

Social and economic criteria for setting minimum wages in Bulgaria

A background document¹

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1. Introductory remarks

The Government of Bulgaria has set out to improve income and wage policies to better respond to the economic challenges and to establish a new minimum wage fixing mechanism based on tripartite consensus. This background document forms part of the ILO's response to the Government's request for technical assistance to that end.

Labour law in Bulgaria has developed under the influence of the ILO conventions and recommendations. Bulgaria has become a member of the ILO in 1920 and ratified the Minimum Wage-Fixing Machinery Convention in 1935. In 1936, the Ordinance-law on the Employment Contract, which regulated the minimum wage (art. 21) was adopted. Since 1945², the competent entity to fix the minimum wage is the Council of Ministers, while higher wages may be set through collective agreements. At present, the national minimum wage is regulated in the Labour code and in several by-laws. Bulgaria has also ratified The Protection of Wages Convention, 1949 (No. 95); the Equal Remuneration Convention, 1951 (No. 100), the Tripartite Consultation (International Labour Standards) Convention, 1976 (No. 144), the Labour Inspection Convention, 1947 (No. 81); the Protection of Wages Convention, 1949 (No. 95) and the Maritime Labour Convention, 2006.

Minimum wages are an almost universally used tool to protect workers against unduly low wages and form an essential part of effective wage policies. More than 90 per cent of all countries currently implement them in one form or another, and the International Labour Standards on minimum wages are among the most widely ratified technical Conventions: Some 103 countries have ratified the Minimum Wage-Fixing Machinery Convention, 1928 (No. 26), and 51 countries are signatories to the Minimum Wage Fixing Convention, 1970 (No. 131). The Minimum Wage Fixing Recommendation, 1970 (No. 135), provides further non-binding guidance to all ILO member countries.

To support the social partners and the Bulgarian Government in developing a more coherent income policy, in particular through the minimum wage, this document presents data on minimum wage employment in Bulgaria and on relevant social and economic criteria which might be used for the purpose of setting and/or adjusting the minimum wage. All data are drawn from national sources, mainly from the Bulgarian National Statistical Institute. Every effort was made to compile the most reliable data. Where necessary, detailed comments about their strengths and weaknesses are made. Taken together, the available data provide a comprehensive picture of the developments faced by workers and employers.

It should be stressed that the analysis and conclusions are provided without prejudice to any comments that may be made by the ILO bodies responsible for supervising compliance with international labour standards. The background document does not make any recommendation on the level of an uprated minimum wage or a new adjustment formula. Such a recommendation is expected to result from full consultations by the competent authorities taking into account the different concerns raised by workers' and employers' organizations.

The findings were presented and discussed during the tripartite training workshop on "Setting and Adjusting the Minimum Wage in Bulgaria" organised by the ILO and the Bulgarian Centre for Human Resource Development and Regional Initiatives in May 2015.

² Decree of the Council of Ministers No. 6, from 1 December 1945

2. Definition and scope of the minimum wage

Bulgaria has one minimum wage, determined at national level for the whole country and for all workers regardless, among others, of the industry in which they are employed, of the ground on which employment has arisen, duration. The Minimum wage applies to private and public sector alike.

Wages and payment systems are regulated by the Constitution³, the Labour Code (Chapter XII), the Civil Procedure Code, the Protection of Workers' Claims in Case of Insolvency of the Employer and several by-laws: Ordinance on wage bargaining, 1991; Ordinance on the structure and organization of wages, 2007 (last updated on 1 July 2012) and Ordinance on salaries for public administration employees, 2012. None of these acts contains a legal definition of minimum wage in strict sense.

The minimum wage is the guaranteed minimum for the lowest paid employees. It refers to the base salary before taxes or other statutory deductions applying to standard hours of work. Overtime pay, additional premiums and bonuses are not included. The minimum wage is calculated on monthly basis for a standard 8-hour work day and 40-hour work week. The minimum hourly wage is calculated on the basis of the minimum monthly wage.

The minimum wage is binding on the parties to the employment relationship and the rules that set it are imperative. It is not possible to agree on a wage lower than the minimum monthly or hourly wage for normal working hours. If a lower contractual wage is set, it is considered invalid and the national minimum wage shall apply.

The minimum wage must be distinguished from the *minimum social insurance thresholds*, which are determined annually by the Law on Social Security Budget. In 2002, these thresholds were introduced with the aim of improving the collection of social insurance contributions⁴ due to under-declaration of wages. The social insurance threshold is the sum of money (insurance income) on which due social insurance contributions are determined. The agreed gross salary (the amount of base salary and additional remuneration) may be less than the minimum social security threshold, but contributions will nevertheless be calculated on the established rate for the minimum insurance income in the Annex to the Law on the Budget of the State Social Security.

3. The role of social dialogue and collective bargaining

Tripartite cooperation at national level has been expanding in recent years. New mechanisms have been introduced such as participation by the social partners in an advisory council under the Parliamentary Commission for Labour and Social Policy; the establishment of special working groups to draft new

³ Art. 48 para 5 of the Constitution: "Workers shall have the right to healthy and safe working conditions, to a minimum labour remuneration, and to pay commensurate to the work performed, as well as to rest and leave, under terms and according to a procedure established by the law"

⁴ The social security system in Bulgaria consists of mandatory state social security with four separate funds (Common Diseases and Maternity Fund; Pensions Fund; Occupational Injuries and Professional Diseases Fund; Unemployment Fund; Additional obligatory pension insurance) and Mandatory health insurance. Contributions to the above-mentioned social security schemes are made by employers, employees, self-employed and the state. The rate of contributions for the different funds of the state social security, as well as the ratio at which contributions are divided between the employer and the employee, are decided by the Parliament for each year. Contributions to the Occupational Injuries and Professional Diseases Fund are paid solely by the employer. 50% of mandatory health insurance contributions are paid by the employer and 50% by the employee. The amount of contributions that is to be paid by the employee is deducted monthly from the gross salary. Self-employed people pay their own social security contributions. The state participates only by making transfers to their Pensions Fund, which is calculated at 12 percent of the sum of social security incomes of the insured persons for the calendar year.

labour and social legislation; the creation of sectoral/branch and municipality councils for tripartite cooperation which discuss issues specific for the respective level, for example the policies on employment in the economy branches and the labour market in municipalities.

The main body for social dialogue is the National Council for Tripartite Cooperation (NCTC), established in 1993. The National Council for Tripartite Cooperation comprises two representatives from the Council of Ministers, the representative organisations of workers (Confederation of Independent Trade Unions (CITUB) and CL Podkrepa) and the representative organisations of employers (Bulgarian Industrial Association -Union of the Bulgarian Business (BIA, Bulgarian Chamber of Commerce and Industry (BCCI; Bulgarian Industrial Capital Association (BICA) and Confederation of Employers and Industrialists in Bulgaria (CEIBG)). It is headed by the Deputy Prime Minister (at present Minister of Labour and Social Policy) and promotes cooperation and consultation over issues concerning namely labour, social security and living standards. Standing expert commissions were created dealing with, among others, incomes and cost of living, collective labour disputes, social security and labour law. The Commission on incomes and cost of living is the first body to discuss minimum wages, then the issue is transferred to the NCTC in plenum, which adopts decisions by consensus. When no agreement is reached the Government issues a decree by which it sets the minimum wage for the country.

According to Bulgaria's Labour Code,⁵ collective bargaining is a trade union right and an employers' obligation. The system of collective bargaining is organised at three levels: branch/sector level; municipal level; company level. Since 2003, collective bargaining at sector/branch level was extended to include annual negotiations on minimum social security thresholds. Agreements generally run for two years and the main theme is pay, especially minimum wage rates.

Valid collective agreements (CAs), by year and level⁶

Year	Sectoral/branch CAs			CAs in company/enterprise		
	Total number	From them:		Total number CA + annexes to CAs	From them:	
		Sectoral CAs	Branch CAs		CA	Annexes
2008	67	10	57	1828	1493	335
2009	73	10	63	1499	1261	238
2010	71	10	61	1596	1321	278
2011	72	9	63	1616	1332	284
2012	64	8	56	1581	1308	273
2013	68	8	60	1439	1153	286

Source: Dimitrov, Plamen: *Annual review of labour relations and social dialogue in South East Europe: Bulgaria* (Bratislava: Friedrich Ebert Stiftung, 2015)

Social partners negotiate yearly the minimum social insurance thresholds. In 2015, minimum social security thresholds have been agreed for 42 economy sections. The average increase compared to 2014 is 4.4%. The State has determined an increase of 4% for the rest of the economy activities, for which

⁵ Chapter Four – articles 50-60 of the LC provides the legal regulation of collective agreements. Only one collective agreement may be concluded at the level of enterprise, branch and industry.

⁶ See Dimitrov, Plamen: *Annual review of labour relations and social dialogue in South East Europe: Bulgaria* (Bratislava: Friedrich Ebert Stiftung, 2015) available at <http://library.fes.de/pdf-files/bueros/belgrad/11537.pdf>

the trade unions and the employers have failed to negotiate new thresholds. The minimum thresholds applicable for the self-insured persons remained unchanged.

The minimum wage for the country is always taken into account when determining the minimum social insurance thresholds. Collective agreements may establish a lower base salary than the minimum insurance threshold for the respective sector/category, but not less than the national minimum wage. Social partners negotiate minimum wages above the national minimum wage through sectorial and enterprise level collective agreements.

Collective agreements are applicable to the employees who are members of the trade union organisation signatory to the agreement. The employees who are not members of a trade union organisation that is a party to a collective agreement may accede to a collective agreement concluded by their employer by applications in writing submitted to him or to the leadership of the trade union organisation which has concluded the agreement, under terms and provisions determined by the parties to the agreement, such as may not be contrary to the law or evading the law, or such that are offensive to the good morals. Where a collective agreement on industry or branch level has been concluded between all representative organisations of the employees and of the employers in the industry or the branch, the Minister of Labour and Social Policy may, upon their joint request, extend the application of the agreement or of individual clauses thereof to all enterprises of that industry or branch. No extension has been determined since 2013.

4. Criteria for setting and adjusting the minimum wage

When setting the level of minimum wage, most countries are guided by a set of clearly defined criteria. In line with the Minimum Wage Fixing Convention, 1970 (No. 131)⁷, these criteria usually aim to find a balance between the needs of workers and their families as well as economic aspects, such as maintaining employment. Specifically, Article 3 of the Convention stipulates that:

“The elements to be taken into consideration in determining the level of minimum wages shall, so far as possible and appropriate in relation to national practice and conditions, 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.”

The national legislation in Bulgaria does not specify the criteria for fixing and adjusting minimum wage determination and update. However reports of the ministers of labour which propose a new minimum wage to be established by a decree indicate that the following criteria should be taken into account:

- (a) needs of workers and their families;
- (b) general level of wages in the country;
- (c) cost of living and changes therein;
- (d) social security benefits;
- (f) economic factors, including the requirements of economic development, levels of productivity and the desirability of attaining and maintaining a high level of employment.

⁷ The Committee of Experts on the Application of Conventions and Recommendations invited the Government of Bulgaria to consider the possibility of ratifying the Minimum Wage Fixing Convention, 1970 (No. 131) which marks certain advances compared to older instruments on minimum wage fixing, for instance, as regards its broader scope of application, the requirement for a comprehensive minimum wage system, and the enumeration of the criteria for the determination of minimum wage level. See http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:13100:0::NO:13100:P13100_COMMENT_ID:3073466:NO

In a document providing a social and economic analysis of the policies of the Ministry of Labour and Social Policy, from 2011⁸, the lack of a mechanism for setting the minimum wage in Bulgaria was considered a weak aspect of the Ministry's policies. Thus, in 2011, specific attention was given to the minimum wage and the mechanisms for its determination - the principles, the procedures, the terms and conditions for the setting and modifying (updating) the minimum wage in the country.

In 2012, a specialized working group was established to review the legislation on negotiation and wages. The adverse economic circumstances and trends, however, influenced the positions of the social partners and after continuous discussions and negotiations an agreement on a specific mechanism for determining the minimum wage was not reached. In 2014 the Minister of LSP in the interim Government also promoted the idea of setting a mechanism for establishing minimum wages.

4.1. Needs of workers and their families

ILO Convention No. 131 emphasizes that a minimum wage should be set in a way which balances the needs of workers and their families and economic factors. One natural starting point to assess the needs of workers and their families is the official poverty line.

The first poverty studies were done by the Ministry of Labour and Social Policy (MLSP), the National Statistical Institute (NSI) and the Institute of Social and Trade Union Research at the Confederation of Independent Unions in Bulgaria (CITUB). These studies took an absolute approach to studying poverty, examining a basket of the most essential goods and services required to satisfy the basic needs of the poor. The research on poverty done by various authors and institutions was summarized in a more complete publication: "Poverty in Transition" (1998, ILO and UNDP). This publication presented both the data and methods used in specific studies on poverty and living conditions in Bulgaria. It also included an examination of the quality of the various methods, comparative characteristics of their advantages and disadvantages, and ideas for their use as instruments of social policy.

Currently, the poverty line is a relative measure defined by the Council of Ministers following a proposal made by the Minister of Labour and Social Policy. The Minister of Labour and Social Policy bases its decision on calculations made by the NSI, using the Household Budget Survey (HBS), and negotiations between social partners and other interested organizations and institutions.

As previously mentioned, in contrast to the original studies, the calculations on poverty made by the NSI, using the HBS, are based on a relative measure of poverty (not absolute). This method is accepted by EUROSTAT and is based on the income distribution of households (in equivalent units). The poverty line is equal to 60% of the median equivalent income. However, in official definitions of the poverty line, this percentage (60%) is not specifically stated. This enables some flexibility in the negotiations and allows the percentage to change each year depending on economic conditions; for example, it could range from 50 to 70% of the median equivalent income.

The approach for defining the national poverty line was published in the State Gazette in December 2006 and updated in November 2007. The poverty line for the following year is determined annually by October 31st of the previous year. If prices increase more than 10% since the previous update, the poverty line is updated more frequently.

The official poverty line for one person in 2015 was 286 BGN and was calculated using the HBS. This level is equivalent to the "at-risk-of-poverty threshold" (ARPT) calculated using the European Union Statistics on Income and Living Conditions (EU-SILC) – and directly available from the NSI. As described above, this is a relative measure set at 60% of the national median equivalised disposable income (after social transfers). The threshold is provided for a single person (286 BGN in 2012) and for a family with two adults and two children younger than 14 years old (600 BGN in 2012).

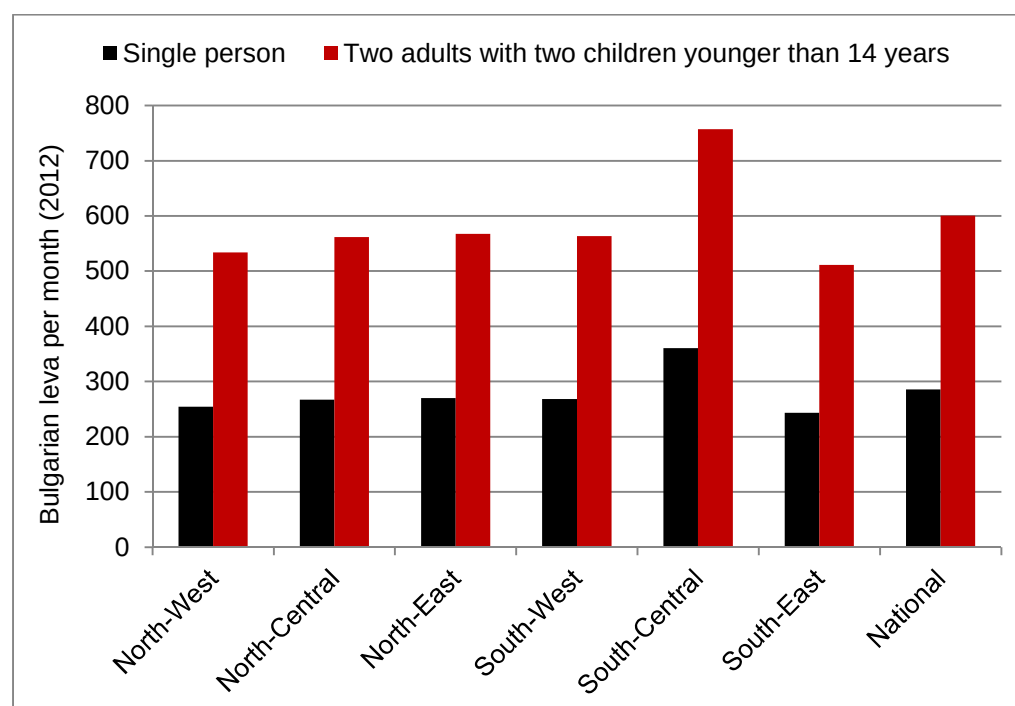
Figure 1 shows the ARTP for different family sizes nationally and by region in 2012 (the latest year for which data are available). As can be seen, with the exception of the south-central region where the

⁸ Available at <http://www.strategy.bg/FileHandler.ashx?fileId=1543>

thresholds are 75 BGN and 157 BGN higher for a single person and family with two adults and two children younger than 14, respectively, there is not much difference across the poverty thresholds in the country.

Since the ARTP rates are only available for 2012, they can be adjusted to account for changes in prices since then. The Consumer Price Index (CPI) published by the NIS gives a good indication of the changes in prices since 2012. Using an average of the monthly levels, prices actually decreased by about 0.5 per cent between 2012 to 2014. This is about the same as that provided by the IMF (from the harmonized index of consumer prices) which shows that prices decreased by about 0.8 per cent between the two years; the IMF estimate also has a projection for inflation showing that prices are expected to increase between 2014 and 2015 by about 0.7 per cent.

Figure 1.1 At risk of poverty threshold by family size and region, 2012



Source: National Institute of Statistics.

Figure 1.2 Estimate of minimum living wage, 2015 (BGN)

Concept	Lowest 25 per cent	Average family	Replacement rate	One person	Source/Calculation
2015 Poverty line for one person	286	286	286	286	Bulgarian National Statistical Institute
Family size	3.5	3.3	4.0	1.0	EU-SILC 2010, ILO Calc
Equivalent family size	2.0	2.0	2.1	1.0	ILO Calc
Family poverty line	586	573	607	1	Poverty line for one person x equivalent family size
Number of people working in the family	1.4	2.0	2.0	1.0	EU-SILC 2010, ILO Calc
Minimum wage required to meet poverty line	420	283	304	286	Family poverty line / number of people working in the family
Current minimum wage (gross) - 2015	360	360	360	360	
Current minimum wage (net) - 2015	282	282	282	282	

Source: ILO Calculations.

The ratio of the projected CPI for 2015 and the actual CPI in 2012 shows that prices will be about the same in 2015. This in part helps to explain why the 2012 ARPT is the same level as the poverty line indicated in 2015.

In order to compute the family size the minimum wage should sustain, an appropriate family size should be determined. In this regard there are several options. For example, the average family size could be used, the replacement rate (i.e. a family with 2 adults and 2 children) could be used or the average family size of those at the bottom of the income distribution could be used (in order to represent the family size of those most likely affected by the minimum wage). There are other options as well which could be used at the discretion of the social partners and Government responsible for setting the minimum wage.

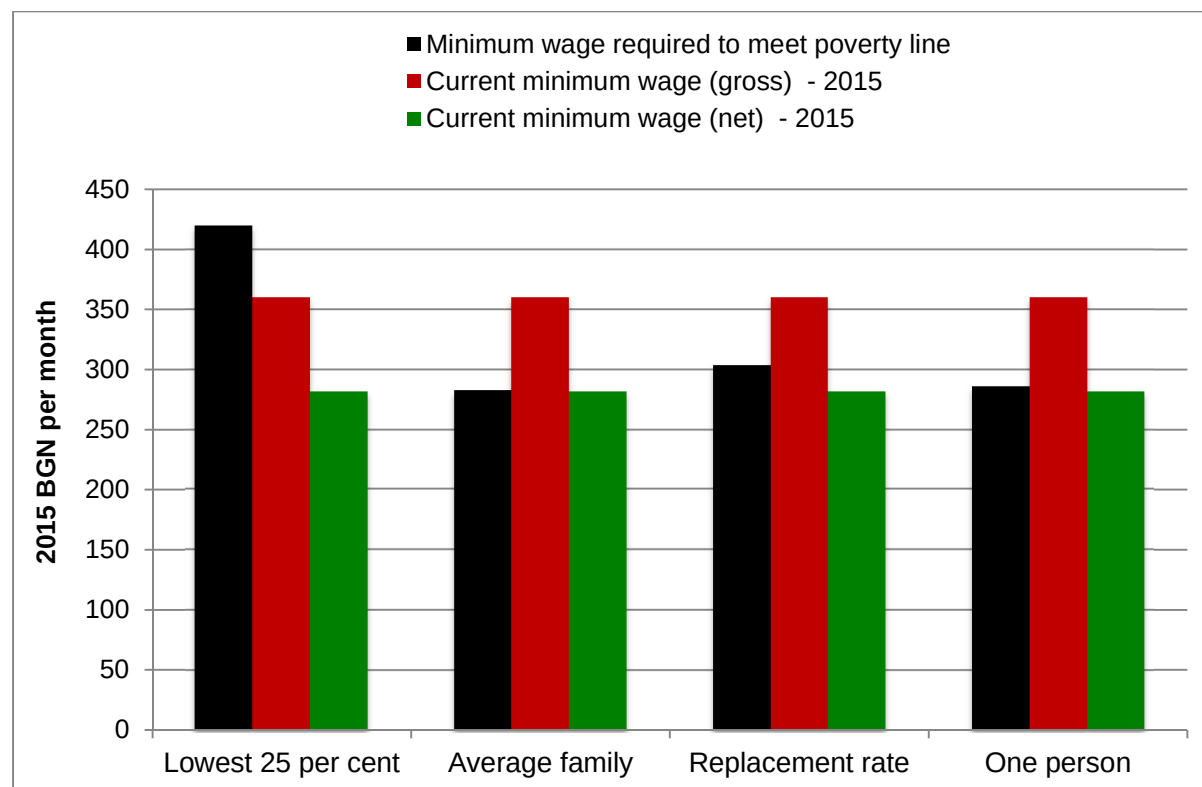
The family size can also be adjusted for smaller consumption needs of children and economies of scale. For example, since children consume fewer calories and only one house is needed (instead of 4 homes for a 4 person family), the poverty line for a family of four is not equivalent to four times the poverty line for one person. There are different ways to account for differences in consumption and economies of scale. One example is: $E = (A + \alpha K)^\theta$, where A represents the number of adults, K is the number of dependent children, α represents the spending of a child relative to an adult, and θ captures the economies of scale in a given household (Deaton and Zaidi, 2002). If this formula is applied, the respective equivalent family sizes are listed in figure 1.2 for each type of family.

A typical household has about two people who can contribute to household income. In a household with two adults and two children (replacement rate), it is assumed that both adults work. Among the poorest 25 per cent of households only 1.4 people work.

Dividing the total needs of the household by the number of workers in each household type gives an estimate of the wage that each worker would need for the household to reach the poverty line. The results are presented in figure 1.2 and graphically in figure 1.3. As can be seen, the current net minimum wage in 2015 nearly meets the minimum needs of one person and an average family and is about 22 BGN short of meeting the minimum needs of a family of four (replacement rate). However, at its current rate, the minimum wage does not meet the minimum needs of a family in the bottom 25 per cent of households; this is because the poorest 25 per cent of households tend to be slightly larger than the average family and there are fewer people who work in these households.

Based on these findings, one could conclude that at the current net minimum wage level, social transfers ranging from 1 BGN to 138 BGN would be needed to complement wages in order to meet the minimum needs of workers and their families, depending on the family size.

Figure 1.3 Minimum wages required to meet the poverty line by various family types, 2015 (BGN)



Source: ILO Calculations.

In conclusion, estimates for the wage needed to satisfy the basic needs of workers and their families vary widely between sources, depending on the methodology and assumptions used. In the absence of an official definition of the needs of workers and their families, this section has presented one possible approach to derive an estimate. The result is that, depending on the type of family used, a minimum wage between 283 and 420 BGN per month would be required to ensure the family reaches the poverty line.

However, it is important to stress that this is only one possible way to do such a calculation. The results vary with assumptions made. For instance, some “living wage”-calculations are based on higher minimum thresholds, adding, for example, an allowance for savings and discretionary expenditure (which is not done in this section).⁹

It is also important to highlight the difference between minimum wages and living wages. The living wage is commonly defined as the wage that workers need to meet their needs, while the minimum wage is the lowest permissible wage that is set by law. In practice, there is often a large discrepancy between the two.

⁹ See, for example, R. Anker (2011): *Estimating a living wage: A methodological review*. Conditions of Work and Employment Series No. 29 (Geneva, ILO).

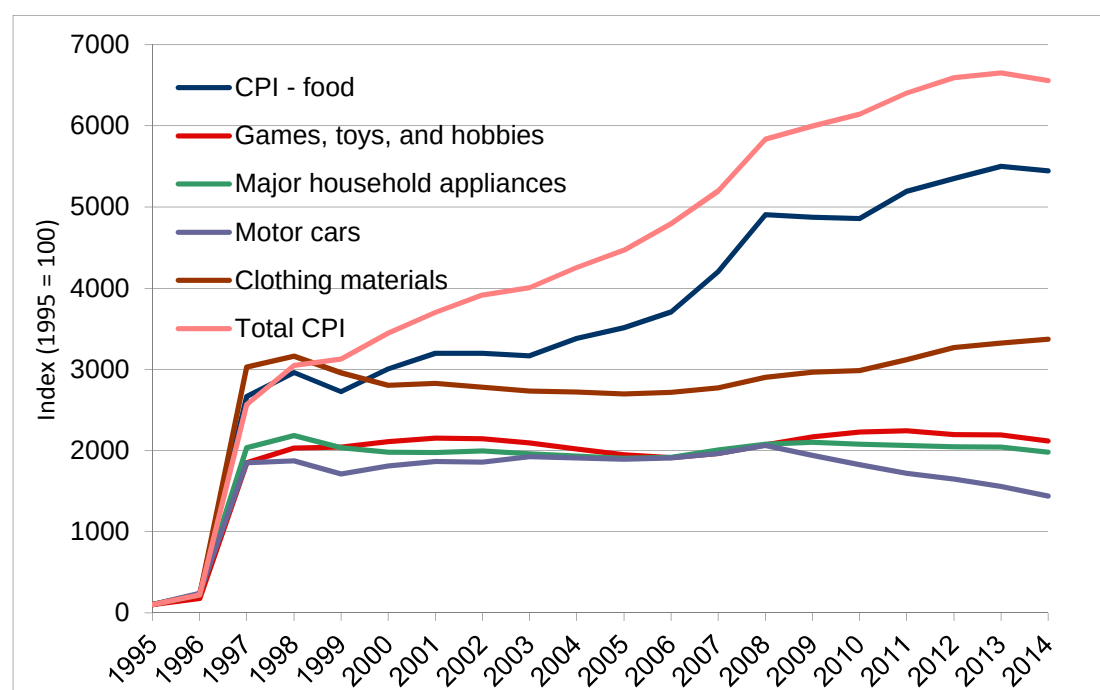
4.2. The cost of living and changes in prices

Minimum wages need to be adjusted from time to time. One reason is that as price levels increase, the purchasing power of the minimum wage erodes. This explains why inflation is often one of the criteria used to adjust minimum wages. However, it has some limitations. For instance, it can lead to wage-price spirals where higher prices lead to higher wages, and higher wages in turn lead to higher prices, and so on. This was the experience in some Latin American countries during the 1970s, where an automatic indexation of wages to prices led to such a dynamic. From the workers' perspective, using inflation as the only criteria would mean that minimum wages stagnate in real terms.

4.2.1. Changes in the Consumer Price Index (CPI)

How have consumer prices evolved over time? The best source to answer this question is the Consumer Price Index (CPI) that is compiled by the NIS. It tracks the evolution of prices for a basket of goods and services on a monthly basis. Figure 2.1 gives five examples, ranging from food to motorcars. To make price movement comparable across different goods, all are presented as an index that takes the value of 100 in 1995 (monthly values have been averaged). As can be seen, prices of some items rose faster than those for others.

Figure 2.1. Consumer price index overall and by good, 1995 – 2004



Source: National Institute of Statistics.

However, on average the price trend is upwards – consumer prices generally rose over the period covered. The overall Consumer Price Index (CPI) maps the average movement of prices. It gives a greater weight to items that have a larger share in people's expenditure. Less frequently bought items are given a smaller weight.

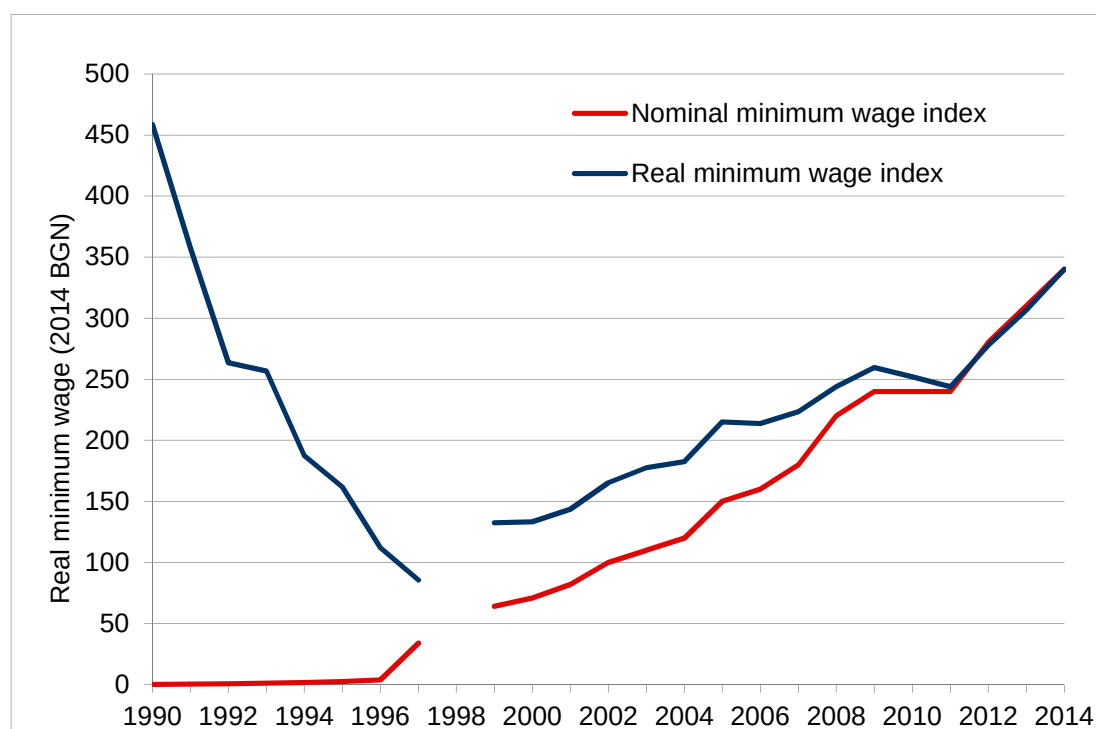
Figure 2.1 also presents the overall change in consumer prices since 1995. The main CPI includes all items. It rose from an index value of about 100 in 1995 to 6557 in 2014. Hence, overall consumer prices were more than 60 times higher in 2014 than they were in 1995. The index for food prices rose somewhat less than the main CPI.

4.2.2. Changes in real minimum wages

How does the change in prices compare to the change in minimum wages since 1990? One way to look at this is to adjust the nominal minimum wage (as set in the minimum wage orders) for changes in prices and calculate a so-called “real minimum wage”. This strips out the effect of price changes.

Figure 2.2 shows that the nominal minimum wage has risen considerably, from less than 1 BGN in 1990¹⁰ to an annual average of 340 BGN in 2014 (see annex 1. for a list of minimum wage levels since 1947). However, given the rise in consumer prices, the increase in the real minimum wage is much smaller. Broadly speaking, the figure shows two distinct periods: From 1990 to 1998, the minimum wage rose slower than consumer prices so that the purchasing power of the minimum wage fell massively. Since about 1998, the minimum wage has risen faster than consumer prices so that the real minimum wage has risen (by 155 per cent when comparing 2000 to 2014). However, the real minimum wage in 2014 was still lower than the value in place in 1990. Much of the increase in wages can be attributed to a catch-up effect in wages after the transition to a market economy. This can also be seen from the trends in real wages presented in the next section.

Figure 2.2. Monthly minimum wage (nominal and real) in 2014 BGN, 1990 -2014



Note: The IMF CPI is used because it begins in 1990. The average minimum wage applicable in each year is shown.

Sources: IMF World Economic Outlook (CPI), Eurostat (minimum wage), Tzanov and Vaughan-Whitehead (1998). Republic of Bulgaria: For a new incomes policy and strategy. ILO.

¹⁰ The nominal level of the minimum wage noted here (less than 1 BGN) is not equal to the level noted in legislative decrees from 1990. In 1999 the Lev was redenominated with 1000 Lev equal to 1 Lev ; minimum wage levels prior to 1999 have been converted using this rate.

4.2.3. Changes in real wages

While every worker is guaranteed to receive at least the minimum wage for full-time work, in practice many workers earn more. It can therefore be informative to consider how the average wages of workers have changed, both in nominal terms and after adjusting for inflation. In addition to the CPI, this requires a reliable time-series of average wages.

Bulgarian labour statistics adhere to international standards (definitions, recommendations and guidelines) developed and maintained by the International Labour Organisation (ILO) and United Nations Statistics Division (UNSD). Bulgaria joined the EU in the beginning of 2007. During the pre-accession period the Bulgarian NSI adopted a number of good practices and harmonized the labour statistics methodologies with those implemented by EU member states.

In order to assess the types of workers and sectors which will be most affected by the minimum wage, comprehensive wage data (in terms of geographic, sectoral, employee, and enterprise coverage) are required. In Bulgaria, there are multiple sources of wage data, highlighted in table 2.1 (some are also described in text in annex 2). The most comprehensive source for wage data would be the Labour Force Survey (LFS) since it covers the entire working population; however it unfortunately does not include a question on wages and wage data are subsequently not available. This is an unfortunate limitation because it implies that minimum wage setting and adjusting analyses, processes and decisions will not be based on data which cover all employees. As an alternative, two other annual sources are: the EU-SILC and the annual survey on employed persons, wages and salaries, and other labour costs. The former will be used to assess the characteristics of minimum wage workers. The latter will be used to show trends in average wages since 2000.

Table 2.1. Sources of wage data in Bulgaria.

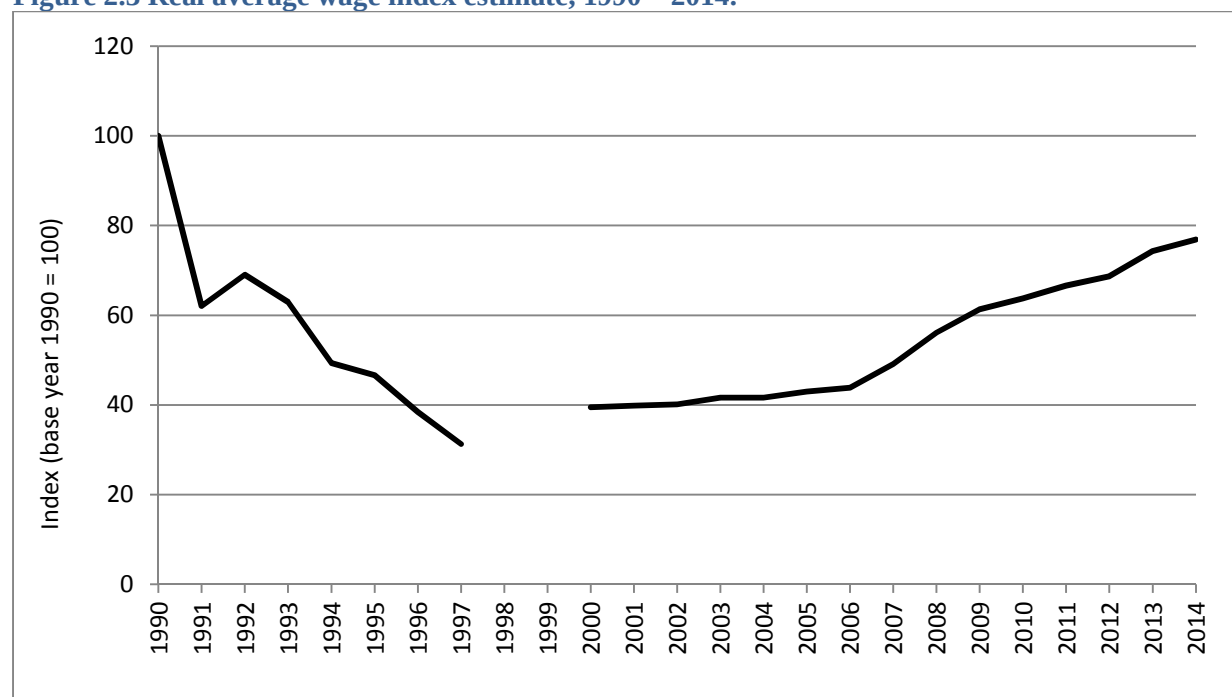
Survey	Time	Employee coverage	Sectoral coverage	Enterprise coverage	Geographic coverage	Wage Data
Labour Force Survey	Annual	All employees (all or no contract types)	All sectors	NA	National	No
Structure of Earnings Survey	Every 4 years	All employees	All sectors except agriculture and domestic work.	All sizes	National	Yes
Annual survey on employed persons, wages and salaries, and other labour costs	Annual	All employees (fixed or permanent contracts)	?		National	Yes
Labour cost survey	Every 4 years	All employees (fixed or permanent contracts)	All sectors except agriculture and domestic work.	All sizes	National	Yes
EU-SILC	Annual	All employees	All sectors	NA	National	Yes

Another source of official data no longer available online comes from a previous report written by the ILO¹¹ on Bulgaria which includes average wage data from 1990 to 1998; the data are from the Ministry of Labour and Social Policy. These data are used to complement trends prior to 2000.

¹¹ Tzanov and Vaughan-Whitehead (1998). Republic of Bulgaria: For a new incomes policy and strategy. ILO.

Trends in real average wages (shown in figure 2.3) follow changes in the economy subsequent to Bulgaria's transition to a market economy. In the early 1990s, in order to mitigate the potential social consequences of wage and price liberalization, a series of policies were introduced to limit increases in inequality. These included: a tax-based income policy, the minimum wage, and collective bargaining at the national, regional, and enterprise level.

Figure 2.3 Real average wage index estimate, 1990 – 2014.



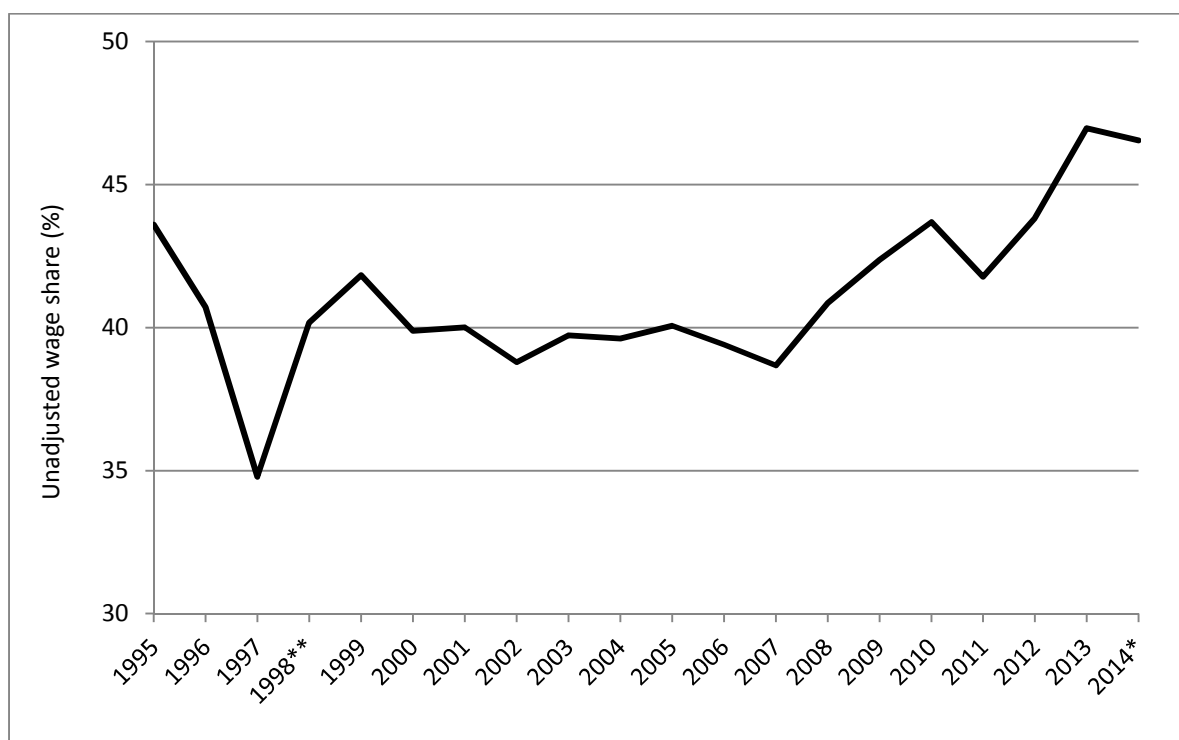
Note: The two series are from different data sources and hence may not be directly comparable. Data for 1998 and 1999 are not available.

Sources: Bulgaria National Statistical Institute; Table 3 from Tzanov and Vaughan-Whitehead (1998). Republic of Bulgaria: For a new incomes policy and strategy. ILO

Under these policies, *state* enterprises were required to follow very strict limits on wage increases. However, since wages in the private sector generally followed those in the public sector, economy wide wage increases remained subdued. Alongside these changes, irregular minimum wage adjustments limited increases in social benefits since the two were linked. Wage tariffs further limited wage growth for rates above those in the tariff. Consequently, wage policies and the link between the public and private sector constrained wage growth; this was compounded by inflationary pressures during the same period. Between 1990 and early 1998, real wages had fallen by nearly 65 per cent (Tzanov and Vaughan-Whitehead). The results of these policies resulted in a steep decline in the share of wages as a share of GDP (see figure 2.4).

In the late 1990s and early 2000s, real wage growth accelerated (as shown by the increase in the wage share). From 2000 to 2014, real average wages grew by about 95%. In part, this was a catch-up effect from the accumulation of inflation from years past. It was also subsequent to the introduction of a currency board in 1997 (which instituted a fixed exchange rate with the deutsche mark). Despite this growth, it seems that in 2014, real wages had yet to return to levels in 1990 (see figure 2.3).

Figure 2.4. Unadjusted wage share in Bulgaria, 1995-2014.



**The underlying data for the period 1995-98 were recalculated from BGL to BGN.

*Preliminary data.

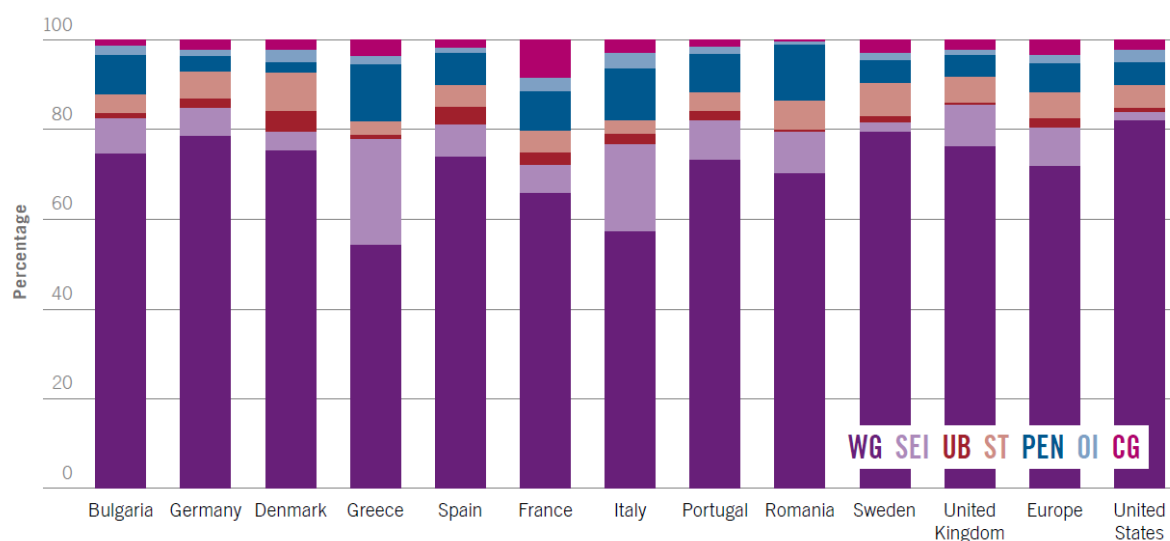
Source: Bulgaria National Statistical Institute.

4.2.4. Changes in income inequality

How have changes in productivity and wage growth translated into income? Moreover, why is this important? First, wages comprise a significant source of household income in Bulgaria. Figure 2.5 shows that across all households in Bulgaria, wages (indicated by the dark purple) represent nearly 80 per cent of total household income. However, this percentage can vary depending on how much income the household has.

Figure 2.6 shows the percentage of household income which can be attributed to different components by household income group. For example, among the bottom 10 per cent of households, wages (dark blue) represent about 35 per cent of total household income and social transfers (green) represent about 30 per cent of household income. In contrast, among the 10 per cent of the wealthiest households wages represent about 80 per cent of household income and capital gains (orange) about 5 per cent. These figures show the importance of wages across different income groups. They also point to the importance that wage policies can have in affecting household income levels as well as the influence that wages and social transfers can have on the income of households at the lower end of the distribution.

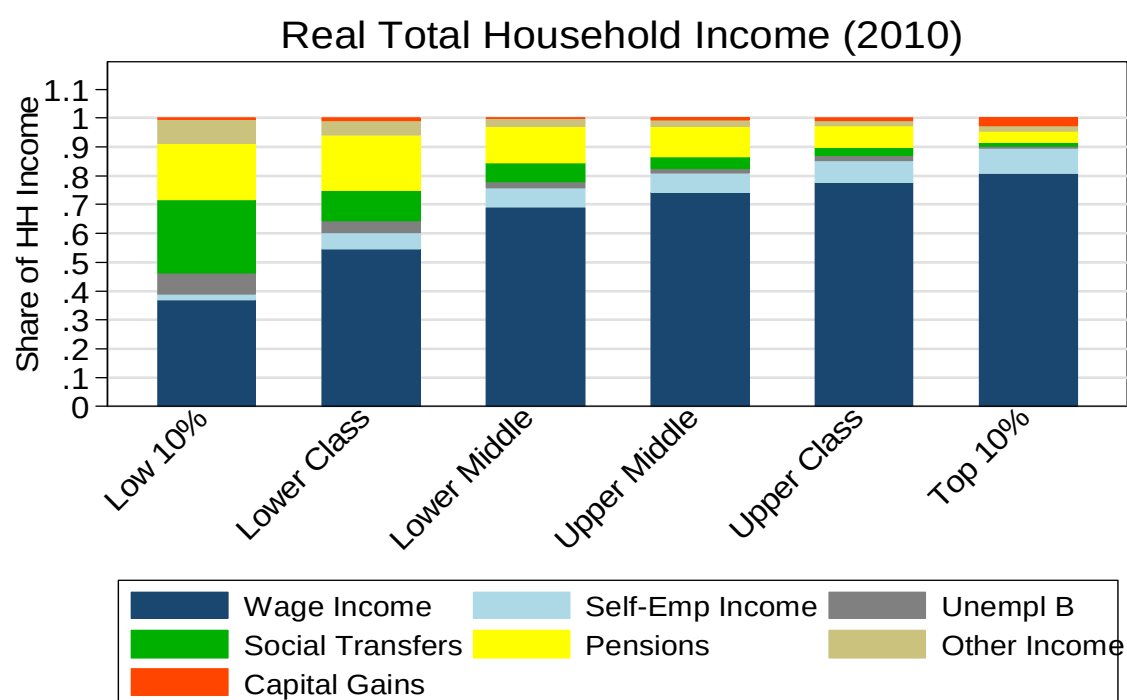
Figure 2.5. Household income decomposition in selected developed economies, latest year



Notes: WG= wages; SEI=self-employment income; UB=unemployment benefits; ST=other social transfers; PEN=old-age pensions; OI=residual income; CG=capital gains. Data for Bulgaria are from the EU-SILC and refer to 2010.

Source: ILO Global Wage Report 2014/15.

Figure 2.6. Household income decomposition in Bulgaria by household income group, 2010



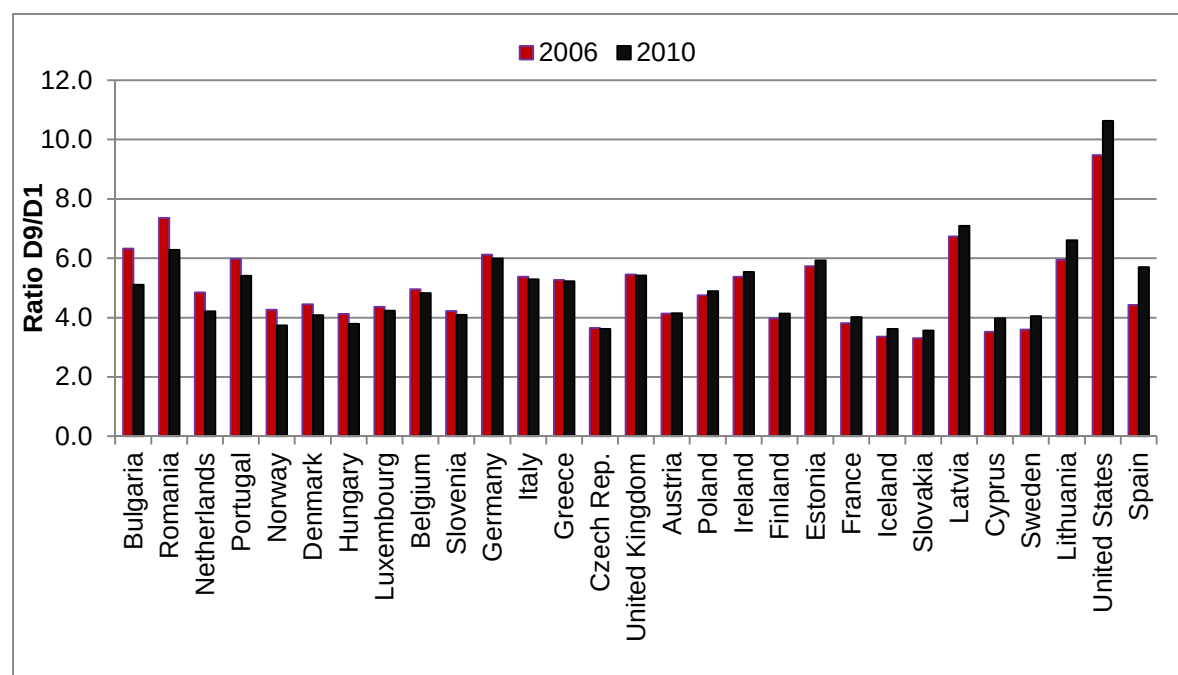
Source: Own estimates using EU-SILC rev 5

Source: ILO estimates using the EU-SILC.

Figure 2.7 shows the average level of total income inequality – as measured as the distance between the top 10 per cent of households and the bottom 10 per cent of households – for 2006 and 2010. Countries

are ranked from left to right, from countries where inequality decreased most (Bulgaria) to those where it increased most (Spain). Across all countries in figure 2.7, the average level of income inequality was about 5.0 in 2010. In 2010 in Bulgaria, the distance between the top 10 and bottom 10 per cent of households was about 5.1. Looking at trends, income inequality in Bulgaria has decreased since 2006. The ILO Global Wage Report 2014/15 attributes the decline in income inequality in Bulgaria between 2006 and 2010 to employment losses. Since many people lost their jobs during the crisis the distance between those at the top and the bottom decreased. Social transfers also worked to decrease inequality as well.

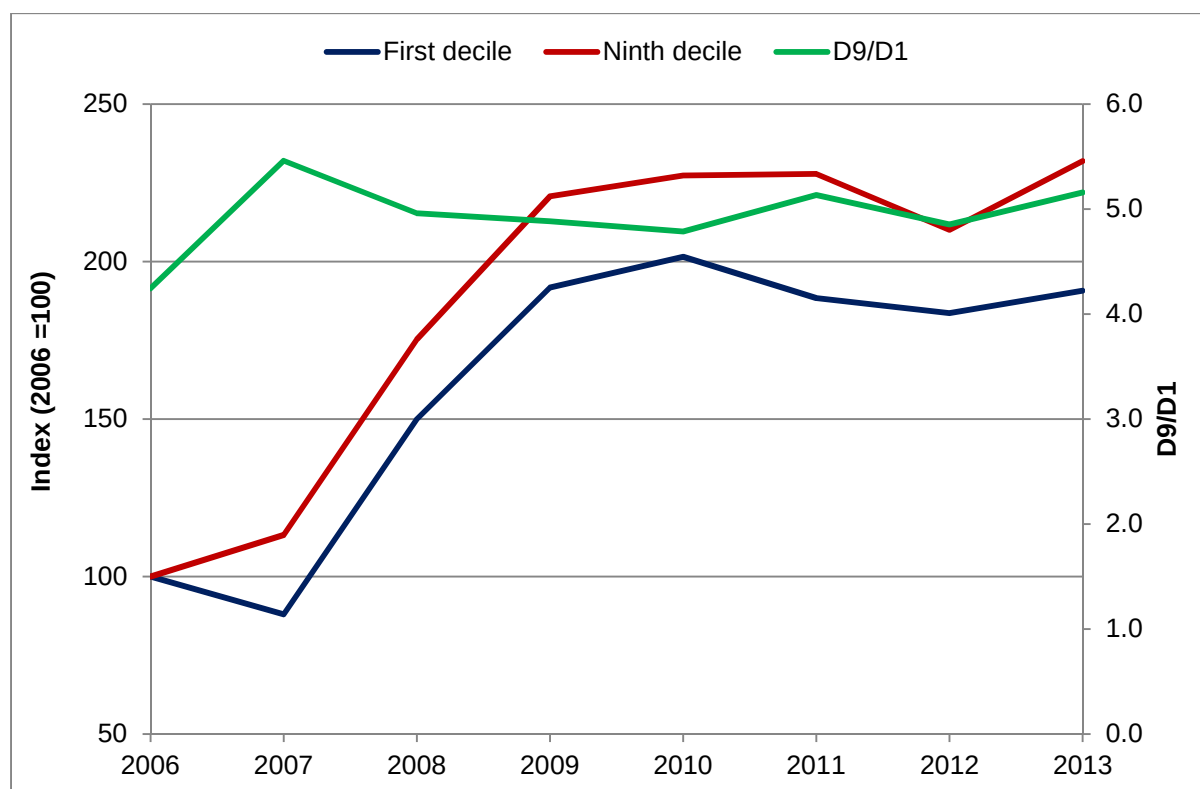
Figure 2.7 Household income inequality (before taxes) in a sample of developed economies in the crisis years, 2006-10.



Source: ILO Global Wage Report 2014/15.

By contrast, data on household income inequality from Eurostat suggest that inequality actually increased across this period. One possibility to explain this discrepancy is that the previous analysis considered income inequality before taxes while the Eurostat data considers disposable income (i.e. trends in income inequality after taxes). In Figure 2.7, inequality decreased from 6.3 in 2006 to 5.1 in 2010. Looking at disposable income however, inequality started from 4.2 and increased to 4.8 in 2010. This can also be shown looking at the growth in disposable household income at different parts of the household income distribution. Figure 2.8 shows that the income of the richest 10 per cent of households more than doubled between 2006 and 2013 (an increase of 132 per cent). In contrast, the income of the poorest 10 per cent of households only increased by about 91 per cent. These trends expanded the distance between the richest and poorest households over time.

Figure 2.8 The D9/D1 ratio and growth in disposable household income by household income decile, 2006-13.



Source: Eurostat.

The different trends in inequality using income before taxes and disposable income suggest that the tax system is generally effective at reducing the overall level of inequality. For example, in 2006 income inequality (before taxes) was 6.3 and disposable income inequality was 4.8. However, it should be noted that flat tax systems disproportionately affect the lowest paid workers.

In the words of Schmidt and Vaughan-Whitehead (2011)¹² “In many South-East European countries, the current structure of the labour taxation system (not only personal income tax but also social security contribution rules) seems both inequitable and inefficient. Tax reforms in relation to personal income tax in Albania, for instance – where there is no progressivity in personal income tax after the introduction of a 10 per cent flat rate – have had a negative effect on the lowest paid workers. There is some evidence that it has also fed an increase in informal employment (72 per cent reported that their wages were informal), as recently reported in a survey carried out by the ILO in the construction sector (ILO, 2008b). A high relative tax burden around the minimum wage, which is the natural point of entry into the formal economy, clearly reduces the incentives for workers to join the formal economy. It thereby also diminishes state revenues. The flat rate which is common also in several other neighbouring countries – such as Serbia – may have similar adverse effects on net wages and purchasing power. Any move toward more progressive taxation and a reduction in the tax burden for low-wage labour would bring improvements in fairness and social justice.”

¹² Schmidt, V.; Vaughan-Whitehead, D. (2011). *The Impact of the Crisis on Wages in South-East Europe*. International Labour Office.

4.3. Impact on enterprises and competitiveness

This section considers the possible impact of minimum wages on enterprises and competitiveness by considering labour productivity and labour costs. This is in line with the legislation on minimum wage setting in Bulgaria that lists labour productivity as one of the elements that should be considered. A country's competitiveness is determined by many factors, including its infrastructure, the access and proximity to major export markets, the reliability of supplies, the exchange rate and the level of labour costs relative to productivity. While there is no single measure of competitiveness, labour productivity, labour costs and minimum wages, vis-à-vis other European countries will be considered in the following analyses.

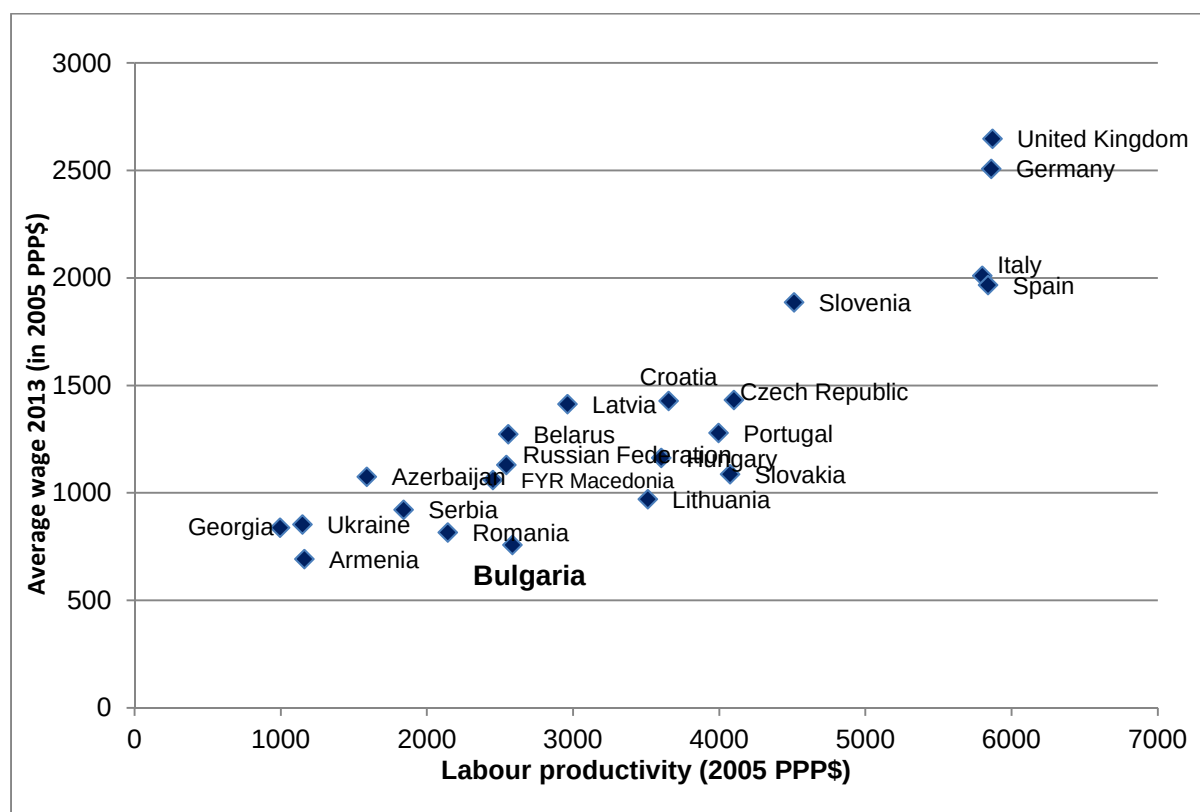
4.3.1. Labour productivity

Exports and enterprise revenue (as measured by gross output) are not a good indicator for the payment capacity of enterprises since a substantial part has to be spent on intermediate inputs. What matters for wages is value added. This amount is what is 'left over' after the cost of intermediate inputs has been deducted from the revenue. Enterprises use the value added to pay wages to workers – but also to serve interest on loans, pay rent for buildings and land, taxes to government and to replace out-dated machinery and undertake other investments. Enterprises also retain some money in the form of profits.

Labour productivity is usually defined as value added (output) per worker or, sometimes, as value added (output) per hour worked. It is therefore based on the measure 'value added' discussed above. Labour productivity is a particularly useful statistics when discussing wages. Instead of comparing the total value added to the total amount of wages, it allows a comparison between value added per worker and the average wage of employees. As a rule of thumb, average wages are higher in sectors and countries where labour productivity is higher. At the national level, statistics on labour productivity also comply with these definitions and are available for both measures (output per worker and output per hour worked).

Figure 3.1 illustrates the relationship between labour productivity and average wages for a selection of countries in Europe. As of 2013, average wages in Bulgaria were about 800 BGN per month. In purchasing power parity dollars (PPP\$), this is lower than most other selected countries in the graph, even though labour productivity in Bulgaria was higher (in PPP\$) than in other countries like Romania or Ukraine.

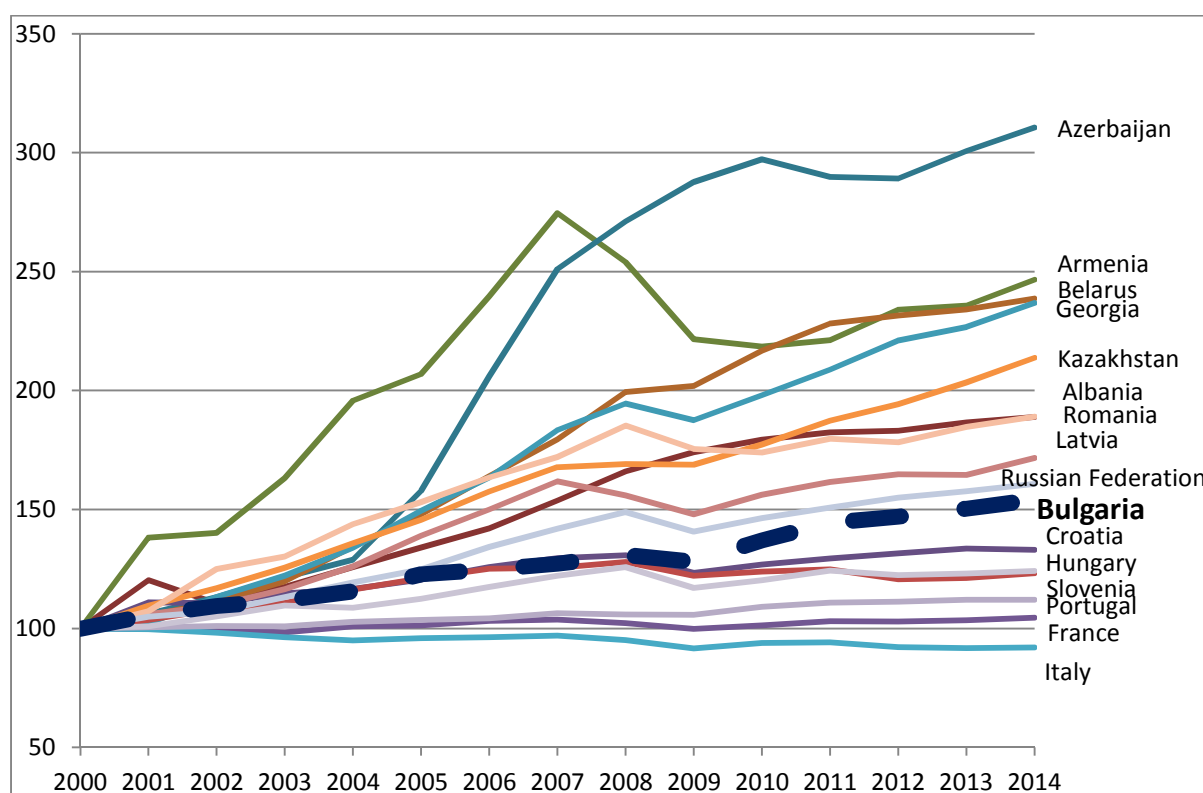
Figure 3.1. 2013 average wage and labour productivity in 2005 PPP\$, selected countries



Source: ILO Trends Econometric Models, ILO calculations using national data from the ILO Global Wage Database.

Turning to trends over time, in most European countries, labour productivity has been growing in the past years – despite a setback in 2009 due to the global financial and economic crisis. However, there seems to be a cleavage between growth in Western Europe and Eastern Europe and Central Asia (see figure 3.2). In Western Europe, labour productivity generally grew by less than 20 per cent over the 14 year period. However, in Eastern European and Central Asian countries productivity growth was generally much higher. For example, it more than tripled in Azerbaijan. With a productivity growth of about 50 per cent, Bulgaria seems to fall among the higher end of labour productivity growth among these countries. For example, among the 49 countries in Europe and Central Asia, only 17 countries had labour productivity growth which exceeded that in Bulgaria over the period (in order: **Azerbaijan, Republic of Moldova, Armenia, Turkmenistan, Belarus, Georgia, Kazakhstan, Romania, Albania, Uzbekistan**, Lithuania, **Tajikistan, Serbia**, Latvia, **Ukraine, the Russian Federation**, and Estonia); however, while labour productivity growth may be higher in these countries, the labour productivity level in 2014 was lower in almost all of them (indicated by those highlighted in bold).

Figure 3.2. Labour productivity index 2000 - 14, selected countries



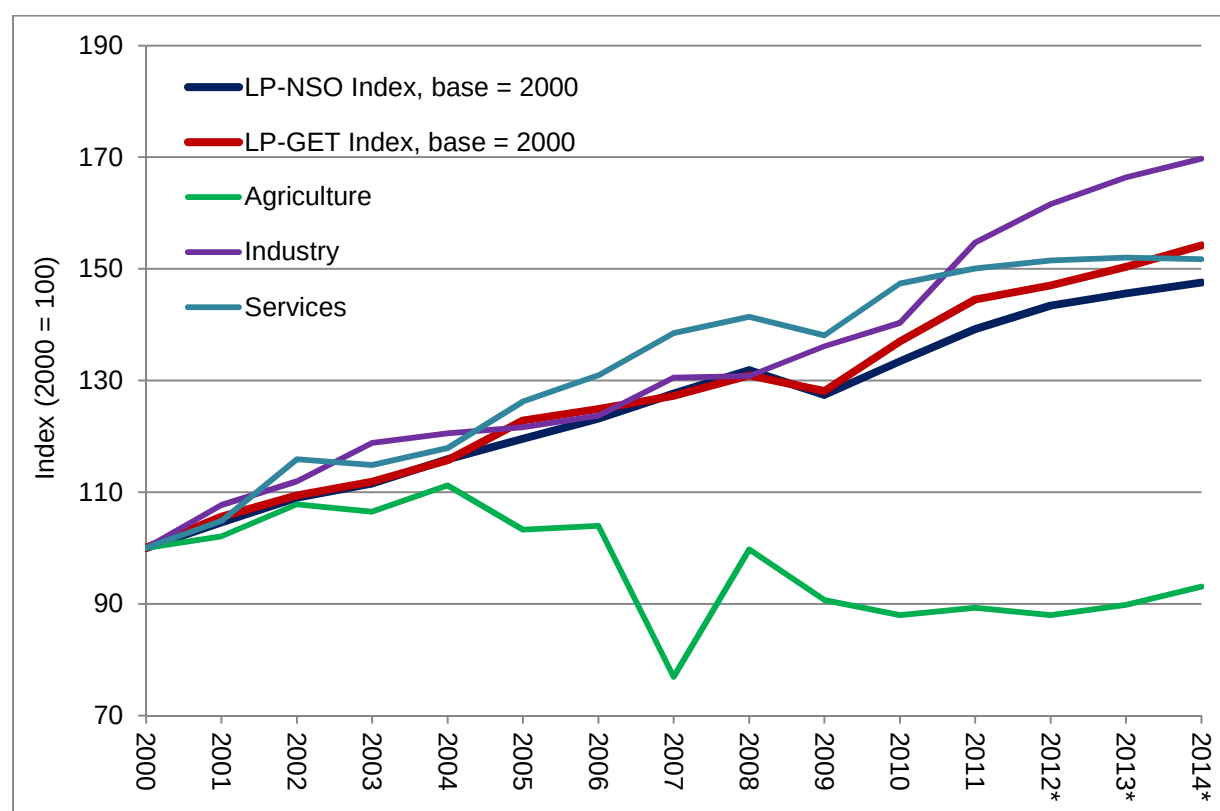
Source: ILO Trends Econometric Models.

It is also possible to consider labour productivity at the sectoral level. However, in some sectors, measuring labour productivity is particularly problematic. Quantifying the output and value added of the public sector or the domestic work sector are particular challenges. For example, how might one quantify the value-added a police department or teachers provide to the economy? As a result, many countries simply use the sum of the costs (i.e. cost of labour, procurement of goods and capital consumption) to provide these services; however, this undervalues their contribution to the economy. This would be akin to a baker equating the cost of a cake she sells to the cost of the ingredients she bought to make the cake. The value of the cake should be more than the cost of the ingredients because the baker herself added value when she used her knowledge to combine the ingredients. To circumvent this challenge, some countries have more complex means of trying to capture the value of these sectors' contributions.¹³

Bearing in mind some of these measurement limitations, figure 3.3 presents labour productivity in Bulgaria by sector since 2000 (defined as gross value added per worker). As can be seen, labour productivity in industry and services has kept pace or outpaced that at the national level. At the same time however, labour productivity in the agricultural sector has declined. The agricultural sector is the smallest sector of the three in terms of employment (about 7 per cent of employment since 2008).

¹³ See Atkinson Review: Final Report (2005). Measurement of Government Output and Productivity and the National Accounts.

Figure 3.3. Labour productivity in Bulgaria by sector, 2000 – 14



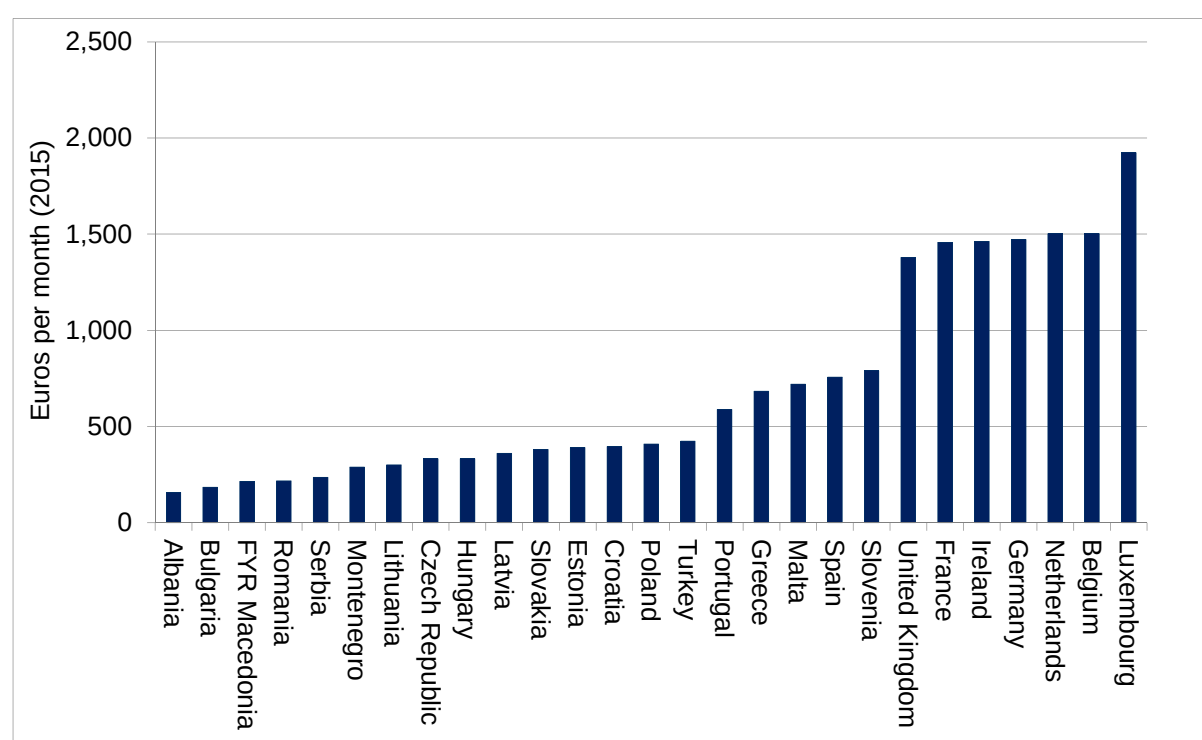
Source: Bulgaria National Statistical Institute; ILO Trends Econometric Models.

4.3.2. Minimum wages and labour costs

As discussed above, the level of wages is one factor that influences a country's competitiveness. As can be seen, in 2015, Bulgaria had one of the lowest minimum wages in Europe (among countries where Eurostat has data for 2015).

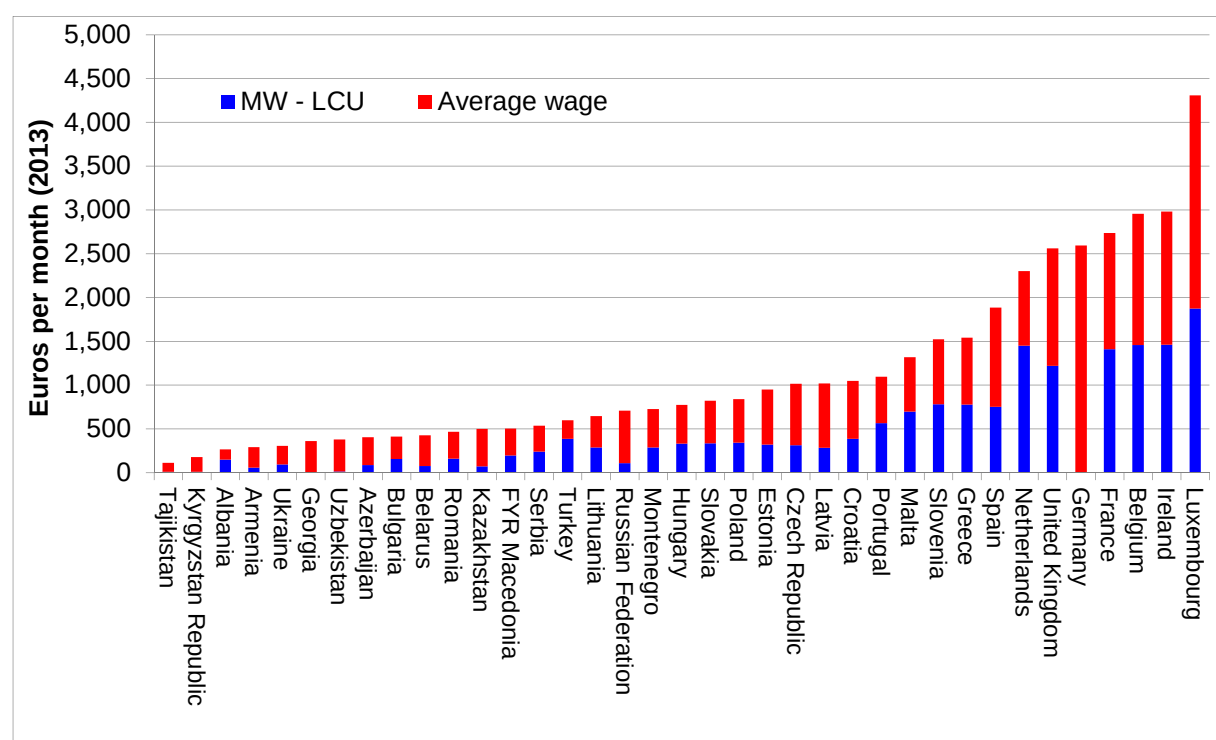
When historical data are used for 2013 and combined with average wage data and an expanded geography, this also generally holds. Figure 3.5 shows the minimum and average wage in countries where data are available in Europe and Central Asia in 2013 (in 2013 euros); Bulgaria figures among the lower levels. The figure also shows that the minimum wage as a share of the average wage can vary across countries in Europe and Central Asia from about 3 per cent to about 65 per cent. In 2013, the minimum wage amounted to about 38 per cent of the average wage. Internationally, countries frequently set their minimum wage at about 45 per cent of the average wage across all countries or between 35 per cent to 60 per cent of the median wage in developed economies.

Figure 3.4. Monthly minimum wages across selected countries in Europe, 2015 (semester 1)



Source: Eurostat.

Figure 3.5. 2013 monthly minimum and average wages in selected European and Central Asian countries, in 2013 euros

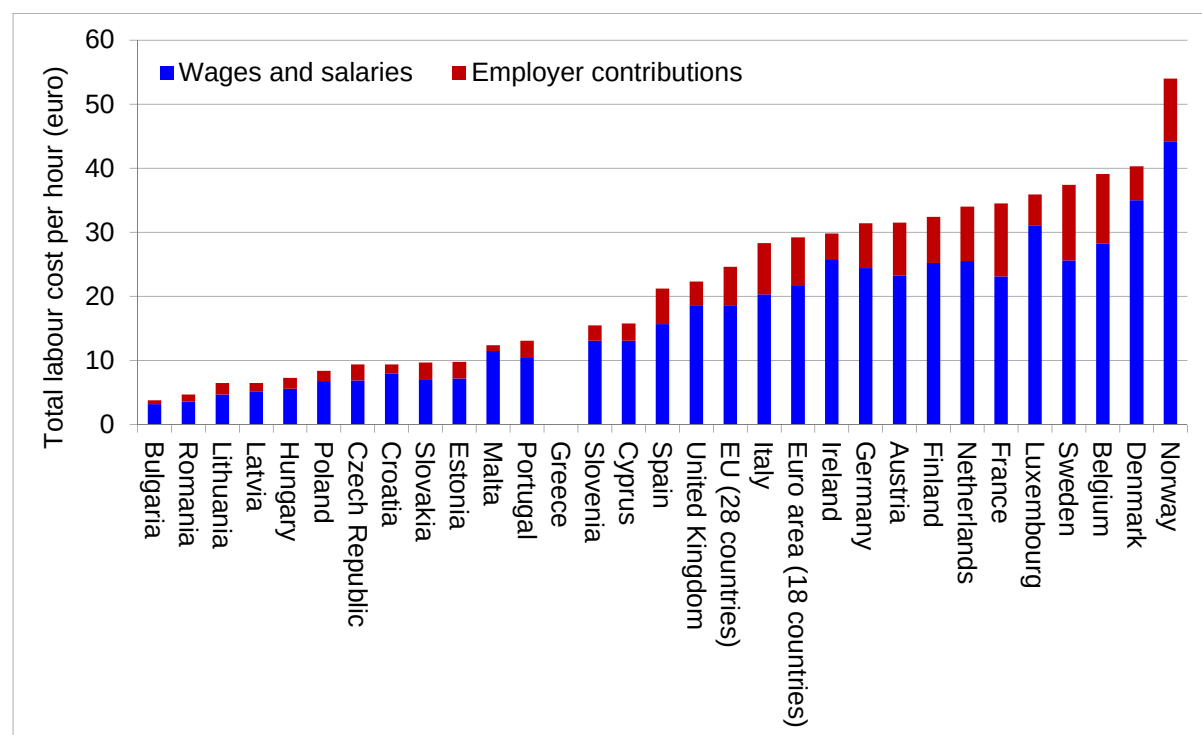


Note: Minimum and average wages refer to 2012 in: Albania, Romania, Poland, Portugal, Greece, France, the Netherlands, and Belgium. Data for Turkey are from 2010. The average wage in a country is the sum of the blue and red components. In 2013, Germany did not have a minimum wage.

Source: ILO calculations based on national wage sources.

Since wages are only one component of overall labour costs, it is also worthwhile to compare labour across countries and over time. Similar to the minimum wage, across countries in Europe for which Eurostat has data, the wages and salaries component of total labour costs and overall total labour costs are lowest in Bulgaria (see figure 3.6).

Figure 3.6. 2014 hourly labour costs in selected European countries, in 2014 euros



Source: Eurostat.

4.4. Impact on the labour market and employment

In the broad academic literature, two primary effects of minimum wages on the labour market are discussed prominently. Firstly, whether they achieve their intended impact and raise wages of low-paid workers. And secondly, whether this comes at the expense of a negative impact on employment. The argument is that there might a trade-off between higher wages and more jobs.

The empirical evidence for negative employment impacts is mixed, as a recent review commissioned by the World Bank has shown.¹⁴ While minimum wage increases can have an adverse impact on employment, this is not always the case and the effect is often small – at least for moderate increases in minimum wages. Unfortunately, the precise impact of minimum wage on employment is often difficult to isolate, given that many other factors affect employment levels and job creation as well. It therefore needs a careful econometric analysis, and the results of such studies are often controversial even among experts in the field.

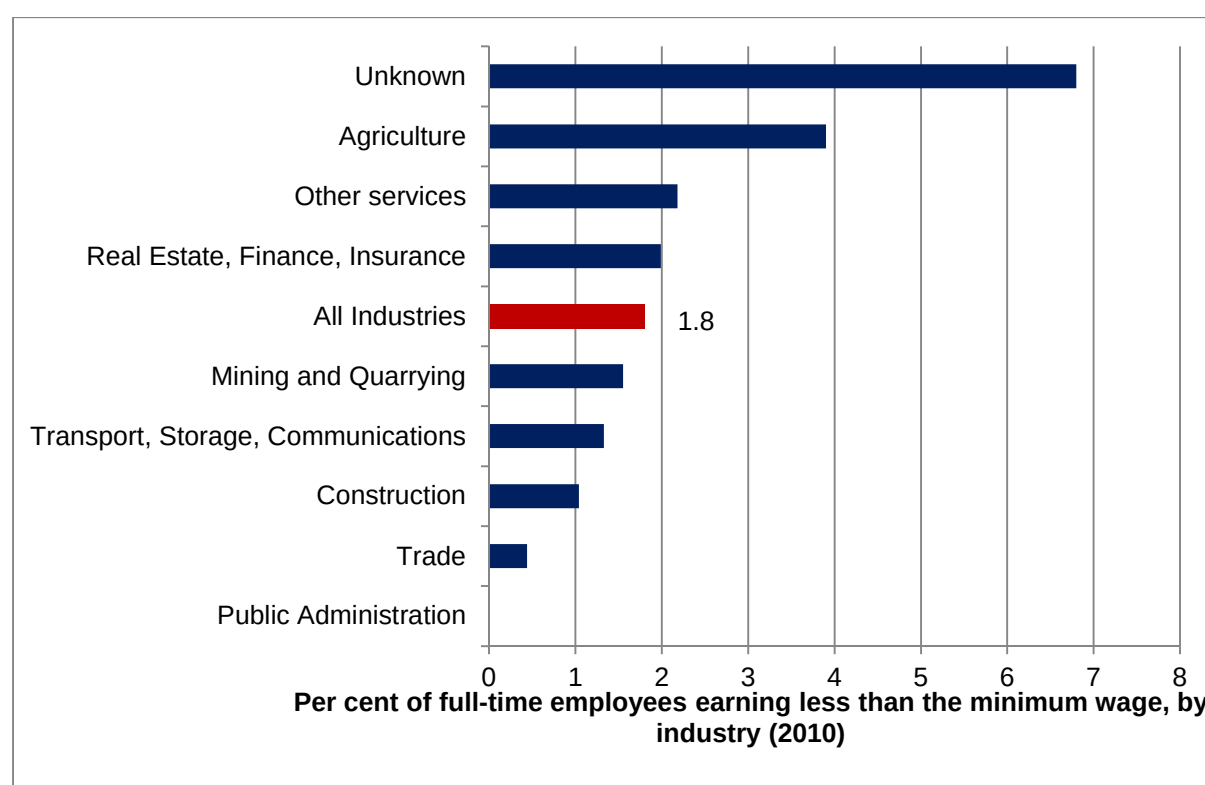
This section cannot therefore provide a definitive answer, but will instead address some more basic questions using a very low-tech methodology. Firstly, is there any evidence that minimum wages achieved their intended impact on labour markets by raising wages? Do minimum wages counteract increases in inequality? Finally, do the data show any obvious correlation between minimum wage increases and employment levels?

¹⁴ See G. Betcherman: *Labor Market Institutions: A Review of the Literature*. Policy Research Working Paper 6276. Background Paper to the 2013 World Development Report (Washington, DC, 2012).

4.4.1. Impact of minimum wages on average wages

High compliance is one precondition for the minimum wage to have the intended effect of raising workers' wages. Near-full compliance means that the vast majority of workers receive at least the minimum wage. Using data from the EU-SILC, figure 4.1 shows that non-compliance is relatively low in Bulgaria. Non-compliance is defined as those workers who report a wage equal to less than 95% of the value of the legal minimum wage in effect (to allow for measurement error). Overall, only 1.8 per cent of full-time employees earn less than the minimum wage. However, this varies across sector. As can be seen, there is full compliance with the minimum wage in public administration whereas in the unknown sector (which contains individuals who did not report the sector in which they work) noncompliance is close to 7 per cent.

Figure 4.1 Non-compliance among full-time employees, by sector (2010)

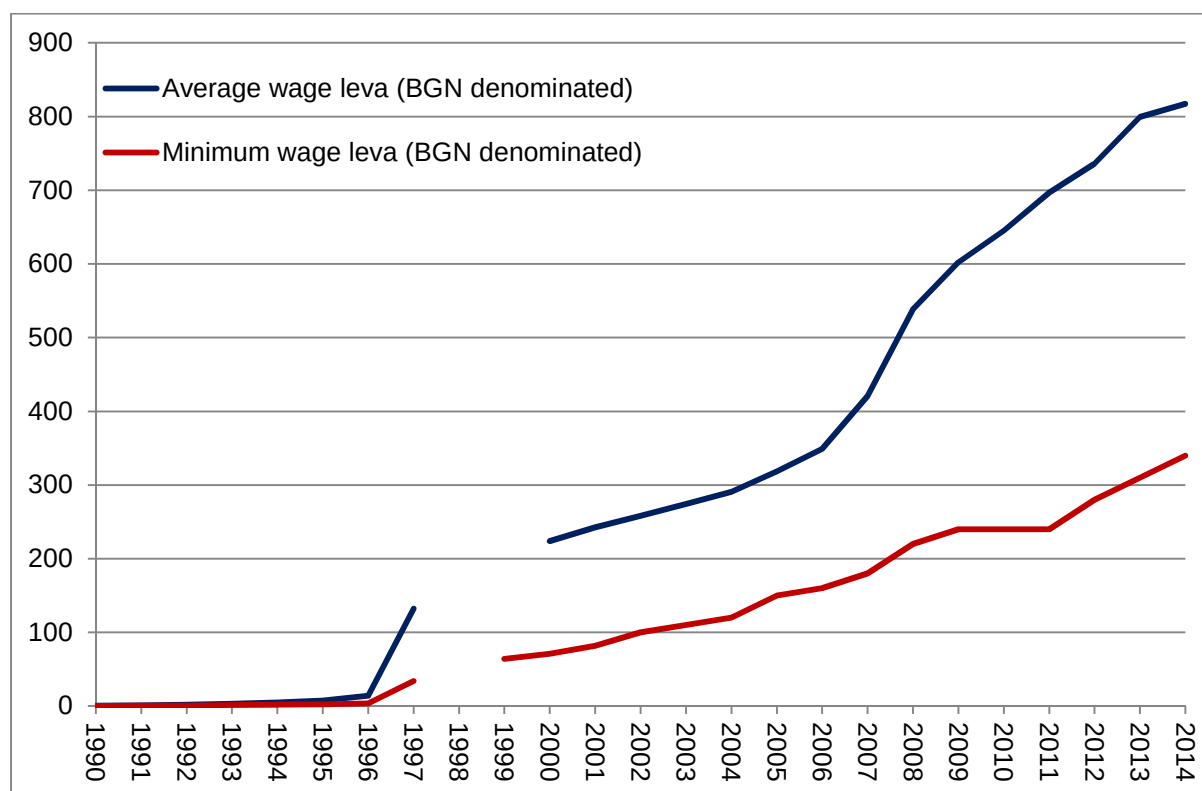


Source: ILO computations using EU-SILC.

However, these analyses should be considered with caution since they are limited to full-time employees and of a tentative nature. The EU-SILC data do not allow for the hours worked of part-time employees to be computed; in addition, no other data source in Bulgaria allows for this on an annual basis. In this regard, the level of non-compliance might be higher if part-time employees could also be included in the analyses.

Given the relatively low level of non-compliance, it is possible to examine the extent to which minimum wages might affect average wages. Figure 4.2 show that average wages are higher than the minimum wage. This is partly due to overtime, which is paid on top of the base wage, and other types of remuneration (i.e. bonuses). In addition, some workers receive wages significantly above the minimum wage, for instance higher-skilled production workers, office workers and managers.

Figure 4.2 Nominal average and minimum monthly wages, 1990 – 2014

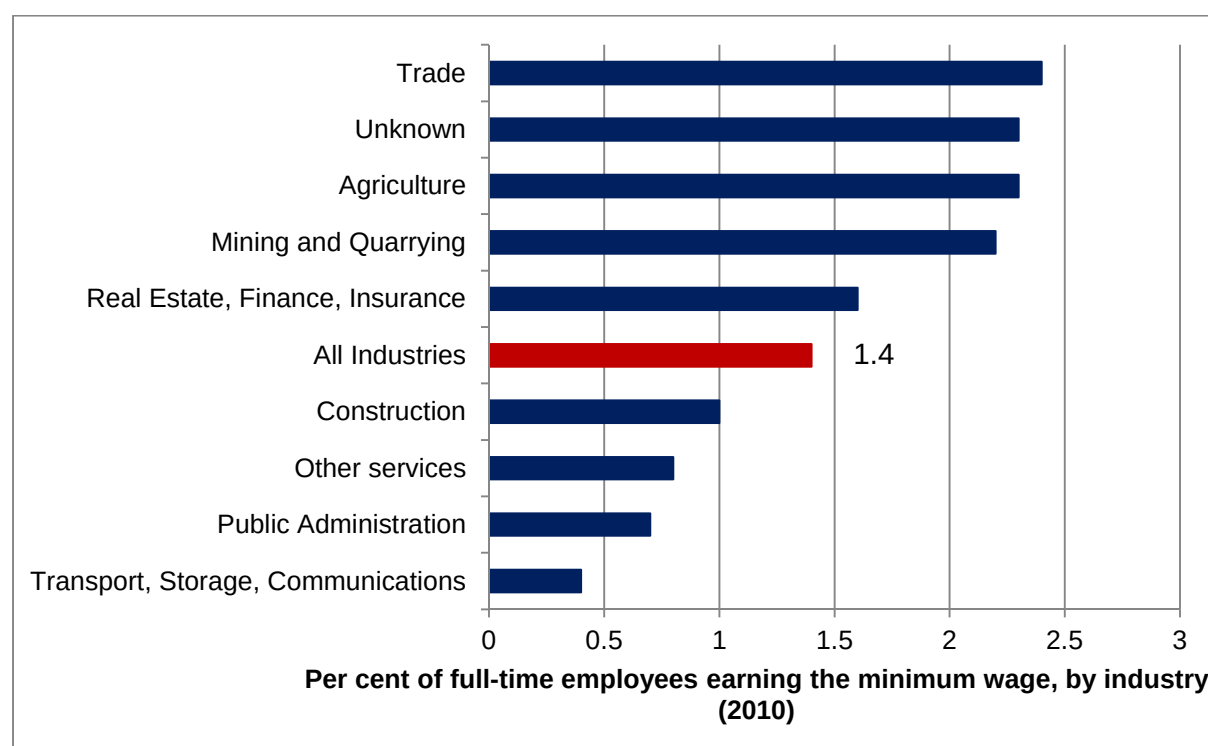


Note: The two series are from different data sources and hence may not be directly comparable. Data for 1998 are not available. Data for 1999 are only available for minimum wages.

Sources: Bulgaria National Statistical Institute; Eurostat; Table 3 from Tzanov and Vaughan-Whitehead (1998). Republic of Bulgaria: For a new incomes policy and strategy. ILO.

Regarding trends over time, figure 4.2 shows that the average wage has been growing alongside the minimum wage since 1990. However, when minimum wages stagnated between 2009 to 2011, it seems that the average wage nonetheless increased. This suggests that while minimum wages may increase average wages, they are not a driving factor (at least over this period). This may partially be explained by the relatively small percentage of employees who earn the minimum wage. Employees who earn the minimum wage are defined as those employees who report a wage which is equal to the minimum wage, or greater or less than the minimum wage by 5 per cent (to account for measurement error). Figure 4.3 shows the percentage of full-time employees who earn the minimum wage. Among all full-time employees, only 1.4 per cent earn the minimum wage. However, this can range from close to 2.5 per cent in the trade sector to less than 0.5 per cent in transport, storage and communications.

Figure 4.3 Percentage of full-time employees earning the minimum wage, by sector (2010)



Source: ILO computations using EU-SILC.

Turning to the legal elements of compliance, Bulgaria has no monitoring organisation (industrial or employment tribunal, the employment offices do not have this function) that oversees enforcement of minimum wages, instead, the labour inspectorate plays this role. According to Art. 399 of the Labour Code, the overall control and monitoring of labour legislation (incl. wages), in all sectors and activities, is implemented by the Executive Agency of the Minister of Labour and Social Policy - the General Labour Inspectorate (GLI). Trade unions, however, also have a role. According to Art. 406 (1) trade unions have the right to inform the supervisory authorities of violations in labour law and seek an administrative penalty for the guilty parties. There are also cases of joint control campaigns of the GLI and trade unions.

According to Art. 412a of the Labour Code, administrative penalties in the form of fines on individuals or legal entities shall be imposed for violations of the labour legislation. Any employer, which violates any provisions of labour legislation, other than the rules for provision of health and safety at work, shall be liable for a pecuniary penalty or fine of between BGN 1,500 or exceeding this amount but not exceeding BGN 15,000, unless subject to a severer sanction, and any such blameworthy official shall be liable to a fine of BGN 1,000 or exceeding this amount but not exceeding BGN 10,000, unless subject to a severer sanction¹⁵.

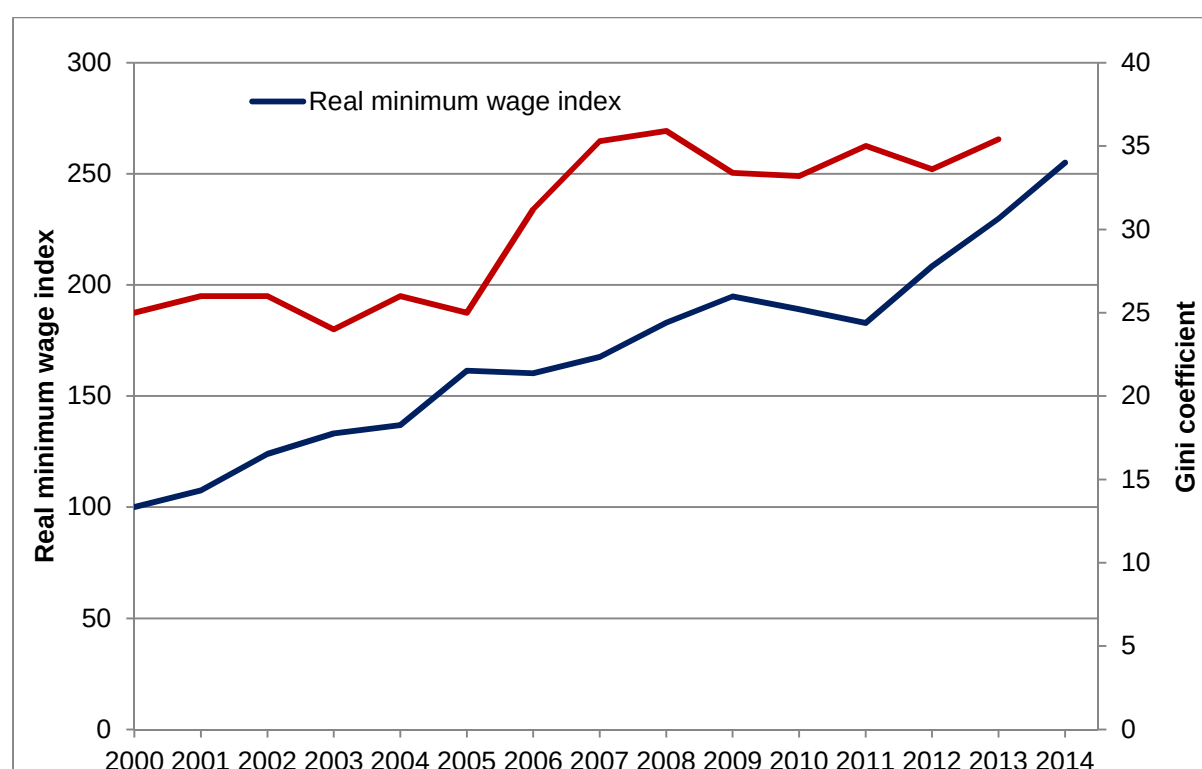
Individual complaints on labour law (incl. wages) violations are usually referred to the GLI. The GLI and the Ministry of Labour and Social policy have hot lines for these complaints. However, trade unions, as representatives of employees, often also have direct information and observations on employment related issues.

¹⁵ Article 414 (Amended, SG No. 48/2006, SG No. 108/2008, SG No. 58/2010, effective 30.07.2010)

4.4.2. Impact of minimum wages on income inequality

Have increases in the minimum wage helped to dampen inequality? Figure 4.4 shows the relationship between the gini coefficient and the real minimum wage. The gini coefficient is a measure of inequality between 0 and 100 (or sometimes between 0 and 1); the greater the gini coefficient, the greater level of inequality. Since 2000, both the gini coefficient and the real minimum wage have increased. In this regard, increases in the minimum wage have not been sufficient to offset the increases in inequality. This could be partially explained by the previous section which pointed to the relatively small percentage of full-time employees directly affected by the minimum wage.

Figure 4.4 Disposable household income gini coefficient and the real minimum wage index, 2000 – 14



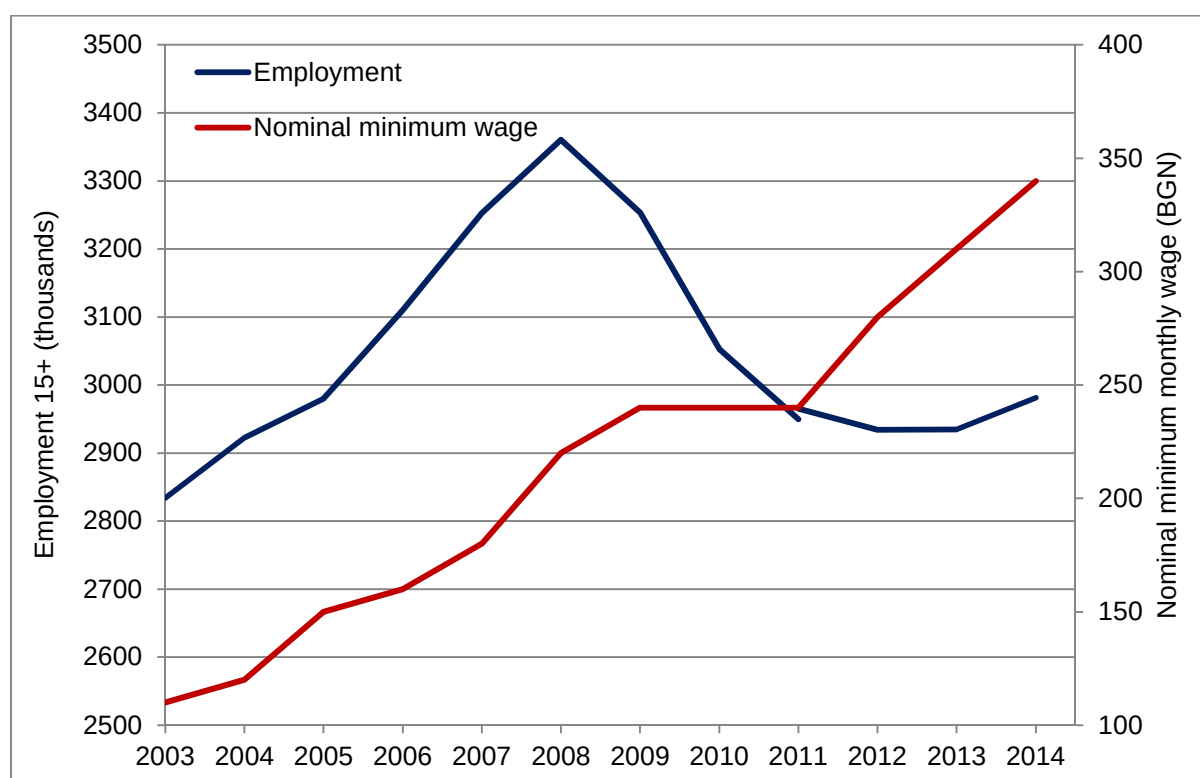
Source: Eurostat and ILO calculations using national data.

4.4.3. Impact of minimum wages on employment

Has the increase in minimum wages and average wages come at the expense of a decline in employment? As mentioned earlier, a firm answer to this question is beyond the scope of the section. It would require a complex econometric study, and even this might not provide a conclusive answer. This section can therefore only investigate whether there is any obvious large-scale, negative effect on employment levels.

Figure 4.5 shows an ambiguous relationship between employment and increases in the nominal minimum wage. Between 2003 to 2008, employment increases accompanied minimum wage increases. When the financial crisis hit, employment declined while minimum wages stagnated. From 2011, minimum wages have increased and employment levels have both declined and increased.

Figure 4.5 Number of workers and nominal minimum wages, 2003 – 2014



Note: There are two series for employment with a correction for the series in 2011. Both series are shown in blue in the figure.

Sources: Bulgaria National Statistical Institute; Eurostat.

In sum, the data show no obvious, large-scale reduction in employment that coincides with the minimum wage increases. However, the absence of an obvious effect in the past does not mean that future minimum wage changes cannot have an employment impact. For example, there might be a turning point up to which minimum wage increases have little or no impact, but once it is crossed; there could be a measurable, negative impact on employment.¹⁶

5. Descriptive trends in relation to international practice

This section provides an overview of the descriptive trends presented thus far, their relationship to international practice, and some general conclusions.

As described above, ILO Convention No.131 emphasizes that a minimum wage should be set in a way which balances the needs of workers and their families and economic factors. Table 5.1 outlines some of these general criteria. The common benchmarks at the bottom represent percentages around which countries minimum wages are often fixed. Countries frequently set minimum wages at 45 per cent of the average wage. Developed economies frequently have levels between 35 to 60 per cent of the median wage. The monthly wage required to meet the household needs of workers was calculated in detail in section 2. The common benchmarks suggest a net minimum wage level from 283 BGN to 420 BGN. This is a rather wide range wherein falls the current minimum wage level set at 360 BGN per month (gross). Unfortunately, the references for the median wage cannot be used since there is not an annual source of wage data available which covers all employees.

Turning to competitiveness and the capacity of enterprises to pay, the minimum wage and labour costs are among the lowest in Europe and Central Asia. These are accompanied by strong growth in labour

¹⁶ In the technical literature, this is known as ‘non-linearity’. See e.g. Betcherman, op. cit, page 6.

productivity as compared with other countries in Europe and Central Asia. For example, among the 49 countries in Europe and Central Asia, only 17 countries had labour productivity growth which exceeded that in Bulgaria over the period (in order: **Azerbaijan, Republic of Moldova, Armenia, Turkmenistan, Belarus, Georgia, Kazakhstan, Romania, Albania, Uzbekistan**, Lithuania, **Tajikistan, Serbia**, Latvia, **Ukraine, the Russian Federation**, and Estonia); however, while labour productivity growth may be higher in these countries, the labour productivity level in 2014 was lower in almost all of them (indicated by those highlighted in bold). In other words, labour productivity is primarily growing faster in countries which are starting from a lower base.

Table 5.1

Indicator	National level
2015 nominal minimum and monthly wage	
Nominal monthly minimum wage - 2015 BGN	360
Projected inflation (IMF) - 2015 (per cent)	0.7
Projected nominal average wage - 2015 BGN*	823
Common benchmarks	
40 per cent of the average wage - 2015 BGN	329
45 per cent of the average wage - 2015 BGN	370
50 per cent of the average wage - 2015 BGN	412
Net monthly wage required per worker to meet household needs of different family types	283 to 420

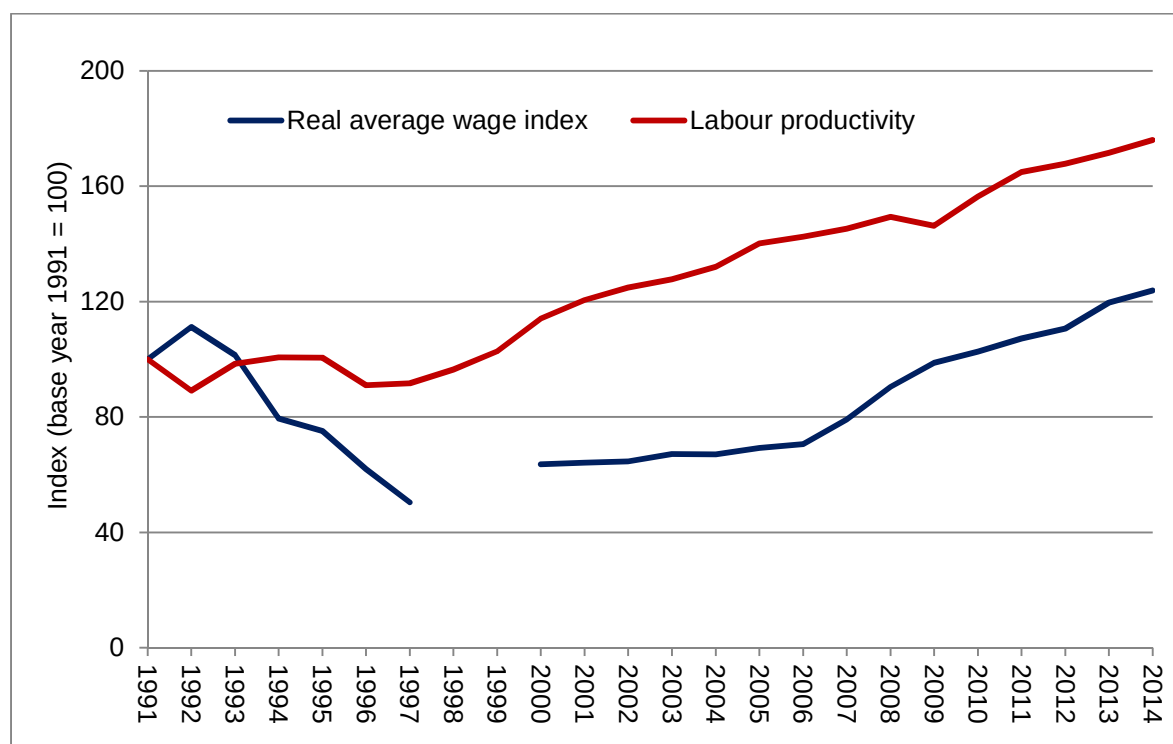
*The projected nominal wage is a conservative estimate which assumes that wages will only grow by projected inflation in 2015

Alongside this relatively strong labour productivity growth, minimum wages do not seem to exert substantial pressure on average wages. This is partially explained by the relatively few workers affected by the minimum wage (only 1.4 per cent of full-time employees) and the relatively low level of noncompliance (1.8 per cent of full-time employees). There also seems to be little direct evidence that minimum wages exert strong pressure on employment (in a positive or negative way).

The labour income share (wage share) is also increasing – suggesting that real wages have grown faster than labour productivity in recent years.¹⁷ This is also confirmed from figure 5.1. which shows that real wages grew faster than labour productivity since 2007. However, the recent gains in real wage growth have still yet to compensate for higher growth in profits over a longer period. From 1991, labour productivity grew by about 176 per cent while real wages grew by about 24 per cent.

¹⁷ However, some care should be noted in the interpretation of the recent uptick of the labour income share. In particular, the labour income share is countercyclical because wages tend to be less volatile than profits during economic downturns.

Figure 5.1 Real average wage and labour productivity indices, 1991 – 2014



Note: The two series are from different data sources and hence may not be directly comparable. Data for 1998 and 1999 are not available.

Sources: Bulgaria National Statistical Institute; Table 3 from Tzanov and Vaughan-Whitehead (1998). Republic of Bulgaria: For a new incomes policy and strategy. ILO; ILO Trends Econometric Models; IMF World Economic Outlook October 2014.

At the same time, using disposable household income, inequality is increasing suggesting that workers at the bottom have not shared in their fair share of economic growth. In combination with the flat tax of 10 per cent, low wage workers are doubly affected in a negative and disproportionate way. Combined, all of these trends suggest that there is scope for increases in the minimum wage.

However, there is one major limitation of many of the analyses presented thus far: envelope wages. To the extent that envelope wages represent a large and unreported component of income, the data and analyses presented here will be biased. For example, the minimum to the average wage ratio would be overestimated thereby overstating the relevance of the minimum wage level. The relationship between average wages and labour productivity might also be skewed. For this reason, in order to ensure an evidence based approach to minimum wage setting, it is essential that efforts be made to provide for a data source which encompasses all employees, of all contractual types across all sectors on an annual basis. The addition of both wage level and hours worked questions to the existing Labour Force Survey would represent a step in this direction.

6. Conclusions

1. Although it is ultimately up to the government to decide on the minimum wage level, full consultation of employers' and workers' organizations guarantees that minimum wage setting takes into consideration both economic and social criteria and contributes to national development. Institutionalizing a tripartite process that considers socio-economic indicators for adjusting the minimum wage at regular intervals, monitoring its effects, discussing policy implications and formulating remedies on a tripartite basis would facilitate meaningful dialogue to accommodate the conflicting interests of the social partners and foster compliance.
2. Minimum wage setting should be evidence based to take into account changing social and economic circumstances. Subsequently, the analyses should also be based on comprehensive wage data which cover all employees, nationally, in all sectors, of all contractual types on an annual basis. The Labour Force Survey already meets these criteria however, questions are not included related to hours worked and the wage earned. It would be advisable to include such questions in future rounds of the Labour Force Survey.
3. Wage fixing processes may take place at different levels: national, sectoral, and enterprise. Generally, however, the minimum wage should constitute the floor, below which no worker should be paid, in order to protect the most vulnerable workers. At the same time, the minimum wage can inform collective bargaining negotiations where social partners may bargain for increases above such a wage floor.
4. Regular minimum wage adjustments ensure that the purchasing power of the most vulnerable group of workers is retained and that they partake of economic growth. Minimum wages equalize the playing field for employers and regular adjustments enable them to better anticipate forthcoming changes in their labour costs.
5. The existing flat tax system and minimum social security thresholds disproportionately affect workers at the bottom of the wage distribution. In particular, since the minimum social security threshold is higher than the minimum wage, minimum wage workers pay an even higher percentage of their gross earnings to social security; in other words their net minimum wage is smaller than it would be if the minimum wage equalled the minimum social security threshold. Combined, these policies may encourage low wage workers to seek other forms of employment (i.e. informal). More progressive taxation and a reduction in the tax burden for low-wage labour could bring improvements to fairness and social justice.
6. Non-compliance with minimum wage standards has immediate negative social consequences for workers and their families, as well as for compliant employers, because it gives non-compliant enterprises an illegitimate cost advantage. Enhancing compliance can thus enhance the rule of law and fairness, and social protection. The extent of non-compliance can vary dramatically depending on policy design as well as the extent to which there coherent enforcement strategies exist. Ensuring minimum wage compliance is not only a matter of putting in place a well-equipped labour inspectorate that has the technical skills and resources to detect and sanction violations through effective procedures. Compliance also depends on the effectiveness of the entire process of designing and implementing minimum wage policies, starting from determination of the right level and rate structure in consultation with employers' and workers' organizations.

ANNEX 1. Evolution of the Nominal Minimum wage in Bulgaria, 1947 – 2015.

Year	Period of validity	Minimum wage/ Per month/BGN	Minimum wage/ Per hour/BGN)	Normative grounds Council of Ministers' Decree CMD
1947		30		
01.04.1950		40		
01.10.1960		47		
1966	01.10.1966 - 31.12.1967	55		CMD№ 53/1965
1968	01.01.1968 - 31.12.1969	60		CMD № 63/1967
1970	01.01.1970- 31.05.1973	65		CMD № 33/1969
1973	01.06.1973 - 30.09.1979	80		CMD № 6/1973
1979	01.10.1979.- 31.08.1984	100		CMD № 50/1979
1984	01.09.1984 - 30.09.1985	110		CMD № 16/1984
1985	01.10.1985 - 30.06.1989	120		CMD № 56/1985
1989	01.07.1989. - 30.06.1990	140		CMD № 97/1988
1990.	01.07.1990. - 31.08.1990.	165		CMD № 49/1990
1990	01.09.1990 - 30.11.1990	191 (indexation included)		CMD № 217/1990
1990	01.12.1990- 31.01.1991	210 (indexation included)		CMD № 21/1991
1991	01.02.1991. - 31.03.1991	435 (indexation included)		CMD № 8/1991
1991 г.	01.04.1991 - 30.04.1991	518 (indexation included)		CMD C № 85/1991
1991	01 .05.1991- 30 .06. 1991	505 indexation included)		CMD № 85/1991
1991	1 .07. 1991 – 31. 12.1991	620 (indexation included)	3.44	CMD № 121/5.07.1991
1992	1.01.1992 - 30.06.1992	620	3.44	CMD № 121/5.07.1991
1992	1.07.1992 - 31.12.1992	850	4.72	CMD № 135/17.07.1992
1993	1.01.1993 - 29.02.1993	890		CMD № 262/1992
1993	1.03.1993 - 30.06.1993	1200	7.08	CMD № 65/26.03.1993

1993	1.07.1993 - 30.09.1993	1343	7.92	CMD № 149/3.08.1993
1993	1.10.1993 - 31.12.1993	1414	8.34	CMD № 214/12.11.1993
1994	1.01.1994 - 30.06.1994	1565	9.18	CMD № 27/7.02.1994
1994	1.07.1994 - 30.09.1994	1814	10.65	CMD № 146/1.08.1994
1994	1.10.1994 - 31.12.1994	2143	12.58	CMD № 268/16.11.1994
1995	1.01.1995 - 31.03.1995	2143	12.58	CMD № 268/16.11.1994
1995	1.04.1995 - 30.06.1995	2450	14.47	CMD № 98/15.05.1995
1995	1.07.1995 - 30.09.1995	2555	15.09	CMD № 166/16.08.1995
1995	1.10.1995 - 31.12.1995	2760	16.30	CMD № 222/23.11.1995
1996	1.01.1996 - 31.03.1996	2760	16.30	CMD № 222/23.11.1995
1996	1.04.1996 - 30.06.1996	3040	17.88	CMD № 56/20.03.1996
1996	1.07.1996 - 30.09.1996	4000	23.53	CMD № 172/18.07.1996
1996	1.10.1996 - 31.12.1996	5500	32.35	CMD № 245/26.09.1996
1997	1.01.1997 - 31.01.1997	5500	32.35	CMD № 245/26.09.1996
1997	1.02.1997 - 28.02.1997	11 000	64.95	CMD № 34/6.02.1997
1997	1.03.1997 - 31.03.1997	17 600	103.92	CMD № 64/24.02.1997
1997	1.04.1997 - 30.04.1997	29 920	176.67	CMD № 123/27.03.1997
1997	1.05.1997 - 30.09.1997	41 290	243.80	CMD № 181/2.05.1997
1997	1.10.1997 - 31.12.1997	45 500	268.66	CMD № 415/5.11.1997
1998	1.01.1998 - 31.03.1998	48 700	286.47	CMD № 12/22.01.1998
1998	1.04.1998 - 31.08.1998	50 940	299.65	CMD № 92/17.04.1998
1998	1.09.1998 - 31.12.1998	53 500	314.70	CMD № 197/21.08.1998
1999	1.01.1999 - 30.06.1999	61 000	368.95	CMD № 7/19.01.1999
1999	1.07.1999 - 04.07.1999	67 000	390.00	CMD № 7/19.01.1999
1999	5.07.1999 - 31.12.1999	67	0.39	CMD № 132/25.06.1999
2000	1.01.2000 - 31.01.2000	67	0.39	CMD № 132/25.06.1999
2000	1.02.2000 - 30.09.2000	75	0.45	CMD № 12/14.02.2000

2000	1.10. 2000 – 31. 12. 2000	79	0.47	CMD № 213/9.10.2000
2001	1.01. 2001 – 31.03. 2001	79	0.47	CMD № 213/9.10.2000
2001	1. 04. 2001 – 31. 09.2001	85	0.50	CMD № 64/16.03.2001
2001	1. 10. 2001 – 31. 12.2002	100	0.59	CMD № 209/21.09.2001
2003	1. 01.2003 - 31 12. 2003	110	0.65	CMD № 1/3.01.2003
2004	1. 01.2004 - 31 12. 2004	120	0.71	CMD № 7/16.01.2004
2005	1. 01 2005 - 31 12. 2005	150	0.89	CMD № 12/21.01.2005
2006	1. 01 2006 - 31 12. 2006	160	0.95	<u>CMD № 8/20.01.2006</u>
2007	1. 01 2007 - 31 12. 2007	180	1.07	<u>CMD № 324/06.12.2006</u>
2008	1. 01 2008 - 31 12.2008	220	1.30	<u>CMD № 1/11.01.2008</u>
2009	1. 01 2009 - 31 12. 2009	240	1.42	<u>CMD № 1/10.01.2009</u>
2010	1. 01 2010 -31 12. 2010	240	1.42	<u>CMD № 326 /30.12.2009</u>
2011	1. 01 2011 - 31 .08. 2011	240	1.42	<u>CMD № 326 / 30.12.2009</u>
2011	1.09.2011 – 31. 12. 2011	270	1.61	<u>CMD № 180 / 30.06. 2011</u>
2012	1. 01 2012 – 31.04.2012	270	1.61	<u>CMD № 180 / 30.06. 2011</u>
2012	1.05. 2012 г. - 31.12.2012	290	1.72	<u>CMD № 300/10.11.2011</u>
2013	1. 01 2013 г. - 31.12.2013	310	1.85	<u>CMD № 250 / 11.10. 2012</u>
2014	1. 01 2014 - 31 12. 2014	340	2.03	<u>CMD № 249 / 31.10. 2013</u>
2015	1. 01 2015 – 30.06. 2015	360	2.20	<u>CMD № 419/17.12.2014</u>
2015	1.07. 2015 -	380	2.21	<u>CMD № 419/17.12.2014</u>

1 Euro-1.958 BGN (fixed rate-currency due to currency board arrangement since July 1997)

Source: State Gazette- the official journal of the National Assembly

ANNEX 2. Description of data sources from selected enterprise surveys in Bulgaria.

- *Short term statistics on employment and labour costs* - Employees under labour contract, Average monthly wages and salaries, Job vacancies, Job vacancy rate, quarterly labour cost index. Covered are enterprises from all economic activities irrespective of their type of ownership and source of financing, which have at least one employee working under labour contract.
- *Annual statistics on employment and labour costs* - Employees under labour contract, Average annual wages and salaries, Employees under labour contract - inflows and outflows, labour costs. The data are collected from enterprises and organizations that perform economic activity in Bulgaria. Sources of information are: pay-roll sheets, presence and absence sheets, labour or non-labour contracts, management contracts, letters of appointment or discharge, applications for paid or unpaid leaves etc.
- *Quarterly Labour Cost Index (LCI)* The quarterly Labour Cost Index (LCI) shows the short-term development of the total hourly costs incurred by the employers of maintaining their employees. In other words, the LCI measures the cost pressure arising from the production factor 'labour'. The index is available broken down by cost items (wages and salaries component, employers' social contributions) as well as by economic activity. The LCI covers the economic activities of industry and services (including public administration). The reference year of the index is 2008. In addition to the index numbers, annual and quarterly growth rates of labour cost are also available. Countries are obligated to transmit the data within 70 days after the end of the reference period to Eurostat.
- *Structure of Earnings Survey*. Detailed tables on the results of the four-yearly Structure of Earnings Survey (SES) provide comparable information at EU-level on relationships between the level of earnings, individual characteristics of employees (sex, age, occupation, length of service, educational level) and their employer (economic activity, size of the enterprise, etc.) for reference years 2002, 2006 and 2010 , 2014). The data collection is based on Council Regulation (EC) No 530/1999 of 9 March 1999 concerning structural statistics on earnings and on labour costs, and data become available approximately 2 years after the end of the reference year.