (2015). The Employment and Wage Spillover Effects of Slovenia's 2010 Minimum Wage Increase. *European Scientific Journal*.