3. Inequality at work emerging in the current crisis in Bulgaria

Vasil Tzanov

1. INTRODUCTION

The effects of the economic crisis on the Bulgarian economy began to reveal themselves from the second half of 2008. From the beginning of 2009, the economy entered into recession which deepened throughout the year and was prolonged to early 2010. Bulgaria began to come out of the recession in the second half of the year but the crisis was not over at the beginning of 2011. The negative effects spread over the entire economy, including the labour market, the public finances, fiscal policy and social protection. Naturally, different branches, firms and social groups are affected in different ways and this is reflected in different developments with regard to inequality.

The significant fall in GDP has had a strong negative impact on the labour market. The key labour market indicators have deteriorated during 2009–2010. Total employment has declined significantly and unemployment has gone up. Since the crisis is concentrated in particular economic branches the effects on the labour market are focused on specific segments. This implies inequalities with regard to employment and unemployment adjustment and structure. Furthermore, the crisis is affecting to different degrees not only employment and unemployment, but also other aspects of work, such as working time, compliance with health and safety regulations, working conditions, training, social dialogue and so on. The overall outcome is increased inequalities in respect of all working conditions.

The impact of the crisis on working conditions depended not only on economic circumstances but also on policy responses to the crisis. Policy decisions at national and firm level had a significant effect on the development of inequality. The measures taken by the government in response to the crisis were directed mainly towards consolidating the budget by curbing public expenditure and this has affected labour market inequality accordingly.
The aim of this chapter is to analyse the effects of the crisis on the Bulgarian labour market. We shall investigate a broad range of working conditions. The focus will be on the assessment of inequality in employment, unemployment, wages and other working conditions. The effects of government policy on inequality are also analysed. The case studies illustrate the issues under consideration at enterprise level.

2. GENERAL ECONOMIC EFFECTS: BULGARIA SEVERELY HIT BY THE CRISIS

2.1 Sharp Decline in Economic Activity: The Sectors Most Affected

The Bulgarian economy underwent substantial development before the crisis. GDP growth rates were relatively high (Figure 3.1). During the past five years GDP has grown at a stable rate of about 6 per cent a year. The recession that started in 2009 has strongly affected output. GDP contracted significantly and at an accelerating rate. As a result, GDP fell by 5 per cent in 2009. The recession has continued into 2010, and GDP fell by 4 per cent in the first quarter in comparison to the same quarter of the previous year. The positive growth of GDP in the next two quarters (by 0.5 per cent in the second and by 1 per cent in the third) suggested that the recession was over.

The economic crisis has affected different sectors to different degrees. Agriculture appears to have been less affected by the crisis since the end

Source: National Statistical Institute.

Figure 3.1 GDP growth rates, Bulgaria, 2006–2010
Bulgaria

Gross value added (GVA) in agriculture declined only by 3.3 per cent in 2009. Industrial output (mainly in manufacturing) has been hardest hit: gross value added in industry contracted by 8.5 per cent in 2009, while before the crisis it was growing. Total manufacturing output decreased by 14.5 per cent during the period December 2008–December 2009. The manufacturing branches most strongly affected were furniture (–35.7 per cent), machine production (–27.6 per cent), textiles (–24.5 per cent) and clothing (–19.5 per cent).

Construction was also hard hit by the crisis. Gross value added fell by 7.2 per cent in 2009 in comparison to 8.5 percentage points growth in the previous year. The fall in domestic demand has had a negative effect on trade turnover. Value added in trade fell by 6.2 per cent, while trade turnover has been reduced by over 12 per cent.

### Table 3.1  Labour market situation, Bulgaria, 2005–2010 (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment rate</th>
<th>Unemployment rate</th>
<th>Participation rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>64.0</td>
<td>9.2</td>
<td>67.1</td>
</tr>
<tr>
<td>2006</td>
<td>64.0</td>
<td>9.2</td>
<td>67.1</td>
</tr>
<tr>
<td>2007</td>
<td>64.0</td>
<td>9.2</td>
<td>67.1</td>
</tr>
<tr>
<td>2008</td>
<td>64.0</td>
<td>9.2</td>
<td>67.1</td>
</tr>
<tr>
<td>2009</td>
<td>64.0</td>
<td>9.2</td>
<td>67.1</td>
</tr>
<tr>
<td>Q1 2010</td>
<td>64.0</td>
<td>9.2</td>
<td>67.1</td>
</tr>
<tr>
<td>Q2 2010</td>
<td>64.0</td>
<td>9.2</td>
<td>67.1</td>
</tr>
<tr>
<td>Q3 2010</td>
<td>64.0</td>
<td>9.2</td>
<td>67.1</td>
</tr>
</tbody>
</table>


of 2009. Gross value added (GVA) in agriculture declined only by 3.3 per cent in 2009. Industrial output (mainly in manufacturing) has been hardest hit: gross value added in industry contracted by 8.5 per cent in 2009, while before the crisis it was growing. Total manufacturing output decreased by 14.5 per cent during the period December 2008–December 2009. The manufacturing branches most strongly affected were furniture (–35.7 per cent), machine production (–27.6 per cent), textiles (–24.5 per cent) and clothing (–19.5 per cent).

Construction was also hard hit by the crisis. Gross value added fell by 7.2 per cent in 2009 in comparison to 8.5 percentage points growth in the previous year. The fall in domestic demand has had a negative effect on trade turnover. Value added in trade fell by 6.2 per cent, while trade turnover has been reduced by over 12 per cent.

### 2.2 Labour Market Situation Deteriorating Rapidly

The negative impact of the crisis on the labour market refers to all indicators (Table 3.1). Most affected are employment and unemployment. Employment fell by 2.9 per cent (112,000 workers) in 2009 after prolonged and stable growth over the past few years. As a result, the employment rate fell from 64 per cent in 2008 to 62.6 per cent in 2009. The deterioration in the employment situation was not as marked as that of GDP, mainly due to inertia and the protective measures that have been taken (reduction of working time, unpaid leave and so on).

Unemployment started to increase from the second half of 2008 and continued to grow throughout 2009. According to data from the Labour Force Survey, the number of unemployed in 2009 increased by 38,300 in comparison to 2008, and now affected 9.6 per cent of the labour force.

The other negative effect on the labour market is the fall in the participation rate. Some people quit the labour market (mainly discouraged...
Work inequalities in the crisis

because of their difficulties finding a job. The participation rate fell by 0.6 percentage points in 2009. This is relatively modest given that the number of inactive people aged 15–64 grew by 15,600 in 2009. Obviously, the crisis forced a significant part of the unemployed to stay in the labour market, looking for a job. Also, a proportion of inactive people re-entered the labour market because of their dwindling financial resources.

The positive economic development since the recession has had a negligible impact on labour market performance. Nevertheless, all labour market indicators have started to improve, including the employment and participation rates.

2.3 An Impact on Real Wage Dynamics but Limited So Far

Alongside the economic and labour market deterioration, nominal and real wages have experienced lower growth than in previous years (Figure 3.2). Both the minimum wage (MW) and the average wage (AW) continued to increase in nominal terms: the average wage rose by 8.4 per cent in 2009, while the minimum wage rose by 9.1 per cent. These rates of growth are much lower than those achieved in the pre-recession years (22.2 per cent in 2008 and 12.5 per cent in 2007 for the minimum wage and 26.5 per cent and 21.8 per cent for the average wage).

In real terms, the minimum wage and average wage have also increased, but by a lower proportion than in the previous year. The real minimum wage grew by 6.1 per cent in 2009 in comparison to 8.8 per cent in 2008.

Source: National Statistical Institute.

Figure 3.2 Nominal and real wage dynamics, Bulgaria, 2000–2009
The increase in the real average wage was below that of the minimum wage, at 5.5 per cent, so that the ratio between the minimum wage and the average wage increased slightly, from 40.4 per cent in 2008 to 40.6 per cent in 2009.

This growth is only half that registered in 2008. At the same time, there has been an increase in the proportion of low-paid workers (see Section 5.3).

Wage development during the recession has been determined by many circumstances. First, the slow adjustment of wages to economic output. Wages are fixed and changes require time to take effect. Second, there is a trade-off between employment and wages. Wage increases were compensated by job reductions (see Section 5.4). Third, most dismissed workers were low skilled and low paid. This automatically increases the average wage in the firm.

2.4 Missing Link Between Wages and Productivity Confirmed

Since wage trends during the crisis have not deteriorated as much as the contraction in output, this has led to an increase, at least temporarily, in the wage share in GDP (Figure 3.3), rising by 1.7 percentage points in 2009. Such a disconnection between wages and GDP also in a period of crisis cannot be interpreted as an improvement in the linkage between earnings and economic performance that had already been observed in the pre-crisis growth period.

Source: National Statistical Institute.

Figure 3.3 Wage share in GDP, Bulgaria, 2000–2010
Evidence for this conclusion is provided by the total disconnection between real wage growth and productivity over the past ten years. Real wage dynamics did not follow productivity development after 2000. Annual changes in the real average wage differ significantly from productivity changes for all years during the period and especially in the past three years. In 2007 and 2008, the average real wage increased by much more (by 12.1 per cent and 8.2 per cent, respectively) than productivity (3.3 per cent and 2.7 per cent, respectively). In 2009, productivity fell by 2.2 per cent, while the real average wage grew by 5.5 per cent. All this suggests a weak relationship between them and, consequently, low economic efficiency and competitiveness. Unit labour costs and total production costs have grown. This negatively affected the functioning of the market which, in the current crisis, is highly inadequate.

The relationship between wages and productivity started to improve at the beginning of 2010. Productivity increased significantly (by 7.5 and 6.4 per cent in the second and third quarters, respectively) due to the further reduction in employment, and in practical terms balanced real wage growth.

2.5 The Rise of the Budget Deficit

The recession has brought about a strong deterioration in the balance of payments in 2009 and 2010. Budget revenues have declined dramatically and for this reason the government has decided to cut public expenditure in all areas. Wages in the public sector were frozen at the end of 2009 and the government postponed all payments to firms carrying out public projects. Despite these restrictive measures, in 2009 the budget balance became negative for the first time for a number of years. The budget deficit for 2009 was BGN 3.21 billion (1.64 billion euros), or 4.7 per cent of GDP. In response, cuts in public expenditure were also made in the 2010 budget. The budget was revised again in the middle of the year, leading to further reductions in government expenditure (of about 10 per cent). This restrictive budgetary policy has had a strong negative impact not only on particular segments and social groups in the labour market (employment and wages in the public sector; unemployment and active labour market policy; low-paid workers), but also on working conditions overall.

3. POLICY RESPONSE TO THE CRISIS

The economic crisis in Bulgaria has hit economic output, the labour market, foreign trade and the public finances very hard. In these
circumstances, the Government has implemented a package of measures (2009 and 2010) aimed at reducing the negative effects of the recession. These measures concern a number of areas of economic policy. Most are oriented towards supporting fiscal policy and reducing the budget deficit. The measures directed towards the labour market and social protection are summarized in Table 3.2.

To meet the ongoing decrease in budget revenues during the recession the Government enforced a restrictive public spending policy from the second half of 2009. That policy has continued in 2010. Most government spending was cut to the bone. Budget expenditure was reduced, first, by cancelling the envisaged growth in wages financed from the budget (public administration, teachers, doctors and so on) from July 2009 and, second, by removing all additional year-end payments to workers in public administration. Further reductions in public expenditure were carried out from the middle of 2010. The budget subsidies of all public organizations were cut by 10 per cent until the end of the year. In some public organizations, this reduction will severely affect the wage bill and wages.

The reduction in public expenditure was supplemented by restrictions on wage growth. The minimum wage and wages in the public sector were frozen for 2010. This is aimed at reducing the pressure on increased labour costs and lowering the budget deficit. This was expected to stimulate economic activity and preserve employment. It might also have had an adverse effect on global consumption while also reducing the quality of public services.

The effects on workers can be summarized as follows. First, the minimum wage and wages in the public sector fell in real terms. This affected a considerable proportion (almost one-third) of employment. Second, the minimum wage freeze had an effect on workers at the bottom with a consequent increase in the proportion of low-paid workers.

Third, the wage gap between the public and private sectors has declined but not because of wage increases in the private sector or a shrinking shadow economy but rather a strong decline in public sector wages. Fourth, decreasing the purchasing power of a sizable part of the employed will reduce consumption and total domestic demand, which in crisis conditions is undesirable.

With regard to the minimum wage, the Government announced its intention (in April 2010 on the basis of an agreement with the trade unions and employers’ organizations) to create a new mechanism for its determination which would be based on the development of economic and social indicators. The idea is to link minimum wage growth with the official poverty line, productivity and wage development.

Labour market support measures deal primarily with maintaining
### Table 3.2 Policy response recovery measures, Bulgaria, 2009–2010

<table>
<thead>
<tr>
<th>Policy area</th>
<th>Description of measure taken</th>
<th>Implementation</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cutting public expenditure</td>
<td>1. Abolish envisaged increases in wages financed by the budget</td>
<td>July 2009</td>
<td>Reducing the budget deficit</td>
</tr>
<tr>
<td></td>
<td>2. 10% reduction of public expenditure in all budget organizations except for education and social care</td>
<td>In force since July 2010</td>
<td></td>
</tr>
<tr>
<td>Restrictive wage policy</td>
<td>1. Freeze the minimum wage</td>
<td>Since 2010</td>
<td>Reducing labour costs and maintaining employment</td>
</tr>
<tr>
<td></td>
<td>2. Freeze all wages financed by budget</td>
<td>Since mid-2009</td>
<td>Reducing the budget deficit</td>
</tr>
<tr>
<td></td>
<td>3. Intention of creating a mechanism for minimum wage fixing</td>
<td>From the beginning of 2010</td>
<td>Increasing the minimum wage in relation to social and economic parameters</td>
</tr>
<tr>
<td>Preservation of employment</td>
<td>1. Complex of measures maintaining employment in the hardest hit enterprises through:</td>
<td>Since June 2010</td>
<td>Maintaining employment</td>
</tr>
<tr>
<td></td>
<td>– introduction of flexible working time</td>
<td>Since 2009</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– specific leave for economic reasons</td>
<td>Since 2009</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– compensation for short-time working</td>
<td>Since July 2010</td>
<td>Maintaining employment</td>
</tr>
<tr>
<td></td>
<td>2. Restrict access to the labour market for low-skilled foreign workers.</td>
<td>Since 2010</td>
<td>Maintaining employment and increasing incomes</td>
</tr>
<tr>
<td></td>
<td>3. Reduction of social insurance contributions by 2 percentage points</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduction of unemployment</td>
<td>1. Creating mechanisms to help young people find their first job</td>
<td>Since July 2010</td>
<td>Reducing youth unemployment</td>
</tr>
<tr>
<td></td>
<td>2. Additional resources for subsidized employment</td>
<td>Since July 2010</td>
<td>Reducing unemployment</td>
</tr>
</tbody>
</table>
employment. Most were initiated in 2009 and prolonged in 2010. The Government introduced a compensation scheme for short-time working and other measures of flexible working time and specific forms of leave. Many affected firms took advantage of this opportunity, but most implemented unpaid leave. To protect the employment of low-skilled workers, the Government restricted the access to the Bulgarian labour market of foreign low-skilled workers. The effect of this measure will not be strong because pressure on the labour market is not intense. Measures related to subsidized employment and the reduction of pension-related social insurance contributions (by 2 percentage points from the beginning of 2010) will probably have more impact on maintaining employment. The aim is to reduce labour costs and thus maintain employment. The expected effects on employment are questionable because there are no controlling mechanisms ensuring that the resources saved would be used for employment protection. The positive effect on real wages is obvious because workers have to pay lower pension contributions.

Particular attention is being paid to youth unemployment; young people are one of the most at-risk groups in the labour market. The

Table 3.2 (continued)

<table>
<thead>
<tr>
<th>Policy area</th>
<th>Description of measure taken</th>
<th>Implementation</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supporting household income</td>
<td>1. Removal of the ceiling on unemployment benefit&lt;br&gt;All unemployed persons must receive 60% of their income before job loss</td>
<td>Since July 2010</td>
<td>Increasing incomes of the unemployed</td>
</tr>
<tr>
<td></td>
<td>2. Removal of the quota principle in the distribution of food vouchers</td>
<td>Since July 2010</td>
<td>Supporting real incomes of workers</td>
</tr>
<tr>
<td></td>
<td>3. Temporary restriction on increases in prices regulated by the Government</td>
<td>Since July 2010</td>
<td>Supporting real incomes</td>
</tr>
<tr>
<td></td>
<td>4. Additional financing of soup kitchens</td>
<td>Since July 2010</td>
<td>Supporting the poor</td>
</tr>
<tr>
<td>Strengthening social protection</td>
<td>Increase resources for social assistance. Ministry of Labour and Social Policy received BGN 142 million for social assistance programmes</td>
<td>Since July 2010</td>
<td>Supporting the poor</td>
</tr>
</tbody>
</table>
Government needs to create mechanisms by which school leavers can find their first job.

The other group of government measures focuses on improving household incomes. The unemployed in principle could receive the full amount of benefits (60 per cent of income before losing their job) after the removal of the ceiling from July 2010. Real wages are supported by the abolition of the quota principle in the distribution of food vouchers (enabling the purchase of food free of charge). The effects of this measure are expressed in the increase in the number, amount and coverage of vouchers, but not in terms of inequality. A stronger effect on real incomes can be expected from the restrictions imposed on prices. The prices of electricity, gas, water and heating are regulated by the Government and their temporary freezing or slight increase should support real household incomes.

4. INEQUALITY IN THE FACE OF EMPLOYMENT AND UNEMPLOYMENT RISKS

4.1 Employment Adjustments

The effects of the crisis on employment have not been distributed equally across sectors and branches, types of labour contract, gender, educational attainment and so on. Inequalities might arise depending on employment status and the extent to which the recession has hit enterprise performance. We shall analyse employment inequality within this framework. Our objectives are to analyse the effects on different categories of employment and to identify the most vulnerable groups of workers.

4.1.1 Employment inequality by sector

The development of employment across economic sectors was different before and during the crisis (Figure 3.4). Before the crisis, several sectors (construction, finance, trade, hotels and restaurants) experienced high employment growth. New jobs in construction and the financial sector increased by 50 per cent and 30 per cent, respectively, during 2005–2008. Employment in trade experienced a similar trend. Employment in other sectors (industry and agriculture) changed at moderate, stable rates and did not exhibit any specific development tendency. This picture suggests unequal employment development by sector before the crisis.

The impact of the recession on jobs has also been uneven across sectors. The financial sector in Bulgaria has not been strongly affected by the global financial crisis. Employment in this sector remained stable during 2009 and employment increased, albeit at a low rate (1.1 per cent).
Employment in agriculture did not change despite the fall in output in 2009. Most affected by the crisis have been jobs in industry, construction and services (trade, transport and tourism). In construction, employment fell by 5.8 per cent (15,000), while in services job losses totalled 20,700 (about 2.1 per cent).

Workers in industry faced the highest risk of unemployment. The number of dismissed workers was 59,900, a contraction of 7.3 per cent in comparison to 2008. This concerned mainly manufacturing: the number of employees in manufacturing fell by 84,000 (14.2 per cent) during the past five quarters of the recession (2009–2010). Most affected are export-oriented branches (base metals, machine products, textiles and clothing).

4.1.2 Inequality by occupational status and type of contract

The structure of employment with regard to occupational status (employees and self-employed) did not differ significantly prior to and during the crisis. Both occupational groups developed positively before the recession but with different rates of growth (the number of self-employed increased at a lower rate). The share of employees represents over 70 per cent of total employment and has exhibited a tendency to grow since 2005. This trend continued in 2009, despite the higher number of lay-offs. Thus the crisis neither halted nor accelerated this development. The impact of the recession on employees and the self-employed differ notably across economic sectors. Job reductions prevail in industry, construction and services, while the number of self-employed declined mainly in industry and services.
Work inequalities in the crisis

The Bulgarian labour market is dominated by typical forms of employment, most workers being hired on full-time contracts. The proportion of full-time workers increased before the crisis and reached 97.7 per cent of total employment in 2008, while in 2006 it was 3.9 percentage points less (Table 3.3). The share of part-time workers also increased from 1.9 per cent in 2006 to 2.3 per cent in 2008. The effect of the recession was evenly distributed among full- and part-time workers. Employment in both groups fell by the same percentage, –3.2 per cent and –3.5 per cent, respectively, for full- and part-time workers. Consequently, their shares remained unchanged in 2009. Moreover, the flows between full- and part-time contracts were limited. The estimates suggest that 0.6 per cent of full-time workers moved to part-time contracts during the recession (Beleva 2010). The opposite movement (from part- to full-time contracts) changed little during the crisis (falling by 1 percentage point). Generally, the impact of the crisis on full-time and part-time employment was negligible.

The workers on temporary contracts represent a small part of employees in Bulgaria. Their share declined to 5 per cent in 2008 from 5.9 per cent in 2006 and 5.1 per cent in 2007 (Table 3.3). This tendency accelerated in 2009, rising to 4.7 per cent. The number of workers in temporary jobs declined by 9.4 per cent (13,900), while permanent job losses amounted to 2.9 per cent (82,300). Temporary workers have thus been one of the buffers in the crisis, despite their small numbers.

The crisis gave rise to higher inequality among workers with different levels of education. The typical employer sought to retain high quality

### Table 3.3 Share of employment by type of working time and educational attainment and permanency of job, Bulgaria, 2006–2009

<table>
<thead>
<tr>
<th>Year</th>
<th>Employed by type of working time</th>
<th>Employed by level of education</th>
<th>Employees by permanency of job</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full-time</td>
<td>Part-time</td>
<td>Higher secondary</td>
</tr>
<tr>
<td>2006</td>
<td>93.8</td>
<td>1.9</td>
<td>25.5</td>
</tr>
<tr>
<td>2007</td>
<td>94.7</td>
<td>1.6</td>
<td>25.5</td>
</tr>
<tr>
<td>2008</td>
<td>97.7</td>
<td>2.3</td>
<td>25.5</td>
</tr>
<tr>
<td>2009</td>
<td>97.7</td>
<td>2.3</td>
<td>26.4</td>
</tr>
</tbody>
</table>


Bulgaria

jobs and skilled workers. This is confirmed by all case studies. Low-skilled workers faced a much higher risk of unemployment. The number of workers with a primary education (lower secondary and lower) decreased by 6.2 per cent (31,300) during the recession. As a result, their share declined to 14.4 per cent (Table 3.3). Workers with a secondary education were also strongly affected by the crisis. Their number fell by 3.8 per cent (from 2,002,500 in 2008 to 1,924,700 in 2009). Employees with a higher education were less affected by the recession: the total number of employees with a higher education increased and this raised their relative share in total employment.

4.1.3 Effects on gender inequality in employment

Employment dynamics for men and women show considerable inequality during the crisis. Men experienced a more negative impact than women (Figure 3.5). Male employment declined at a higher rate than female employment during the whole recession and the gap between them became wider in 2010. For the period between the fourth quarters of 2008 and 2009 male employment decreased by 6.1 per cent, or 107,900 workers. During the same period, female employment fell by 5 per cent (51,800). There was a greater reduction of male employment in 2010: employment for men fell at an increasing rate (from −8.4 per cent in the first quarter to −9.9 per cent in the third quarter) and for women by an almost constant rate (around −7.78 per cent).

This inequality contributed to reducing the difference between the male
Work inequalities in the crisis

and female employment rates. The employment rate for men declined by 6.9 percentage points between the first quarters of 2009 and 2010 (from 69.2 per cent to 62.3 per cent). The female employment rate went down by only 4 percentage points, reaching 55.3 per cent at the beginning of 2010. As a result, gender inequality in employment narrowed. The improvement of the economic situation since the recession provoked a rise in the employment rates of both groups and further shrinkage of gender inequality.

4.1.4 Young people hardest hit by the crisis

Employment among young people showed positive development before the crisis. The number of employed young people (aged 15–24) increased by 15.8 per cent in the period 2005–2008, yielding an employment rate of 26.3 per cent (Table 3.4). This development of youth employment was the result of the special programmes and measures implemented in recent years (2006–2008). Employment in other age groups also showed progress, in particular, among older people, whose employment increased by 117,000 or 34.8 per cent.

The crisis affected employment in the first two groups (young people aged 15–24 and 25–34) most strongly. Employment in the age group 15–24 declined by 8.6 per cent or 22,600. As a result, the employment rate in this group decreased by about 1.5 percentage points. In the age group 25–34, the fall was about 6.3 per cent (46,300) and the employment rate fell by a higher magnitude (3.1 percentage points). In total, the crisis reduced youth employment by 68,900.

4.2 Inequalities in Unemployment Risks

The effects of the crisis on unemployment were also not distributed equally among groups. Some groups were more affected than others, leading to

Table 3.4 Employment rate by age, Bulgaria, 2005–2009

<table>
<thead>
<tr>
<th>Age group</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>15–24</td>
<td>21.6</td>
<td>23.2</td>
<td>24.5</td>
<td>26.3</td>
<td>24.8</td>
</tr>
<tr>
<td>25–34</td>
<td>69.4</td>
<td>72.2</td>
<td>76.2</td>
<td>78.2</td>
<td>75.1</td>
</tr>
<tr>
<td>35–44</td>
<td>77.1</td>
<td>79.6</td>
<td>82.8</td>
<td>84.6</td>
<td>82.6</td>
</tr>
<tr>
<td>45–54</td>
<td>72.1</td>
<td>74.8</td>
<td>78.4</td>
<td>80.6</td>
<td>79.0</td>
</tr>
<tr>
<td>55–64</td>
<td>34.7</td>
<td>39.6</td>
<td>42.6</td>
<td>46.0</td>
<td>46.1</td>
</tr>
<tr>
<td>65+</td>
<td>2.5</td>
<td>2.7</td>
<td>3.0</td>
<td>3.8</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Source: Labour Force Survey.
higher inequality between them and changing the structure of unemployment in a number of respects (gender, age, level of education and duration).

4.2.1 Stronger unemployment growth among men

The higher reduction of male employment (the crisis strongly affected branches with predominantly male employment) was translated into higher unemployment among men. Before the crisis (2008), unemployment was almost equally distributed between men and women, with female unemployment slightly higher (Figure 3.6).

Gender inequality started to emerge from the first quarter of 2009. The male unemployment rate increased from 6.5 per cent in the first quarter of 2009 to 10.9 per cent in the same period of 2010 and declined to 10.2 per cent in the third quarter, while the female unemployment rate grew from 6.2 per cent to 9.5 per cent and dropped to 8.9 per cent. The gender gap in the unemployment rate, calculated as the difference between men’s and women’s unemployment rates, grew from 0.4 to 1.1 throughout 2009 and decreased slightly in 2010 (from 1.4 in the first quarter to 1.3 in the third quarter). Therefore, the crisis significantly increased gender inequality in unemployment. This situation differs strongly from the pre-crisis period when gender inequality declined in favour of women.

Source: Labour Force Survey.

Figure 3.6 Unemployment rate by gender, Bulgaria, 2007–2010
4.2.2 Youth unemployment at a peak

Young people aged 15–24 typically faced a higher unemployment rate than older workers. The unemployment rate for this age group declined significantly during the period 2007–2008 (from 16.0 per cent in the first quarter of 2007 to 11.4 per cent in the third quarter of 2008). Consequently, the gap between the unemployment rate of young people and that of the other age groups was reduced. The impact of the recession totally changed this tendency. The unemployment rate of young people climbed from 14.2 per cent in the first quarter of 2009 to 23.8 per cent in the same period of 2010 and slightly decreased after the recession (Figure 3.7). At the same time, the unemployment rate of older workers (aged 35–54) also increased, but to a smaller extent (from 5.2 per cent in 2009 to 8.4 per cent in 2010). The effect was to increase the ratio between unemployed young people and unemployed older people from 2.7 in 2008 to 2.8 in 2010. This small difference suggested that the crisis caused a moderate increase in unemployment inequality by age.

The other group particularly hard hit by the recession is persons aged 25–34. Before the crisis, the unemployment rate of this group decreased in parallel with older groups and there were no major differences between them. The recession caused a rapid increase in unemployment among this group during the fourth quarter of 2008 and the first quarter of 2010. In this period, the unemployment rate jumped by 6.9 percentage points (from 5.0 to 11.9 per cent) and declined to 10.1 per cent in the third quarter of 2010.

Source: Labour Force Survey.

Figure 3.7 Unemployment rate by age, Bulgaria, 2007–2010
A more modest increase in unemployment was observed among older workers (aged 35–54 and 55+). The unemployment rate of the 35–54 age group increased by 3.2 percentage points during the recession, while that of the 55+ group rose by about 1.9 percentage points. In contrast to the other age groups, the unemployment rate of the oldest workers (aged 55+) continued to rise in the period after the recession (from 7.9 per cent in the first quarter of 2010 to 8.9 per cent in the third quarter). Evidently, economic development in this period did not affect the oldest workers.

### 4.2.3 Increase in long-term unemployment

Unemployment started to increase from the second half of 2008, when the Bulgarian economy experienced the first symptoms of the crisis. The small number of new unemployed did not influence the structure of unemployment by duration. The number of persons unemployed for up to five months continued its downward trend to the end of the year (Table 3.5). Also, the number of long-term unemployed declined by 21,600 during 2008. The proportion of those unemployed for 6–11 months remained stable throughout the first three quarters and sharply declined at the end of the year.

The recession significantly increased the number of short- and long-term unemployed. The first significant rise appeared in the first quarter of 2009 and hit short-term unemployment (less than six months). In comparison to the previous quarter the number of those unemployed for less than six months increased in the first quarter of 2009 by 60 per cent (35,300) and of those unemployed for 6–11 months by 25 per cent. The number of long-term unemployed rose by only 3 per cent because a part of those unemployed for 6–11 months (3,000) entered this group. The augmentation of unemployment in 2009 caused a further and higher increase in short-term than in long-term unemployment. The effect on long-term

### Table 3.5 Unemployment by duration, Bulgaria, 2008–2009 (in '000s)

<table>
<thead>
<tr>
<th></th>
<th>Up to 5 months</th>
<th>6–11 months</th>
<th>Over 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1-08</td>
<td>82.4</td>
<td>30.3</td>
<td>116.2</td>
</tr>
<tr>
<td>Q2-08</td>
<td>69.7</td>
<td>32.4</td>
<td>105.1</td>
</tr>
<tr>
<td>Q3-08</td>
<td>65.2</td>
<td>31.4</td>
<td>97.5</td>
</tr>
<tr>
<td>Q4-08</td>
<td>58.5</td>
<td>24.6</td>
<td>94.6</td>
</tr>
<tr>
<td>Q1-09</td>
<td>93.8</td>
<td>30.7</td>
<td>97.6</td>
</tr>
<tr>
<td>Q2-09</td>
<td>81.4</td>
<td>41.4</td>
<td>99.7</td>
</tr>
<tr>
<td>Q3-09</td>
<td>88.9</td>
<td>46.8</td>
<td>98.7</td>
</tr>
<tr>
<td>Q4-09</td>
<td>100.0</td>
<td>55.2</td>
<td>117.6</td>
</tr>
</tbody>
</table>


Vasil Tzanov - 9780857937513
Downloaded from Elgar Online at 07/15/2019 11:59:48AM
via free access
unemployment was revealed after four quarters in which the number of those unemployed for more than 12 months rose by 19 per cent: 2009 has thus been characterized by growth in long-term unemployment.

5. EFFECTS ON WAGE INEQUALITY

The overall impact of the recession on wage dynamics was characterized by reductions in the nominal and real rates of growth, although they remained positive during the period 2009–2010. This effect was not distributed evenly among economic sectors, form of ownership, occupations, professions and so on. As a result, wage inequality has changed in these respects.

5.1 Wage Inequality Between Public and Private Sector

Average earnings in the public sector in Bulgaria are traditionally higher than those in the private sector. Average wages in the public sector from 2000 were higher (anything between 27 per cent and 48 per cent). However, the inequality between wages in the public and private sectors has shown a downward trend since 2002. The wage gap fell from 32.5 per cent in 2002 to 23.7 per cent in 2007 and then 23.5 per cent in 2008 and...
23.1 per cent in 2009. The recession to some extent contributed to further reduce this disparity. The restrictions on wages financed by the budget, initiated in 2009 and 2010, caused a lower rate of wage growth in the public than in the private sector (Figure 3.8), especially after restrictive measures were introduced (second half of 2009). Figure 3.8 shows a decline in both sectors from mid-2008, but with the decline in the public sector being more significant. The average gross wage in the public sector increased by 10.4 per cent in the fourth quarter of 2009 (in comparison to the fourth quarter of 2008), while wages in the private sector rose by 14.7 per cent. The difference was bigger at the beginning of 2010 when the gross average wage in the public sector went up by 6.1 per cent, in contrast to 11.5 per cent in the private sector.

Due to the crisis, the difference between earnings in the public and private sectors has declined. The wage gap calculated on the basis of quarterly data clearly confirms this. During 2008, the wage gap increased significantly, reaching over 30 per cent at end of the year, while in 2009 it remained almost stable and in 2010 it declined. The wage gap in the first quarter of 2010 fell by 4 percentage points on an annual basis, reaching 18.2 per cent, and further decreased to 17.2 per cent in the third quarter. This trend is likely to continue until the end of 2010 because of the restrictive wage policy in the public sector.

5.2 Wage Inequality by Sectors: Public Employees Hardest Hit

Wage development across economic sectors during a recession is different depending on firms’ adjustment to the crisis. All sectors experienced a progression of average nominal wages but the overall tendency is downwards (Figure 3.9). The average wage in manufacturing increased at fairly stable rates of around 10 per cent on an annual basis during the recession. In the first quarter of 2010, the average wage in manufacturing rose by 9.1 per cent in comparison to the same period of 2009. In contrast, wages in construction experienced higher rates (over 20 per cent) in 2009 and fell significantly (to 4.1 per cent) in the third quarter of 2010. Wages in the financial sector also grew, but with very low rates in comparison to the pre-recession period.

Employees in the public administration appeared to be most affected by the crisis. The wage restrictions caused a strong decline in nominal wage growth which became negative at the end of 2009. Compared to the pre-recession period, the average wage in public administration in the last quarter of 2009 decreased by 15 per cent.

These differences in wage dynamics across economic sectors lead to changes in relative wages and inequality. Generally, the recession has had an equalizing effect on wage inequality among economic sectors.
Work inequalities in the crisis

The following evidence supports this conclusion. First, wage dynamics in high wage sectors were lower than in low wage sectors. For example, the average wage in the financial sector increased by 7.1 per cent in the fourth quarter of 2009, while wages in hotels and restaurants increased by 14.0 per cent and in agriculture by 12.5 per cent.

Second, there was reduction in the wage differential between the highest and lowest wage branches. The difference between the sectors with highest and lowest average wages declined from 3.6 in the first quarter of 2008 to 3.2 in the same quarter of 2009 and further to 3.1 in 2010.

Third, the coefficient of variation, that measures the variability of sectoral wages in relation to the average wage, based on quarterly data for the period 2008–2010, presents a clear downward tendency. This means a lower deviation of sectoral wages from the average, indicating decreasing wage inequality by sectors. It declined steadily from 0.51 in the fourth quarter of 2008 to 0.46 in the first quarter of 2010.

5.3 Effect on Low-paid Workers

The impact of the crisis on low-paid workers in Bulgaria could be analysed by comparing the dynamics of the minimum wage and low pay (LP) threshold. There is no statistical information on wage distribution which

Source: National Statistical Institute.

Figure 3.9 Wage dynamics in selected economic sectors, Bulgaria, 2008–2010 (percentage change between current quarter and same quarter of previous year)
Bulgaria

would enable us to analyse the changes in the proportion of workers below the minimum wage and low pay. The effects on low-paid workers in the crisis differ from those in pre-recession years. It was found before the crisis that there was compression of the wage distribution from the bottom and the distance between low and average wages narrowed (Tzanov 2010a).

During the recession, the Government froze the minimum wage and public sector wages for 2010. This led to an increasing gap between the minimum wage and the low pay threshold, the latter increasing more since it is measured as two-thirds of the median or average wage. The low pay threshold rose by about 9.9 per cent, while the minimum wage remained unchanged throughout 2010. As a result, the minimum wage/low wage ratio shows a downward trend (Figure 3.10). This means that the pressure for higher wages on the bottom of the wage distribution began to relax in comparison to previous periods (2005–2006, when the minimum wage increased faster than the average wage) and the protective power of the minimum wage declined. In practical terms, this means more low-paid workers because the low pay threshold increased and the minimum wage remained unchanged.

5.4 Varying Wage–Employment Trade-offs by Sector and Enterprise

Firms’ adjustment to the crisis includes different patterns, depending on the extent to which the recession affected economic performance. In the hardest hit firms, a combination of employment adjustment, working time

Source: National Statistical Institute.

Figure 3.10 Dynamics of the minimum wage/low wage ratio, Bulgaria, 2007–2010
Work inequalities in the crisis

In less affected firms, reductions in wages and hours worked were often sufficient and made it possible, in particular, to retain skilled workers. The case studies confirm the range of company approaches to adjustment. Generally, the trade-off between wages and employment appeared to be a frequent arrangement for adapting to the crisis. Across economic sectors, the wage–employment trade-off was applied differently, although the general practice consisted of a reduction of employment while maintaining positive, albeit reduced wage growth (Figure 3.11).

In the hardest hit sectors (manufacturing and construction), employment decreased faster than wages. The positive wage development in manufacturing was made possible by growing rates of employment reduction (Figure 3.11, panel A). The number of employees has declined at a growing rate, quarter by quarter (from 6.1 per cent in the first quarter of 2009 to 12.7 per cent in the same period of 2010). This implies a strong downward

Source: National Statistical Institute.

Figure 3.11 Wage and employment dynamics in some sectors, Bulgaria, 2009–2010 (percentage change between current quarter and same quarter of previous year)
replacement between wages and employment. At the beginning of the recession, 1 per cent wage growth corresponded to a 0.6 per cent decline in the workforce, while in the same quarter of 2010 this ratio was 1:–1.4 (that is, 1 per cent wage growth corresponded to a 1.4 per cent decline in the labour force). Thus, a reduction in employment allowed positive wage growth.

A more severe decline in employment and wage growth was observed in construction (Figure 3.11, panel B). Wage dynamics decreased by 19 percentage points during the period 2009–2010 (from 23.7 per cent to 4.7 per cent in the first quarters of the two years), while employment contracted by 25.6 per cent. A 1 per cent increase in wages coincided with a 5.4 per cent decrease in employment. This indicates that in construction there was not a strong relationship between changes in wages and employment and thus employment adjustment prevailed. The situation in the financial sector, which has not been so affected by the recession, is different. The positive wage growth is not always accompanied by the reduction of employment and the trade-off appears only in some quarters (third and fourth quarters of 2009).

The adjustment of the public administration to the crisis was accomplished by reductions in both wage growth and employment. The ongoing reform in the public administration (2009–2010) optimized employment by cutting redundant jobs. In particular, this was observed at the end of 2009 and the beginning of 2010. In addition, the wage restrictions strongly reduced the rates of growth and the peak of the reduction was observed in the fourth quarter of 2009; wages in that quarter declined by 15 per cent in comparison to the same period of the last pre-recession year (2008) because all annual bonuses were cut.

### 5.5 Income Inequality and Impoverishment

The equalization effect on sectoral wages was also revealed with regard to household incomes but to a much lower extent (Table 3.6). Income inequality, measured by the Gini coefficient, decreased slightly in 2009 after a 1 percentage point growth in 2008.

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gini</td>
<td>26.4</td>
<td>24.9</td>
<td>24.1</td>
<td>25.3</td>
<td>26.3</td>
<td>26.2</td>
</tr>
<tr>
<td>S80/S20</td>
<td>4.0</td>
<td>3.7</td>
<td>3.5</td>
<td>3.7</td>
<td>3.9</td>
<td>3.9</td>
</tr>
</tbody>
</table>

Source: National Statistical Institute.
Work inequalities in the crisis

Also, the burden of the recession was equally distributed among low and high income households. Disparity between the incomes of the highest 20 per cent of households and the bottom 20 per cent did not change in comparison to the pre-recession year. The effect of the crisis on impoverishment has been quite different among different social groups. The disappearance of incomes from work for those who were forced to leave the labour market led to an increase in poverty among workers (Table 3.7). The percentage of working poor increased by 0.7 percentage points in 2008, halting the downward tendency since 2004.

In contrast to working people, inactive people (pensioners and so on) are characterized by a declining poverty rate. Not all inactive groups have experienced a reduction of poverty. The poverty rate among the unemployed went up from 43.3 per cent in 2008 to 44 per cent in 2009, while among pensioners it dropped from 17 per cent to 15.5 per cent due to the increase of all pensions from the middle of 2009.

Among working people, employees are in a more disadvantageous position than the self-employed. The poverty rate has risen by 0.8 percentage points for employees, but for the self-employed it decreased slightly (−0.2 percentage points). Generally, budgetary restrictions have had a negative impact on household incomes and have caused an increase of poverty.

With regard to the impact of the crisis on gender impoverishment, there are also differences. The poverty rate for women increased more (0.6 percentage points) than for men (0.1 points). This is probably due to the higher income differences between them because inflows into unemployment affect men more than women.

Table 3.7  At risk of poverty rate among different households, Bulgaria, 2004–2009 (%)

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working poor</td>
<td>6.8</td>
<td>5.9</td>
<td>5.5</td>
<td>5.0</td>
<td>5.0</td>
<td>5.7</td>
</tr>
<tr>
<td>Inactive poor</td>
<td>19.3</td>
<td>19.5</td>
<td>20.2</td>
<td>20.5</td>
<td>21.4</td>
<td>20.4</td>
</tr>
<tr>
<td>Employees</td>
<td>6.9</td>
<td>5.6</td>
<td>5.7</td>
<td>4.9</td>
<td>4.5</td>
<td>5.3</td>
</tr>
<tr>
<td>Self-employed</td>
<td>6.1</td>
<td>8.7</td>
<td>2.8</td>
<td>5.9</td>
<td>10.0</td>
<td>9.8</td>
</tr>
<tr>
<td>Men</td>
<td>13.0</td>
<td>12.8</td>
<td>11.8</td>
<td>11.3</td>
<td>12.7</td>
<td>12.8</td>
</tr>
<tr>
<td>Women</td>
<td>17.4</td>
<td>15.4</td>
<td>15.7</td>
<td>16.6</td>
<td>15.8</td>
<td>16.4</td>
</tr>
</tbody>
</table>

Source: National Statistical Institute.
6. INEQUALITY WITH REGARD TO OTHER WORKING CONDITIONS

6.1 Reduction of Working Time: An Option for All Workers?

The most popular reaction to the crisis among firms was to reduce working time. To protect employment the Government introduced a compensation scheme at the beginning of 2009. In the firms with a trade union, the decision on a working time reduction was taken through negotiations (see case study 1). This scheme allowed workers to receive compensation for short-time working. However, the coverage of the compensation scheme remained limited: only a relatively small number of employees (19,485) and firms (531) received compensation for short-time working in 2009. The number of workers obtaining compensation fell further to 6,188 in 2010.

The total number of hours worked by all workers declined at a growing rate in parallel with the depth of the recession. While total working hours dropped by 0.5 per cent in the first quarter of 2009, at the beginning of 2010 they shrank by 7.5 per cent. A higher contraction of working time is observed among employees than among the self-employed. The hours worked by employees fell by 8.6 per cent in the first quarter of 2010, but those of the self-employed decreased much less (by –3.3 per cent). Most self-employed work as shopkeepers and have no reason to reduce working time.

The reduction of working time is unequally distributed across economic sectors but has been present nearly everywhere (Figure 3.12). A higher reduction has been observed in sectors harder hit by the recession. Construction is the sector with the highest reduction. During the second half of 2009 and the first quarter of 2010, hours worked decreased by over 15 per cent each quarter. Industrial firms are also reducing working time, but at a lower rate. Working time in industry has declined less than 10 per cent each quarter since mid-2009, so over the whole period of the recession it has been reduced by 9.6 per cent. The lowest decrease in working time has been in services (trade, transport, hotels and restaurants). In this sector, the total number of hours worked declined by between 4 and 9 per cent during the same period. An exception is the financial and business services sector. Working time in this sector has increased, following its overall tendency to rise during the past few years.

Differences in working time reductions also appeared between types of contract. According to LFS data, average weekly working hours fell from 40.5 hours in 2008 to 40 hours in 2009. The contraction of working time affected both full-time and part-time workers, but to different extents. For full-time employees the weekly fall in working time was 1.2 per cent (from
Work inequalities in the crisis

40.8 hours in 2008 to 40.3 hours in 2009), while for part-time employees the contraction was much greater (4.7 per cent).

6.2 Health and Safety: Mitigated Effects of the Crisis

The impact of the crisis on health and safety presents a mixed picture. Some basic risk factors (stress, accidents, noise, dust, toxicity and so on) improved, while other remained unchanged or deteriorated. According to the data from the Annual Reports of the Labour Inspectorate, the share of employees working under unfavourable conditions has declined over the past few (from 2007) years, continuing in 2009. The share of workers with poor working conditions fell from 17 per cent in 2008 to 12 per cent in 2009. The improvement in the working environment mainly affects firms in mining and electricity supply. However, the share of workers with unfavourable working conditions remained high (over 53 per cent) in firms in metal extraction, electricity supply, coal mining, production of paper and metal founding.

In the case of particular risk factors the Labour Inspectorate found that the highest percentage of workers were exposed to unfavourable microclimates (dust, lighting and so on). Almost 52 per cent of the workers (66,410

Source: National Accounts.

Figure 3.12 Quarterly changes of hours worked in selected economic sectors, Bulgaria, 2008–2010 (percentage change between current quarter and same quarter of previous year)
in 2009) worked under such conditions. This share remained almost unchanged in comparison to the pre-recession year. Workers in construction, cement, glass and wood are most seriously affected by inappropriate microclimates.

The other widespread risk factor is noise in the workplace. About 40 per cent of the workers inspected have to work in conditions which breach the standards (50,387 in 2009). Noisy workplaces are concentrated in specific branches, where technological processes are characterized by intensive noise (metal construction, timber and wood-processing industry, electricity supply, textile industry and so on). There was no reduction in noisy workplaces during the recession.

Among risk factors, only accidents at work had a tendency to decline. This concerns not only the total number of accidents but also the number of accidents ending in fatalities and accidents leading to invalidity (Figure 3.13). The total number of accidents at work has decreased by about 39 per cent since 2005 (from 3,638 cases in 2005 to 2,476 cases in 2009). A higher reduction has been observed in accidents that cause invalidity. Their number fell significantly, from 76 cases in 2005 to 13 cases in 2009 (about 83 per cent). Accidents ending in fatalities also decreased. It is worth noting that the economic crisis did not impact negatively on accidents at work. It is notable that during the recession (2009) the number of accidents at work declined at the highest rates. Compared to 2008, their total number fell about by 21.6 per cent, while fatal accidents went down by 49.6 per cent and accidents causing invalidity by 51.9 per cent. This
general downward tendency continues in 2010. While this mainly reflects the continuation of a long-term trend that started in the early 2000s, it might also reflect lower working hours.

### 6.3 Difficult Work and Family Life Balance in the Crisis

Analysis of the reconciliation of work and family life before the crisis shows that work appeared to be a priority in people’s living strategies (Beleva and Tzanov 2006). Most families tried to compensate low labour incomes by increasing working time, taking a second job or postponing the birth of children. The difficulties that families face in balancing work and family were supplemented by the lack of social infrastructure for child care, insufficient use of flexible working time and so on.

The worsening of economic and labour market conditions caused by the crisis influenced arrangements of work and family life in different ways. The interaction of positive and negative impacts on families’ decisions makes them more difficult to assess. On the one hand, the crisis provides an opportunity for better reconciliation of work and family in the sense that it left more time for family life; on the other hand, the high risk of unemployment has led to higher competition for jobs and less attention to family responsibilities.

Another positive effect on work–family life reconciliation was the forced reduction of working time. In the Bulgarian model, where work dominates family responsibilities, shorter working time provides an opportunity to increase the time devoted to the family. This effect is not strong, however, given that average weekly working hours fell by only 0.5 hours per week and benefited men more than women (0.7 hours for men versus 0.4 hours for women).

Work–life reconciliation depends strongly on government support for family dependents (children and dependent elderly). This should be considered in terms of two aspects: first, protection of maternity within the family (ensuring maternity benefits and leave), and second, providing support outside the family for child care and care for the elderly (crèches, kindergartens, homes for elderly people and so on). Analysis of social protection indicates that resource provision with regard to the social protection of maternity has tended to increase during the past few years, including the year of recession (Tzanov 2010b). In 2009, the level of maternity compensation rose by 31 per cent, accompanied by an increase in the duration of benefits (from 315 to 410 calendar days).

Resource provision for child care outside the family also rose during the recession. The number of places in crèches grew by 1,861 (7.4 per cent) in comparison to the pre-recession year. In general, all these figures suggest
that government support for maternity and child care during the crisis improved conditions for the reconciliation of work and family duties.

6.4 Vocational Training as a Response to the Crisis

One of the most effective answers to the crisis, and one that will have long-term effects on economic restructuring, is investment in human capital. Support for vocational training in particular will increase the quality of the labour force and jobs. The measures taken by the Government and employers will have both short- and long-term effects on economic development.

During the recession, the Government continued to implement training programmes launched in previous years and introduced new ones, but the budgetary restrictions imposed sharply reduced the coverage of these programmes. The number of unemployed who started vocational training declined by 16,053 (about threefold) in the period 2008–2009. A further reduction is expected in 2010. The number of unemployed participants in training has declined by 6,934 in 2010 compared to 2009, a 79 per cent fall. This considerable contraction of vocational training coverage suggests that the Government’s restrictive budgetary policy does not provide sufficient support for those who have lost their jobs and require re-qualification.

The willingness of particular unemployed groups to participate in training programmes did not change during the recession. Traditionally, young people (up to 29 years of age) make up the highest proportion of participants. They account for 30.8 per cent (2,670 persons) of the total number of training participants. Older unemployed people (above 50 years of age) also show high interest in vocational training. Compared to 2008, their share has increased by 3.2 percentage points to 24.1 per cent. This shows that both risk groups among the unemployed participate strongly in training.

The situation is particularly unfavourable with regard to the educational level of participants in training courses. Low-skilled unemployed persons are poorly represented in training programmes, due to a lack of interest. The proportion of unemployed persons with a primary and lower education participating in training in 2009 was the smallest (15.8 per cent) compared to higher skilled groups, despite the fact that it increased by 3.6 percentage points in relation to 2008. Next come people with a lower secondary education (16.4 per cent). Nearly one-fifth (19.7 per cent) of participants have higher education. Their share increased by 4.1 percentage points during the recession. It seems that inequality with regard to training increased in relation to educational level.
Depending on the type of training course the expected effects might emerge in the near or distant future. Training courses that offer new professions or new skills will have long-term effects. Most of the courses offered to the unemployed have such a character. The other type of training is aimed at upgrading existing skills (accounting, basic computer skills, information technology and so on). Such courses have short-term effects.

A particular problem facing vocational training in Bulgaria is its relatively low coverage at company level. A study of lifelong learning (Atanasova 2010) shows that about 30 per cent of the enterprises offered vocational training in 2007. During the recession, this share probably decreased due to the limited financial resources of the firms, as shown by the case studies. Only a relatively small proportion of enterprises (in construction, trade, transport and manufacturing) organized training (between 25 and 35 per cent). In other sectors (finance, mining and electricity) about 50–70 per cent of the firms offered vocational training. Inequalities in training also appeared between small/medium-sized and large enterprises. Small and medium-sized firms have been found to conduct training only rarely.

6.5 Social Dialogue – Reinforced During the Crisis

The negative effects of the recession on the economy and the need to take adequate anti-crisis measures to overcome them strengthened social dialogue at all levels. Depending on a given level’s degree of competence a number of different issues were discussed, in particular, dismissals, wage adjustment, short-time working and unpaid leave.

National social dialogue has traditionally discussed the issues of national minimum wage fixing, minimum insurance thresholds and other industrial relations issues of national scope. Besides these traditional issues, the National Council for Tripartite Cooperation (NCTC) discussed measures initiated by the social partners to combat the impact of the severe economic crisis. In September 2009, the NCTC accepted 32 anti-crisis measures, including a national information system for job search, an increase in the maximum payment to which workers are entitled in the case of enterprise bankruptcy, the creation of mechanisms and procedures to accelerate the reintroduction of VAT, reducing corporate debt and so on. The trade unions accepted these measures, but expressed their disappointment at the rejection of their proposed precautionary measures with regard to the incomes of employees and the unemployed (increase the minimum wage and unemployment benefits, introduce a tax free minimum income and so on).
In March and April 2010, the new round of negotiations discussed 64 measures proposed by the Government. The social partners reached an agreement on four groups of measures in support of fiscal policy; (i) limitation of public expenditure and recovery of financial discipline; (ii) ensuring additional financial resources; (iii) supporting household incomes and domestic demand; and (iv) measures to support the labour market and the social insurance system.

Social dialogue at national level also covers measures related to changes in labour and insurance legislation, the pension system, untaken paid leave and patient’s charters. In May 2010, the NCTC approved the changes in the state budget for 2010. All these activities of the National Council for Tripartite Cooperation suggest an increasing role for national social dialogue in solving the problems emerging from the crisis.

Social dialogue at branch and firm level has also become stronger in response to the crisis. Many new collective agreements have been signed that reflect the new circumstances. Efforts are being directed towards reaching agreement on employment, wages and working time, among other things.

7. CASE STUDIES: DIFFERENT CRISIS ADJUSTMENTS AND DIFFERENT IMPACTS ON WORKING CONDITIONS AND INEQUALITIES

The sectors most affected by the crisis are manufacturing and construction. For this reason, the case studies focused on enterprises from these sectors. The effects of the crisis on working conditions varied substantially between companies. Firms producing for export were hardest hit. Depending on the economic situation and management objectives workers in some companies faced multiple negative effects, while in others the workers were less affected. The aim of the case studies was to analyse the impact of the crisis on working conditions and work inequalities at enterprise level and to discover the extent to which our earlier conclusions are supported by the facts.

The case study covered three enterprises from different branches: chemicals, clothing manufacturing and construction (industrial buildings). For the sake of comparison, we chose both large and smaller and medium-sized enterprises, and both with and without trade unions. Table 3.8 (overleaf) summarizes the main features of the companies and their main adjustment mechanisms in the crisis, which obviously led to a differentiated impact on both working conditions and work inequalities.
### Table 3.8 Main characteristics of case-study companies

<table>
<thead>
<tr>
<th>Case 1: Sviloza</th>
<th>Case 2: FFCP</th>
<th>Case 3: Robsov</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sector</td>
<td>Chemicals</td>
<td>Construction</td>
</tr>
<tr>
<td>Employment</td>
<td>540</td>
<td>228</td>
</tr>
<tr>
<td>Employment reduction in the crisis</td>
<td>50 employees or 9%</td>
<td>78 employees or 34%</td>
</tr>
<tr>
<td>Main form of adjustment</td>
<td>Wages: basic wage cuts, Bonus cuts, Working time reduction</td>
<td>Employment: strong reductions</td>
</tr>
<tr>
<td>Main advantages in terms of inequalities</td>
<td>No lay-offs, no inequality in employment</td>
<td>No wage cuts and no wage inequality</td>
</tr>
<tr>
<td>Main drawbacks in terms of inequalities</td>
<td>Severe wage cuts led to declining purchasing power; trade unions helped to make time and wage cuts equal for all</td>
<td>Negative effects of a restrictive budgetary policy on employment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Deterioration of all working conditions led to higher inequality; absence of social dialogue impeded any possible negotiated trade-offs</td>
</tr>
</tbody>
</table>

### 7.1 Case Study 1: Marked Wage Decline in Chemical Company

#### 7.1.1 High output contraction during recession

‘Sviloza’ is a private joint-stock company in the chemical industry and consists of four holdings. The basic enterprise is ‘Svilocell’ producing cellulose and carboxymethyl cellulose for the paper industry. The firm also produces viscose silk and wood briquettes. Svilocell is the only producer of these products in Bulgaria and the Balkans. There has been considerable investment in technological modernization. Nearly 95 per cent of production is exported, to a number of EU countries (including Germany, Italy, Greece and Austria).
The world economic crisis hit the company hard. The world prices of cellulose collapsed dramatically (by nearly 50 per cent) and, at the same time, the prices of wood pulp rose in Bulgaria. As a result, sales in the Bulgarian market fell and exports stalled. In the face of this severe deterioration in economic conditions Svilocell slowed down production in February–December 2009.

7.1.2 Modest effect on employment: a key priority in the firm
Sviloza is a large company. The total number of employees was 540 in 2008. The number of temporary workers was negligible (below 10). All employees worked full-time. There were no part-time or seasonal workers. The age structure of the personnel was favourable because nearly 25 per cent of all workers were under 35 years of age. The educational attainment of employees was also fairly good: about 14 per cent of workers had a higher education, 81 per cent had a secondary or specialized secondary education and only 5 per cent were low-skilled workers. The total number of workers decreased only slightly during the recession (by about 50 employees or 9 per cent), compared to 2008. The main management objective was to preserve employment and particularly that of skilled employees. Most of those dismissed were low-skilled workers in services. During the recession the other employment conditions (type of contracts) did not change. There were no cases of transition from permanent to temporary contracts and also there were no shifts from full-time to part-time. The employment structure also remained stable by education and age. In general, the workers experienced only a modest negative impact on employment.

7.1.3 Considerable wage reductions
The firm’s deteriorating economic situation led to a marked reduction in wages. The employer did not disclose the firm’s wage levels and the change in the average wage (due to confidentiality), but did comment that the wage reduction had been significant. All workers received much lower wages than in the pre-recession period. This concerns not only the basic wage but also additional payments, such as bonuses.

During the period of short-time working, all employees received compensation not exceeding 120 BGN (60 euros) per month. Individual compensation was calculated on the basis of hours worked and did not affect wage disparity in the firm. Also, the sharp reduction in all wages during the recession did not significantly influence inequality, which remains almost unchanged. The minimum wage in the firm (290 BGN or 145 euros) was 20 per cent above the national level and did not change during 2009.
7.1.4 Mixed effects on other working conditions

Reduction of working time  The other negative effect on working conditions was the temporary reduction of working time. All workers, including executives, worked a four-hour day during April–July 2009. This short-time working was compensated by the Government under the abovementioned compensation scheme. Reducing working time in the firm had a positive effect on employment: relatively few workers were dismissed. To protect employment, the management also made it possible for workers to take unpaid leave. About 50 workers did so, some of them taking up secondary employment elsewhere.

Maintenance of health and safety  Investment in technology during the period 2005–2008 improved job quality considerably. Most technological processes were automated and this created healthier and safer working conditions. Besides this, spending on maintaining health and safety remained unchanged.

Reduction of expenditure on training  The firm, however, reduced expenditure on training. Only a limited number of workers attained further qualifications in 2009. The requirements of the newly introduced technological processes for qualified workers were met in the years before the recession.

7.1.5 Strengthening social dialogue in the firm
There are two trade union organizations in the firm: the Confederation of Independent Trade Unions of Bulgaria (CITUB) and CL ‘Podkrepa’. Both organizations evaluated social dialogue in the firm positively. During 2009, there were negotiations on employment, wages, working time and maintaining social benefits, among other things. The agreements reached aimed at preserving employment in the firm, shifting to short-time working, use of unpaid leave and cutting wages, while maintaining all social benefits. The trade unions agreed that the firm’s priority task was to save employment.

The trade unions expressed satisfaction that social benefits were not reduced. Workers were given additional paid leave (five days), monthly food vouchers, free food and transport to the workplace. Free medical services, provided by the employer, continued despite the difficult economic situation in the firm during the crisis.

7.1.6 Concluding remarks
The case study illustrates the different ways in which the crisis influenced working conditions in the firm. Most affected were wages, working
time and training, while employment, types of contract and social benefits fared better. Social dialogue in the enterprise was strengthened and helped, in fact, to avoid large employment adjustments, while preventing serious deterioration of working conditions, although wages were used as the main adjustment variable. Workers participated in negotiations on working conditions. This enterprise is a good example of a strong trade-off between employment and wages. To maintain employment, wages were reduced sharply. This made it possible to retain qualified technological staff in the hope of better times to come.

7.2 Case Study 2: Considerable Reduction of Employment in a Construction Firm

7.2.1 Why the construction sector?
Construction has been hit hard by the crisis. Industrial building and house building were affected to different extents. Firms oriented towards house building after the rapid development of the past few years faced a sharp decrease in demand and production in 2009. In contrast, enterprises specializing in industrial buildings suffered from low demand during the entire period of transition and firms were constantly under pressure to restructure. The chosen firm belongs to this category.

7.2.2 Dramatic shrinkage of output
The Factory for Ferroconcrete Constructions and Products (FFCP) is one of the best known firms in construction. It was founded in 1961 and has undergone significant changes in production and technology. Starting with the production of ferroconcrete traverses for railways the company’s product range widened over the years and the firm is now able to produce all ferroconcrete elements for industrial buildings. FFCP was privatized in 1999.

Before and during the recession the firm limited its range to two groups of products: first, ferroconcrete traverses for overground and under-ground railways, and second, ferroconcrete poles for electro transmission networks. All production is directed towards the domestic market where the company enjoys a monopolistic position.

During the recession output fell significantly. Sales and production of ferroconcrete traverses ceased, while the production of ferroconcrete poles declined strongly. The enterprise now produces mainly marginal products (elements for road and railway building).

7.2.3 Restrictive budgetary policy further worsened economic activity
As a construction firm FFCP is heavily dependent on public contracts. Most orders are from the Government and concern large construction
projects (electrification of the railways, building of the metro in Sofia and so on). The Government appears to be the main source of the firm’s revenues. During the recession, the financial situation worsened significantly because the Government postponed (in practical terms, halted) all payments. In this way, the restrictive budgetary policy directly harmed the enterprise.

7.2.4 Considerable negative effect on employment
The FFCP is a medium-sized enterprise. All workers are employed on permanent and full-time contracts. There are no workers on flexible contracts (fixed-term, seasonal or part-time workers). The educational structure of the workforce is normally distributed. Most have completed a secondary education. A relatively small part (17 per cent) are low-skilled.

Employment in the firm started to decline much earlier than the advent of the recession that started in Bulgaria in early 2009. The number of employees fell by 7.9 per cent in 2008 (from 228 workers in 2007 to 210 persons in 2009). In 2009, the firm dismissed about 60 workers (29 per cent), which means that the workforce now numbers 150. Most of the workers made redundant were low-skilled and engaged in auxiliary activities.

According to the employer, this was the only solution in the current situation. Output had fallen dramatically (traverse production had practically ceased) and thus the firm could not use these workers. There is no short-term prospect of production resuming.

7.2.5 No changes in wages and other working conditions
The substantial reduction in employment made it possible to maintain the wages of those remaining at the pre-recession level. The minimum and average wages in the firm are above the respective national levels. Also, there was no change in wage disparity.

In these circumstances, the firm has not used flexible forms of employment. Working time remains unchanged; labour contracts remain as they were; unpaid leave has not been resorted to.

The firm’s policy in relation to training and qualifications remained encouraging, even in the recession. The technical staff are obliged to take periodical training courses and the firm provides the necessity resources. Spending on health and safety has been maintained. In addition, the firm provides medical services.

7.2.6 Concluding remarks
This case study presents a limited number of negative effects on working conditions. The substantial reduction in employment to some extent
limited the deterioration of other working conditions. The particular conditions in the construction sector forced the management to dismiss surplus workers. This case study also shows the negative effects of a restrictive budgetary policy on the business climate. Non-payment of government liabilities for public orders has further worsened the economic situation in many supply firms.

7.3 Case Study 3: Deterioration of all Working Conditions in Clothing Company

Textiles and clothing was found to be one of the branches of manufacturing hardest hit by the crisis. Production is strongly connected with international markets. The effects of the crisis in this sector have been mainly negative with regard to employment, wages and all other working conditions. Typical in this respect is the company ‘Robsov Ltd’, a medium-sized private company.

7.3.1 Strong decline in output
Production is mainly for export. The company works with materials supplied by foreign clients and depends on commissions from abroad. For this reason, the effects of the world crisis on the firm’s output showed up earlier than in the country as a whole. During the recession the firm lost a significant part of its foreign markets and output contracted by around 60 per cent. In addition, the company faced problems with financing because credit conditions in Bulgaria deteriorated. This situation negatively affected working conditions in the firm.

7.3.2 Strong negative effect on employment and wages
The total number of employees in 2008 was 135 workers. Most were on permanent contracts (80 per cent) and the rest on temporary contracts. New workers are engaged on temporary contracts with a duration of six months. All work full-time. In relation to educational status, most workers have completed secondary and elementary education. The company experienced shortages of qualified staff both before and during the recession.

The negative impact of the recession on employment has been proportionate to the fall in output. From the beginning of 2009, employment started to decline, falling as low as 75 workers in the most difficult period. Over a period of a few months the number of employees decreased by over 44 per cent. Most of those dismissed were low-skilled workers.

Wages decreased for all categories of workers. In comparison to the pre-recession period, the average wage in the firm declined by 44.4 per cent (from 450 BGN in 2008 to 250 BGN in 2009). In this period, the starting
wage in the company also declined due to part-time work (from 240 to 150 BGN). Changes appeared in the wage structure. All additional payments, such as bonuses, were also cut.

7.3.3 Deterioration of other working conditions
To save the remaining part of the workforce the company used flexible working time and unpaid leave. In the period January–June 2009, all workers shifted to short-time working (four hours a day) and received wage compensation. The management also encouraged low-skilled workers to take unpaid leave, up to a maximum of 45 days. According to the management, all these measures could not prevent employment and wage reductions.

Although the problem of low qualifications persists, the management did not make any attempt to solve it. Spending on training and recruitment was cut. Health and safety provisions were at the required minimum because the available resources had been reduced.

7.3.4 Concluding remarks
The case study show that firms hardest hit by the crisis have generally allowed working conditions to deteriorate. Workers in this clothing company suffered from multiple negative effects due to the crisis. There were no trade-off effects between working conditions. The absence of social dialogue impeded any possible negotiated trade-offs. All working conditions deteriorated to different extents and this brought with it greater inequality.

8. CONCLUSIONS
The research presented here illustrates a number of key issues in Bulgaria’s experience of the crisis and its impact on labour market inequalities. A substantial decline in total output worsened working conditions. The unequal distribution of negative production effects by sector and enterprise caused the emergence of inequality in employment, unemployment, wages and other working conditions. The other source of inequality in the labour market has been the restrictive budgetary policy. Imposing restrictions on public expenditure (including public sector wages) has multiple effects on the augmentation of inequality in employment, unemployment and wages. With limited resources, the firms were forced to reduce employment or cut wages, generally both.

The deterioration in labour market conditions concerns all key indicators. Employees in manufacturing and construction faced the highest risk of job losses during the recession. The restrictive government policy
also put workers in administration, health and education at risk. The crisis has provoked raising inequality among workers in accordance with educational and occupational levels: higher skilled employees and professionals have been less affected by the recession, while elementary occupations and low-skilled workers have been hard hit and form a particularly disadvantaged group of the unemployed.

Young people also represent a particular risk group in the Bulgarian labour market. Their share in employment is relatively small and their share of unemployment is correspondingly high. The measures taken by the Government in the pre-recession years significantly improved their situation in the labour market, but the crisis halted this positive trend. The recession hit youth employment and unemployment hard. The Government’s programmes appear to have been ineffective in counteracting the crisis.

The effects of the crisis on wage dynamics and inequality are more modest. The evidence suggests positive dynamics in nominal and real terms, but at low rates. This positive growth of wages is compensated by employment decline. The case studies identified a strong trade-off between employment and wages, particularly in the hardest hit branches (manufacturing and construction). Wage inequality among economic sectors and type of ownership has also changed. The data show a process of wage equalization during the recession. The equalization effect is also revealed with regard to household incomes, but to a much lower extent.

Adaptation to the crisis correlates strongly with the worsening of other working conditions. Most companies used short-time working, not always with compensation. Moreover, the reduction of working time has not been distributed equally across economic sectors. It is not surprising that higher reductions are observed in the most affected sectors. Also, many firms are not able to ensure health and safety conditions in accordance with the relevant standards. Vocational training has been severely limited at both national and company level. The Government has reduced the resources made available for training despite the obvious need for the re-qualification of the unemployed (a situation worsened by the qualification structure of the crisis).

In contrast to working conditions, the crisis has had a positive impact on social dialogue, which has been strengthened at all levels. At national level, the anti-crisis measures applied to reduce the negative effects of the crisis were discussed and consensus was reached. Social dialogue at branch and firm level was also strengthened in response to the crisis.

Government policy in response to the crisis includes a package of measures related to different parts of the economy. Most are aimed at reducing the budget deficit and thus have a restrictive character. Their effects on
the labour market and inequality in many cases have a twofold character. Freezing the minimum wage has increased wage inequality between workers on the minimum wage and other workers. On the other hand, freezing wages in the public sector has reduced wage inequality in relation to the private sector. The reduction of public spending and the postponement of government payments to firms with government contracts have contributed to a deterioration in working conditions in all organizations and firms dependent on the budget. In general, the restrictive public policy as a response to the crisis has generated more inequality in the labour market rather than solving the problems.

NOTES

1. The number of employees declined by 3.7 per cent and that of the self-employed by 0.7 per cent.
2. Calculated as the percentage difference between average gross earnings in the public and private sectors.

BIBLIOGRAPHY