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LABOUR MARKET ADJUSTMENT DURING 2008–2013 IN LATVIA: FIRM LEVEL EVIDENCE



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ABBREVIATIONS

AMECO – Annual Macroeconomic Database of the European Commission COICOP – Classification of Individual Consumption According to Purpose CSB – Central Statistical Bureau of Latvia EC – European Commission ECB – European Central Bank ESCB – European System of Central Banks EU – European Union GDP – gross domestic product NACE Rev. 2 – Statistical Classification of Economic Activities in the European Community OECD – Organisation for Economic Co-operation and Development UK – United Kingdom US – United States WDN – Wage Dynamics Network

ABSTRACT

In this paper we examine firm level survey data collected in the framework of the Eurosystem's Wage Dynamics Network (WDN) in Latvia. The survey explores labour cost adjustment strategies during 2008–2009 and 2010–2013 with the aim to uncover wage, employment, and price adjustment channels for different firm categories during crisis and post-crisis periods. The results show that more than half of firms were affected by a slump in demand and credit conditions during 2008–2009, with the effect being particularly strong on non-exporting firms. Unlike what the macroeconomic picture of average wage suggests, both flexible and permanent wages were adjusted strongly in response to the shock. One third of firms reduced employment or altered its structure strongly, with freeze of new hires and reduction of permanent employees used particularly often. The demand improved during 2010–2013 despite still tight credit conditions. Decrease in working hours, freeze of wages and new employment remained significant measures of labour cost adjustment during the latter period. Improvements in demand conditions transmitted into the increase in base wage, while bonuses were raised relatively less often.

Keywords: firm survey data, wage adjustment, labour force adjustment, price setting

JEL codes: J31, J38, J24, D22, C25

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NON-TECHNICAL SUMMARY

This paper presents the results of firm level survey on labour cost adjustment strategies during the crisis (2008–2009) and the post-crisis (2010–2013) period in Latvia. The purpose of the survey was to obtain detailed information on wage, employment and price adjustments in firms facing different economic and financial conditions. There are various factors that can affect firm behaviour, e.g. firm-specific or market-specific characteristics such as the number of employees, sector, type of ownership, export share in revenues, and changes in demand and credit availability. This detailed information about every individual firm (called micro-level data) allows of exploring factors that determine the firm behaviour regarding wage, labour and price adjustment strategies during the cycle. Unlike macro-level data, micro-level data allow of conducting detailed analysis of structural changes in employment and wages.

The survey was developed within the Wage Dynamics Network (WDN), a research network of 25 central banks in the EU coordinated by the ECB. Latvia's WDN survey was conducted by market and social research agency FACTUM, collecting responses of 557 firms in the summer of 2014. The survey targeted firms, which were established before 2011 and had at least 10 employees at the end of 2013. Two sets of weights were applied to aggregate the results of the survey so that it represents the population of firms (firm number weights) and the population of employees (employment weights).

The survey results show that Latvia experienced a substantial negative demand shock during 2008–2009, while the access to financing and supplies was affected less. Furthermore, the negative demand shock was mostly domestic and reflected the economic overheating before 2008, whereas the subsequent economic revival was primarily based on export growth. Despite a relatively swift strengthening of demand during 2010–2013, the financial conditions improved only gradually, and credit constraints were binding for around half of firms during 2008–2009 and 2010–2013.

The analysis of labour cost adjustment channels in Latvia shows that during the crisis firms decreased their labour costs mainly by reducing base wage and flexible wage components, lowering the number of employees and, to a lesser extent, reducing working hours per employee. The reduction of base and flexible wages was especially pronounced during 2008–2009. Wage freezes were used extensively in 2010 and 2011. Particularly, we show that both frequency and magnitude of wage changes were crucial for labour cost adjustment in Latvia, unlike what the macroeconomic picture of average wage suggests. Labour force reductions were used by one third of firms during the crisis, with freeze of new hires and reduction of permanent employees being the most popular measures. For the majority of firms, competition has tightened since 2008. Along with higher frequency of labour cost adjustments, it explains higher frequency of producer price changes. Overall, this paper affirms the flexibility of labour market in Latvia. Flexible wages, employment and prices have been crucial in engineering the necessary and timely adjustments in the economy, thus paving the way for a quick recovery.

1. INTRODUCTION

Latvia kept an exchange rate peg during the recent boom-bust cycle. While returning to robust economic growth on the back of restoring competitiveness through an internal adjustment strategy, the adjustment channels are far from clear. Macroeconomic data reveal that the unit labour cost adjustment was based on a spectacular labour productivity growth, while the average wage in the private sector remained broadly flat, raising concerns about downward rigidity of wages (Blanchard et al. (2013); Krugman (2013)). Yet the macroeconomic picture may suffer from structural changes, particularly from labour hoarding of high-skilled employees which may bias up the statistics of both average wage and productivity (Krasnopjorovs (2011)). Therefore, using micro-level data in research is crucial for understanding the wage, price and employment adjustment channels of firms over the cycle.

This paper presents the results of the firm level survey uncovering labour cost adjustment strategies of firms during the crisis (2008–2009) and the post-crisis (2010–2013) period in Latvia. The survey was developed within the WDN, a research network of 25 central banks in the EU coordinated by the ECB, and conducted during the summer of 2014. The purpose of the survey was to obtain detailed information on wage, employment and price adjustments in firms facing different economic and financial conditions. In addition, the survey collects information on firm self-reported characteristics, e.g. sector of activity, its size, ownership, structure, export share, level of competition, structure of labour force and its institutional features, etc. Therefore, the resulting dataset allows for detailed analysis of labour force adjustment strategies in different types of firms during the business cycle.

The aim of this research is to provide an overview of the whole set of survey results for Latvia. A detailed cross-country research concentrating on different aspects of labour force adjustment will be developed during the next year.

The harmonised survey questionnaire contains five major parts: firm characteristics, changes in the economic environment (demand and credit conditions) as well as labour force, wage and price adjustments. Special attention is paid to financial conditions of firms and wage and price setting mechanisms.

The analysis of labour cost adjustment channels in Latvia shows flexibility of both wages and employment during the recent economic cycle. More than half of firms were affected by a slump in demand and credit conditions during 2008–2009, with the effect being particularly strong on non-exporting firms. Both flexible and permanent wages were significantly adjusted in response to the shock (around one third of firms reduced wages). The average base wage reduction was 20%. One third of firms reduced employment or altered its structure. Freeze of new hires and reduction of permanent employees were the most widespread measures. Demand conditions improved during 2010–2013 despite still tight credit conditions. Decrease in working hours, freeze of wages and new employment remained significant measures of labour cost adjustment during the latter period. Improvement in demand conditions transmitted into the increase in base wage in 70% of firms, while bonuses were raised less often (in only 40% of firms). The price setting frequency increased, transmitting more frequent changes of labour costs. The competitive pressure grew during both the crisis and the post-crisis period.

The paper is structured as follows. Section 2 gives an overview of Latvian economic development during 2008–2013 and labour market institutions. Section 3 presents sample characteristics of the survey and provides the data robustness check. Section 4 reviews the methodology of general ordered logit analysis. Empirical results are presented in two subsequent sections, with labour cost adjustment strategies of Latvian firms being in the focus of Section 5 and Section 6 presenting characteristics of price setting and its changes. Finally, Section 7 concludes."

2. ECONOMIC AND INSTITUTIONAL CHARACTERISTICS

During the last decade, Latvia experienced a boom-bust cycle followed by economic recovery. For three years in a row (2004, 2005 and 2006), Latvia's GDP growth was the fastest among the EU countries. Latvia closed one third of its income gap with the EU average income level in just 5 years before 2007. This strong income convergence created perception that Latvia could achieve the EU average income in just one generation. Fuelled by low borrowing costs after the EU accession in 2004 and euro peg as from 2005, this led to pro-cyclical behaviour of Latvian households and a real estate bubble. Economic overheating, i.e. the economic growth faster than augmented by fundamentals, was further enhanced by pro-cyclical expansionary fiscal policy, EU fund inflows and emigration. While unemployment decreased below its natural rate and entrepreneurs were claiming that labour shortages were a major business obstacle, real wages were increasing faster than productivity in every sector of the economy, consumer price inflation increased and the demand-driven economic growth resulted in unsustainably high current account deficits. Latvia's output gap exceeded 11% of GDP in 2007 (EC AMECO; March 2015), which was among the highest numbers in the EU.

 Table 1

 Key macroeconomic variables (Latvia; 2002–2014)

Variable	2002	2003	2004	2005	2006	2007	2008
Real GDP (year-on-year growth; %)	7.2	8.6	8.9	10.2	11.6	9.8	-3.2
GDP per capita PPS (EU28 = 100)	41	45	48	51	55	60	60
Unemployment rate (%)	12.5	11.6	11.7	10.0	7.0	6.1	7.7
Inflation (consumer prices; %)	1.9	2.9	6.2	6.7	6.5	10.1	15.4
Variable	2009	2010	2011	2012	2013	2014	
Real GDP (year-on-year growth; %)	-14.2	-2.9	5.0	4.8	4.2	2.4	
GDP per capita PPS ($EU28 = 100$)	53	53	57	60	64	NA	
Unemployment rate (%)	17.5	19.5	16.2	15.0	11.9	10.8	
Inflation (consumer prices; %)	3.5	-1.1	4.4	2.3	0.0	0.6	

Sources: CSB and Eurostat data.

As the global financial crisis started, internal imbalances became increasingly visible, materialising as a bursting domestic housing bubble; the slump of global demand, in turn, had deteriorated exporting opportunities. The mix of these factors has determined the depth of the economic slowdown: Latvia lost 20% of its GDP during 2008–2010, which was the biggest slowdown in the EU.

Unemployment sky-rocketed from 6% in 2007 to above 20% at the beginning of 2010, the highest level in the EU at that time, and led to another wave of emigration. Society's understanding that economic developments were unsustainable during the short boom period determined general acceptance of the large wage cuts, which, in turn, helped restore competitiveness. Meanwhile, high flexibility of consumer prices in Latvia transmitted the effects of contracting demand and decline in world food and energy prices through a sharp drop in inflation. The robust economic growth within 4%–5% per year in 2011–2013 helped the country close the output gap and return the unemployment rate on the track of both the EU average and Latvia's (high) natural rate.

Latvia is one of the few examples of competitiveness restoration through internal adjustment while maintaining an exchange rate peg. However, the question of which was the main adjustment channel remains open. For instance, whether the balance between wages and productivity was restored due to a fast labour productivity rise, as suggested by macro-level data, while the average wage in the private sector remained almost flat; or firms hoarded highly-skilled labour and it biased up the statistics of both average wage and productivity (see Krasnopjorovs (2011)). The WDN survey data have a potential to explain firms' strategies of coping with the crisis and to answer the above question.



Labour productivity Real wage



Labour market in Latvia is rather flexible, characterised by swift changes in wages, employment and working hours during crises. The employment protection legislation (EPL) in Latvia is rather rigid compared with the OECD standards (*OECD Employment Outlook* (2013)). However, it says little about how a particular dispute might be resolved in practice. In the case of Latvia, strict EPL may not imply well-protected workplaces or rigid labour market as argued by Krasnopjorovs (2012). For instance, the Labour Law prohibits the employer from terminating the employment contract with a trade union member without a prior consent of the relevant trade union (and if the trade union does not agree, only the court can dismiss the employee). However, given that trade union density in Latvia is one of the lowest in Europe and trade unions are particularly rare in the private sector, the issue does not add much to the actual employment protection.

The minimum wage in Latvia increased several times during the recent years: by one third in 2008, 12.5% in 2009, 11.1% in 2011, and 12.5% in 2014 and 2015. The impact of a minimum wage rise on the average wage in Latvia is not large. Even though it defines the minimum hourly wage (and monthly wage for full-time employees) mandatory for all sectors, occupations and regions, significant distortions due to minimum wage rise by one third as from January 2008, it reflected a 32% average wage rise during 2007. Therefore, the minimum wage to average wage ratio, which increased somewhat during the recent years (from 33% in 2008 to 40% in 2013), just reversed the previous decreasing trend (it was 38% in 2004) and, by EU standards, remained rather modest.

There were also some changes in the amount and duration of unemployment benefit payments, which could alter the motivation to obtain the status of a registered unemployed person, however without any significant impact on the real unemployment (job seekers) rate. The temporary public works programme "Workplace with Stipend" was limited to temporal low-skilled employment in public enterprises and lasted for two years, starting from the fourth quarter of 2009.

Historically, the role of collective bargaining has not been significant in Latvia. Trade union density (16%) and collective bargaining rates (20%; both according to the European Participation Index 2.0) are among the lowest in the EU. Although the impact of trade unions is much higher in education and healthcare, they are generally weak and unlikely to force the government to raise wages sharply.

3. THE SURVEY

Since the beginning of Eurosystem's WDN, which started operation in July 2006, two waves of surveys have been conducted. In 2014, the third WDN survey round started, focusing on the wage, labour force and prices adjustments in Europe (Latvia participated in this WDN survey for the first time). The harmonised survey questionnaire covers the period from 2010 to 2013, i.e. the years of economic slowdown in the majority of EU countries. Due to earlier exposure to the financial crisis, several countries (Latvia, Estonia, Lithuania, Poland, Bulgaria, and Luxembourg) extended the survey period by including 2008 and 2009.

The current survey was undertaken within the WDN framework by 25^1 central banks in the EU in 2014. The aim of the survey is to uncover labour market adjustment channels of firms during the crisis. Special attention is paid to financial conditions of firms and labour market reforms as well as wage and price setting mechanisms.

The resulting questionnaire is shown in Table A1 in Appendix. The questionnaire contains five major parts: firm characteristics, changes in the economic environment as well as labour force, wage and price adjustments. Several countries used the opportunity to add country-specific question blocks exploring unique labour market features. Thus the Latvian questionnaire contains country-specific questions about the minimum wage and performance-related bonuses for employees with different skills.

3.1 The sample

The Latvian WDN survey was conducted by market and social research agency FACTUM in the summer of 2014. The survey was done electronically with a presurvey invitation and follow-up calls. The response rate of 27 per cent resulted in the final sample of 557 firms. The sampling strategy was based on an equal probability basis, stratified by four categories of the number of employees and ten NACE Rev. 2 sectors. Firms established prior to 2011 with at least 10 employees were targeted. The resulting dataset is analysed for four firm employment size categories (10–19, 20–49, 50–199 and 200–..) and five sector groups (Manufacturing (C), Construction (F), Trade (G), Business services (H, I, J, L, M, N) and Financial intermediation (K)).

¹ Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Germany, Estonia, France, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovenia, Slovakia, Spain and the UK.

Two sets of weights are applied: 1) the firm number weights (wb) targeting population of firms, and 2) employment weights (wl), which aim at ensuring that the sample represents employees in the population. Both weights are constructed at NACE Rev. 2 two digit level.

The firm number weights *wb* correct for unequal probability of firms to be included in the realised sample. They are set by dividing the number of firms in population (N_h) by the number of firms in realised sample (n_h) for corresponding strata (h) at NACE Rev. 2 two digit sector $(wb = N_h/n_h)$. The employment weights *wl* are constructed by using the average size of firms in the realised sample (l_h/n_h) to estimate employment in population strata $(N_h(l_h/n_h))$ and then dividing it by the number of firms in the realised sample $(wl = (N_h(l_h/n_h))/n_h)$.

The composition of the resulting and weights-adjusted sample is presented in Table 2. The first four columns describe the sample and population of firms; the remaining three show the distribution of employment. The structure of sample and population of firms is very similar by construction. There is a slight over-sampling of trade firms and under-sampling of construction firms. A larger difference is evident in firm distribution by size. Small firms are under-represented and big firms are over-represented in the sample, which is corrected by the firm number wb and employment wl weights.

	Number of firms				Employment		
	Sample	2	wb*	Population** (commercial companies)	Sample	wl*	Population (including firms with less than 10 employees)
	Number	%	%	%	%	%	%
Manufacturing	100	18	17	18	22	21	23
Construction	69	12	14	14	11	11	12
Trade	173	31	29	29	14	19	24
Business services	203	36	37	37	48	43	37
Financial intermediation	12	2	3	2	5	6	5
Total	557	100	100	100	100	100	100
10–19	264	47	51		9	19	
20-49	144	26	30	81	12	14	
50-199	118	21	15		29	31	
200–	31	6	4	19	51	37	
Total	557	100	100	100	100	100	

Table 2Sample composition by sector and size

Note: wb - weighted to represent firm population, wl - weighted to represent employees in the population.

* The structure of the weighted sample and population differs due to the absence of some subsectors in the sample.

** Official statistics on firm size/sector groups uses slightly different size groups (10–49, 50–249, 250–..), therefore we present population distribution for two groups: 10–49 and 50–...

3.2 Robustness check and sample descriptive statistics

Before analysing labour force adjustment channels, it is useful to have a closer look at the obtained data and to compare firm characteristics of the sample with those of the official statistics from the CSB and the Lursoft database of Latvian enterprises.

The majority of firms participating in the survey (95%) were established prior to 2008 (firms established after 2011 are not included in the sample). That is why almost all firms were able to answer questions about their labour adjustment strategies during the crisis (2008–2009) and the post-crisis (2010–2013) period in Latvia. Lursoft data on active enterprise demographics show that the share of enterprises established prior to 2008 accounts for 73% of the total number of firms established prior to 2011. Thus, younger firms are under-represented in our sample.

Due to the fact that the minimum size of firms was limited to 10 employees, our survey does not cover the segment of very small firms. Firms with less than 10 employees, however, represent only 14% of employment², therefore the results of the study cover the major part of labour market. Still, one needs to keep in mind the structure of firms involved in the study while interpreting the results.

Around 18% of the weighted firm sample are multi-establishment firms (see Table A3), which is in line with the CSB's data for 2012 (enterprise groups represent around 15% of all firms). Less than half of the multi-establishment firms in the sample are mainly foreign-owned (44%) and 38% of them are parent companies (see Table A4). These numbers are only slightly above the official CSB's estimate of 33.5% for foreign-owned enterprise groups in the total number of firms in 2012.

At the end of 2013, 96% of employees in the sample had permanent contracts, which is in line with the official statistics. According to the weighted sample data on employment structure, a vast majority of employees (85%) had permanent full-time contracts (see Table A5), which is slightly less than the CSB's evaluation (91%). Only one out of nine permanent employees in the sample was working part-time at the end of 2013, while temporary and agency workers accounted for 4% and 1.5% of the workforce respectively. In large firms and the financial intermediation sector, temporary workers were more prevalent while permanent part-time workers were less prevalent (see Table A5). Agency workers were more prevalent in business services and less prevalent in large firms.

The share of manual and non-manual workers in the firm-weighted sample matches precisely the CSB's estimated proportion of 57% and 43% in 2013. Inside the groups, however, the sample share of lower-skilled manual workers is slightly below official 15% (11.8%), which is probably due to under-sampling of construction firms. About one third of all employees (33%) are higher-skilled manual workers; this group is more prevalent in manufacturing and construction (see Table A6). As to higher-skilled non-manual and lower-skilled non-manual worker groups, each accounts for about one fourth of the total employees' number. The former is more prevalent in financial intermediation and the latter in trade.

² Authors' estimation based on Lursoft data for 2012 http://blog.lursoft.lv/2013/05/30/lursoft-petijums-mikro-un-mazie-uznemumi-latvijas-ekonomika-ienem-aizvien-nozimigaku-lomu/.

According to the sample data, one half of employees have been working for the current employer for more than five years and one third of employees for between one and five years. The share of employees with long tenure was higher in small firms and those operating in manufacturing and construction (see Table A7).

The WDN survey confirms that the collective bargaining coverage is low in Latvia. Only 2% of employees are working in firms that have a binding collective pay agreement signed outside the firm, while 17% have such an agreement inside the firm (see Table A8 and Figure A34). The collective bargaining coverage relates positively to the firm size. Among large firms, 6% have binding collective pay agreement outside the firm and 34% inside the firm. Collective bargaining inside the firm is more prevalent in domestically-owned firms, particularly in finance and business services, whereas in trade it is less prevalent. The most popular frequency at which collective pay agreement inside the firm is adjusted is once per year (40%; see Table A9).

The average revenue share from the main product or service due to sales in foreign markets is around 20%, according to the firm number weighted sample (see Table A10). The manufacturing sector shows the biggest export activity (around 42% from total revenue), which is in line with the estimation from the CSB's sector output and export data.

At the beginning of 2013, around 17% of employees received wages equal to the minimum wage or below it (according to the CSB's Labour Force Survey data). In the sample, 15% of employees receive minimum wage (according to the employment weights). The discrepancies between the sample and official statistics can be explained, to a large extent, by exclusion of firms with less than 10 employees from the sample. However, even within the existing sample, minimum wage is more prevalent in small firms (see Table A63). Financial intermediation firms have the lowest share of minimum wage received due to generally high wage level in the sector.

Overall, the robustness check shows that aggregate statistics obtained from the collected database are in line with the official statistics, and, therefore, the results of the study can be attributed to the population of Latvian firms (of corresponding size and sector).

4. THE GENERALISED ORDERED LOGIT (GLOGIT) MODEL

The majority of responses collected in the survey database are ordered categorical variables (e.g. 1 =Strong decrease, 2 = Decrease, 3 = Unchanged, 4 = Increase, 5 = Strong increase) or binary variables (e.g. 1 = Relevant, 0 = Not relevant) (see questionnaire in Table A1). To provide a detailed overview of information obtained, we use both qualitative and quantitative techniques. Besides cross-tabulations and corresponding figures we provide marginal effects of ordered logistic regressions³. This lets us be more specific about factors determining the actions undertaken by firms.

A generalised ordered logit regression was applied to analyse ordinal dependent variable. The model can be written as

³ All tables and figures can be found in the Appendix.

$$P(Y_i > j) = g(X\beta_j) = \frac{exp(\alpha_j + X_i\beta_j)}{1 + \{exp(\alpha_j + X_i\beta_j)\}}, \ j = 1, 2, \dots, M - 1,$$
(1)

where *M* is the number of categories of ordinal dependent variable. If M = 2, the model is equivalent to the logistic regression model. Estimation and interpretation of coefficients in the ordered logistic model is similar to the simple logit in the sense that the chosen *j* category is contrasted against all the other groups, e.g. if M = 5 and j = 3, the reference group is formed from j = 1,2,4,5.

The main difference of the generalised ordered logit model from the regular ordered logit model is a relaxation of the assumption that the effect of explanatory variables is the same for all levels of ordered explained variable, i.e. β is the same for all *j*. STATA routine proposed by Williams (2006)⁴ allows keeping some β equal for all levels of ordered variable while letting the chosen *j*'s differ. Automatic backward stepwise selection procedure was applied at 0.05 significance level for β equality check. The description of explanatory variables used in regressions is given in Table A2.

5. MAIN RESULTS OF ADJUSTMENTS AND WAGE SETTING CHANGES

This section illustrates the main sources of shocks for Latvian firms and labour cost adjustment strategies undertaken. The survey results are presented in the Appendix. Cross-tabulations and figures show weighted responses of firms for two distinct periods of 2008–2009 and 2010–2013. Particularly, we show that both frequency and magnitude of wage adjustment were significant, unlike what the macroeconomic picture of average wage suggests.

5.1 Sources and size of shocks

In the survey, the firms were asked about three types of shocks: of the demand for products and services, of the access to external financing through conventional financial channels, and of availability of supplies from usual suppliers. The WDN survey results show that Latvia experienced a substantial negative demand shock during 2008–2009, while changes in access to financing and usual supply chains were less pronounced. Furthermore, the negative demand shock was mostly domestic, reflecting economic overheating just before the first WDN period, whereas the subsequent economic revival was primarily based on export growth. Despite a relatively swift improvement of demand in 2010–2013, financial conditions improved only gradually, and credit constraints were binding during both periods on half of firms.

5.1.1 Change in overall demand for products and services

The global financial crisis of 2008 together with the burst of real estate price bubble provoked a broad-based contraction of the Latvian economy during 2008–2009, the severity of which was enhanced by a build-up of domestic imbalances during the previous years of economic overheating. More than half of firms claimed some decrease in demand for their products or services during 2008–2009 (see Table A11 and Figure A1), with more than 28% of them considering it to be particularly strong.

⁴ STATA gologit2 command.

The results are not uniform across the economy. Particularly in 2010–2013, a larger export share not only decreased the probability of facing a demand slowdown but also increased the probability of facing a demand rise. Construction firms, in turn, experienced demand slowdowns more often (see Table A13 and Figures A2 and A3).

Despite global weakening of the demand and recession in Latvia's main trade partner countries, strong competitiveness gains (declining unit labour costs in particular) helped Latvian firms expand their market shares in other countries' imports, while the magnitude of demand slowdown gave rise to search for new markets. This can be illustrated by the fact that almost two thirds of firms reported an increase in demand during 2010–2013 (see Table A11), with the effect being more pronounced for large exporting firms, since the recovery of domestic demand was subdued given the strong economic overheating just before the crisis. The analysis of change in demand for their main product or service decreased in 2008–2009 experienced an increase in demand during 2010–2013 (see Table A12). On the other hand, only 23% of firms experiencing deterioration of demand in 2008–2009 answered that the demand for their product was still decreasing.

5.1.2 Domestic versus foreign demand and prices

A detailed analysis of firm exposure to changes in foreign and domestic demand shows that on average the foreign market was characterised by more stable demand and prices (see Table A15 and Figure A17). For instance, 60% and 50% of firms reported that the foreign demand for their main product or service has not changed in 2008–2009 and 2010–2013 respectively (twice as much as in the domestic demand). The share of firms reporting foreign market price stability for their main product or service is broadly similar (around 62%) and twice higher than the corresponding share in the domestic market. The demand volatility did not transmit fully to prices, with the shares of firms whose prices experienced strong decreases or increases being on average twice as small as the corresponding shares of changes in demand.

The logistic regression analysis shows that large firms experienced a stronger demand rise in both domestic and foreign markets particularly in 2010–2013 (see Table A16 and Figures A18 and A19). Construction firms were most likely to face a fall of domestic demand in 2008–2009, while manufacturing ones were more likely to face a rise in foreign demand in 2010–2013 even after controlling for the export share.

In each period, the price changes were positively related to the demand changes for both domestic and foreign markets (see Table A17). The extent of domestic competition increased the probability of price changes in the domestic market in both periods, while foreign competition increased the probability of price decreases in the foreign market only during 2010–2013. Over 2008–2009, construction firms were more likely to face a price decrease in the domestic market and less likely to face a price increase in the foreign market. The subsidiaries were less likely to face a price decrease in both periods.

5.1.3 Customers' ability to pay and availability of supplies

Customers' ability to pay deteriorated together with a decrease in demand in 2008–2009 and improved afterwards, however, at a lesser frequency. Half of firms had not reported any change in both periods (see Table A11 and Figure A1). There is also a strong positive relation between customers' ability to pay and demand for firms' products (see Table A14).

The global economic crisis had not changed the access to usual suppliers for about two thirds of Latvian firms, reflecting the demand nature of economic crisis without notable impact on supply chains (see Table A11). Interestingly, the domestically-owned firms were more likely to experience improving availability of supplies during 2010–2013. However, supply availability may partly reflect a firm's own ability to pay (supplies may be limited to firms with low ability to pay), mirroring a strong positive relation between availability of supplies and the demand for firm's products (see Table A14).

5.1.4 Availability of external financing and credit conditions

Besides negatively affecting the demand conditions of the economy, the crisis of 2008–2009 worsened the financial conditions of firms. Despite relatively swift recovery of demand in 2010–2013, the financial conditions improved only marginally. According to the Financial Stability Report of Latvijas Banka, loans to residents have shrunk on average by 8% per year since the end of 2008 (*Financial Stability Report* (2015)). By February 2015, the domestic loan portfolio had contracted by 8.4 billion euro, or 40%, compared to the end of 2008, reflecting the on-going deleveraging process of borrowers and credit institutions.

According to the results of Bank Lending Survey (*Euro area bank lending survey* (2014)), during the crisis period, credit standards were tightened sharply in 2008 in Latvia and have remained broadly unchanged since. The WDN survey results confirm a tight credit standard environment for Latvian firms, showing also that despite improvements in demand for half of firms credit constraints were binding in both 2008–2009 and 2010–2013 (see Tables A18 and A19; Figure A5). About 10% of firms described the unavailability of credit (to finance working capital, new investment or to refinance debt) or too onerous credit conditions as very relevant.

The problem of financing working capital was classified as very relevant by almost half of firms in each period (by 42% of firms in both periods altogether). Insufficient availability of credit to finance new investment or refinance debt was relevant for 40% and 30% of firms correspondingly. Manufacturing firms were more likely to be credit-constrained to finance working capital and new investment during both periods, and also to refinance debt during 2008–2009 (see Tables A20 and A21; Figures A6 and A7). Large firms were more likely to be credit-constrained during 2008–2009, while subsidiaries faced less onerous credit conditions, particularly during 2010–2013, in respect to working capital financing and debt refinancing. The impact of export share on credit availability or credit conditions was not significant.

Availability of external financing has changed as well. More firms experienced some tightening rather than loosening of the access to external financing over the period of 2008–2009; the opposite was true for 2010–2013. Five out of six firms

having stated that availability of external financing had not changed over 2008–2009 gave the same answer also regarding the latter period (see Table A11).

Overall, firms with a more pronounced demand slowdown experienced also a more substantial tightening of credit constraints (see Tables A20 and A21; Figure A8). Insufficient demand was likely to worsen financial indicators, which, in turn, decreased credit availability. Furthermore, during the latter period, larger firms enjoyed more favourable changes in the access to credit.

5.2 Methods of labour cost adjustment (wages versus employment and hours)

The economic revival of 2010–2013 was primarily export-based and reflected sizeable competitiveness gains due to the labour cost adjustment in 2008–2009 and productivity growth in 2010–2013. The analysis of total cost components shows that financing costs did not change much over years, while supply-related costs increased during both the crisis and the post-crisis period. Therefore, the adjustment of labour costs determined a change in total costs and explains its cyclical behaviour (see Table A22 and Figure A9).

Total costs decreased somewhat during 2008–2009 and rose thereafter. Although firms were as likely to decrease total costs during 2008–2009 as to increase them, the share of firms recording strong decreases in total costs was considerably larger than that recording a strong increase. By contrast, about two thirds of firms increased their total costs during 2010–2013.

Changes in demand are highly correlated with changes in labour costs (firms with a demand slowdown were more likely to decrease their costs and vice versa; see Table A23 and Figure A12). Firms in the construction sector, large firms and parent companies were most likely to decrease their labour costs during 2008–2009 even after controlling for the demand changes. In turn, the financial firms decreased their labour and financing costs considerably during 2010–2013 (see Table A24 and Figures A10 and A11). The fall of labour costs is confirmed by the CSB's business survey, according to which the construction and finance sectors have shown worst employment developments since mid-2007, while a period of very low interest rates may have lowered financial costs for financial intermediation enterprises.

5.2.1 Fixed and flexible wage components

Low collective bargaining coverage (wages negotiated mainly at individual level) and over-optimistic wage growth prior to 2008 both explain the remarkable flexibility of wages in Latvia during the recent crisis. According to the survey results, around 33% of firms decreased wages of their employees. Roughly the same share of firms reduced the number of their permanent workers (see Table A25 and Figure A13). Therefore both wage and employment adjustments were the main channels of labour cost adjustment.

Over 2008–2009, base wages or piece work rates were as likely to be reduced as flexible wage components. In this period, firms decreased their base wages or piece work rates for 32% of workers and flexible wage components for 37% correspondingly. After controlling for demand changes, base wages and piece work rates were more likely to fall in the construction sector (see Table A26 and Figures A14 and A15). In the meantime, flexible wage components were more likely to be

reduced by large enterprises, parent companies, firms in domestic ownership, and in the financial sector.

During 2010–2013, with the improvement in foreign and domestic demand, more than 70% of firms raised base wages or piece work rates for their employees, and 40% of firms raised flexible wage components. Base wages were more likely to be increased in the manufacturing sector, while flexible wage components were less likely to rise in financial intermediation companies (see Table A26). A decrease in base or flexible wages was still an issue for only 12% of firms during 2010–2013 mostly due to sluggish demand developments (see Figure A16).

A detailed description of wage adjustment is presented in Subsection 5.3.

5.2.2 Employment and working hours

During 2008–2009, the number of permanent employees was reduced twice more often than the number of temporary and fixed-term employees (by 31% and 15% respectively) (see Table A25 and Figure A13). It is in line with the results of labour flow analysis carried out by Braukša and Fadejeva (2013). Over 70% of firms did not adjust the number of employees with fixed or temporary contracts, which can be partly explained by the relatively small share of this type of contracts (approximately 4% at the end of 2013) and their increasing popularity after the crisis.

The results of logistic regression analysis show that during 2008–2009 the construction sector experienced most pronounced layoffs of permanent employees even after controlling for the demand changes. The financial sector, on the other hand, had lower probability to increase the number of temporary or fixed-term employees compared with other sectors (see Table A27 and Figures A14 and A15).

In 2010–2013, 40% of firms increased the number of permanent employees and 17% raised the number of fixed-term contracts, with the probability to increase employment being higher for firms with positive demand developments (see Table A27 and Figure A16). It is important to note that the relative share of firms reporting some growth in employment in 2010–2013 is almost twice as small as the share of firms reporting a wage rise. More details on labour force adjustment are presented in Subsection 5.5.

About 16% of firms reduced hours worked per employee during 2008–2009 (75% of firms stated no changes in average hours worked; see Tables A25 and A8). During 2010–2013, 19% of firms reported an increase of hours worked per employee. Therefore, varying workload was one of the buffers that may have decreased the magnitude of layoffs during the crisis. A notable exception was the financial sector where the workload was stable (see Table A28 and Figures A14 and A15).

5.2.3 Labour productivity and profit margins

Overall, 50% of firms stated that average productivity per employee (as compared to labour costs per employee) did not change during 2008–2009 (see Table A29 and Figure A20). In manufacturing and business services, more firms increased the average productivity per employee than decreased it, while the opposite was true for the construction, trade and financial intermediation (see Figure A21). In turn, the

labour productivity rise exceeded the labour cost increase in each sector of the economy during 2010–2013 (especially in manufacturing and the financial sector). During both periods, firms with foreign ownership were more likely to increase labour productivity faster than labour costs (see Table A30 and Figure A22). Furthermore, productivity gains in relation to labour cost developments were positively linked with changes in the demand level and access to credit (see Figure A23).

Profit margins, measured as prices compared to total costs, decreased in 30% of firms during 2008–2009 (see Table A29 and Figure A20). Particularly, 11% of firms decreased profit margins strongly, while firms with a strong increase were almost absent. A larger need to decrease profit margins was observed in firms facing a more pronounced drop in demand and customers' ability to pay (see Table A30 and Figure A23). Profit margins decreased particularly strongly in construction, exporting and domestically-owned firms. In 2010–2013, profit margins increased in every sector of the economy (less so in construction companies). Firms experiencing improvements in demand growth and problems in access to credit had a higher probability to increase their profit margins (see Table A30). We also checked for the effect of wage changes on profit margins, controlling for demand changes. A wage increase is positively related to an increase in profit margins during both periods; hence we do not find evidence of firms raising their profit margins by reducing the base wage of employees.

The share of non-labour costs in total costs increased in both periods. During 2008–2009, labour costs declined substantially, while financing costs did not change significantly and cost of supplies went up moderately. In the meantime in 2010–2013, the increase of financing costs as well as costs of supplies exceeded the rise of labour costs (see Table A29). In both periods, the increase of non-labour costs compared to labour costs was positively related to the demand level and was present particularly in the manufacturing and financial sectors (see Table A31 and Figures A21–A23).

5.3 Wage adjustment

The previous section showed that, according to the results of the survey, the degree of synchronisation between changes in labour costs and total costs is very significant in Latvia (see Subsection 5.2). Adjustments in both wages and employment help balance firms' expenses during the times of sharp demand drops and increasing credit constraints. In line with the general knowledge about firms, the balance sheet structure survey results show that base and flexible wage components before taxes together with training expenses and contributions to the pension funds accounted for 36% of all operating expenses in 2013. Capital intensity varies across sectors, thus the labour cost share is lower in the manufacturing sector and higher in financial intermediation (see Table A44).

5.3.1 Wage setting mechanism

About one third of all firms adjusted base wages once a year and one fifth of them did it less frequently than once every two years (see Table A52). This proportion did not change much during or after the crisis. There was some marginal substitution towards reducing the share of firms that change base wages more often than once a

year and increasing the share of firms that change wages every two years or less frequently. However, the overall composition of wage change frequency remained unchanged. Firms with more stable demand tended to change wages less frequently. Construction was a sector with most frequent wage changes: 10% of employees were employed in firms where base wages were changed more often than once a year. Trade, on the other hand, was a sector with least frequent wage changes: 22% of employees were not subject to base wage change at all during 2010–2013 (see Figures A37 and A38).

The share of firms indexing base wages to inflation has been steadily declining since 2008–2009. In 2010–2013, only 24% of employees were working in a firm adjusting base wages to inflation (almost 20 percentage points lower than before 2008; see Table A51). This is attributable to lower inflation only partly: the share of firms that claimed no wage inflation indexation mechanism because of too low inflation rose only marginally. A particularly steep decline was present among large firms (see Figure A35). Before 2008, wage indexation to inflation was most prevalent in large firms (53% of employees working in large firms), whereas during 2010–2013 it was the least prevalent in this category of firms (15%). During 2010–2013, wage indexation to inflation to inflation (a steep decline during 2008–2009).

Moreover, analysing the probability of linking base wages to inflation, we found out that non-exporting firms following state-dependent pricing (prices are adjusted solely according to changes in costs and profit margins, disregarding any imposed frequency of price change) have higher probability to adjust base wages to inflation (see Table A54).

It is interesting that in all periods wage inflation indexation was more prevalent in firms with no significant change in demand for their products or services (see Figure A36). This could reflect the situation in which firms with no changes in demand place more emphasis on the general economic situation and adjust wages to inflation.

Only 6% of the wage bill was related to individual or company performance bonuses and benefits in 2013 (9% according to the employment weights). Flexible wage components were more prevalent in large firms as well as in financial intermediation and other business services (see Table A45). Both manual and non-manual higherskilled employees are more likely to receive performance-related bonuses, while lower-skilled manual workers are less likely to receive them (see Table A46).

5.3.2 Adjustment of base and flexible wages

As already mentioned in Subsection 5.2, wage adjustment was one of the two main channels of labour cost adjustment. Moreover, base wages were as likely to be reduced as flexible wage components. Both wage cuts and freezes were used intensively during the crisis and the post-crisis periods.

Wage cuts were particularly widespread in 2009 (29% of employees were working in a firm that applied the wage cut strategy) when a strong demand slowdown created the necessity to decrease labour costs significantly. Wage freezes, meanwhile, were mostly used in 2010 and 2011 (27% and 26% respectively; see Table A53 and Figure A39). In 2012 and 2013, in line with the robust economic

growth, the prevalence of wage cuts and freezes decreased markedly. However, it should be noted that the absence of wage freeze or cutting strategy does not necessarily mean a wage rise.

Wage freezes and cuts were applied relatively more by large firms (see Figure A39). In 2009, for instance, 39% of large firm employees worked in companies that applied the wage cut strategy, while 20% of employees worked in companies that applied wage freezes (twice as many as small firms). This difference declined over time. The analysis of marginal effects from ordered logistic regressions (see Tables A58 and A59) shows that the elasticity of wage freeze to firm size increased with time, whereas the elasticity of wage cut to firm size declined. This clearly points to a change in wage adjustment strategies for firms with different number of employees. Therefore, after the crisis of 2008–2009, wage freezes were more dominant in larger firms, yet the probability of wage reductions was solely dependent on demand conditions.

Comparing wage adjustment strategies across sectors, we see that wage freezes and cuts were less prevalent in financial intermediation and business services during the analysed period (except 2013 when the probability of wages to be reduced in the financial sector was higher; see Figure A39 and Table A59).

Improvements in labour productivity had a significant positive effect on wage increases after 2011. As shown in Table A59, the probability of cutting or freezing wages declined along with changes in labour productivity, thus indicating that workers benefited from an increase in labour productivity after the crisis.

As from 2010, wage freezes and cuts became more prevalent in domestically-owned firms (see Table A59). For instance, in 2012 and 2013, the prevalence of wage freezes among domestically-owned firms was twice as high (see Figure A39). Also, a higher share of exporting firms were freezing base wages of their employees (the export share effect was statistically insignificant, however). During 2010–2013, the share of exporting firms implementing a wage freeze (weighted by employment) was by about 10 percentage points larger than that of non-exporting firms (see Figure A39).

It is noteworthy that before 2012 firms with a strong demand decrease were as likely to implement wage cuts and freezes as firms with a strong demand increase (see Figure A40). It means that during the crisis some firms took advantage of the overall tendency to decrease wages during 2008–2009 and reduced labour costs despite favourable demand conditions. In later years, however, the situation changed significantly: in firms with a strong demand increase wage cuts were not implemented at all, while among firms with a strong demand decrease, 24% and 19% of firms (weighted by employment) cut wages in 2012 and 2013 respectively.

If a firm had implemented the wage freeze strategy, wages of about 90% of employees were frozen on average (see Table A55). In turn, the implementation of wage cut strategy affected 60% of employees on average; however, this proportion was falling steadily over time (see Table A56). If a firm decreased the wage of a particular employee, the average decrease varied from 16% to 26% in different years. Small firms tended to decrease wages more sharply (see Table A57) and for a larger share of employees (see Table A56).

Overall changes in flexible wages are analysed in Subsection 5.2. It shows that individual or company-related bonuses and base wages were reduced in the similar share of firms (around 30% and 12% in 2008–2009 and 2010–2013 respectively; see Table A25). With the improvement of demand conditions, around 40% of firms increased their flexible wage, this share being smaller than that of firms with base wage increase (almost 70%). There are differences in adjustment by employee skill level (see Tables A47 and A48). It should be noted that the number of firms keeping the share of performance-related benefits unchanged was roughly 50% in both periods and for all types of workers.

During 2008–2009, the decreasing share of performance-related benefits in the total wage bill affected non-manual workers slightly more than manual workers. This tendency was observed in all sectors. One out of three employees experienced reduction of performance-related benefits both in higher and lower non-manual skill groups (see Table A47). In the financial intermediation sector, 70% of employees experienced benefit cuts, which is almost twice more than in the manufacturing sector. The lowest share of employees affected was in the trade sector (around 15%).

In 2010–2013, around 30% of employees (somewhat less for low-skilled manual workers) experienced an increase in the share of performance-related benefits (see Table A48). Benefits were increased for more than 40% of employees in business services. Firms in the financial intermediation sector, in line with the findings about base wage cuts, were reducing benefits for around 40% of employees, at the same increasing them for 30% of employees. Therefore, the overall effect on average performance-related benefits in the financial sector is mixed. In the manufacturing and construction sectors, more than one third of employees in the higher skilled manual labour group received a rise in performance-related benefits (compared with a lower share of employees with different skill level), which can be explained by the limited supply of high skilled manual labour group. In the business services sector, the share of people receiving higher performance-related bonuses increased an increase in services all skill types.

Developments in demand determine changes in flexible wage, thus firms experiencing negative demand shocks have a higher probability to decrease flexible wage, and vice versa (see Tables A49 and A50). The share of performance-related benefits decreased particularly strongly in larger firms (with higher elasticity for 2008–2009), which is in line with the results for the base wage. It is interesting that the decline in flexible wage for higher-skilled non-manual workers was particularly strong for firms with a large number of respective employees in 2008–2009. For other periods and employee skill types, this factor was statistically significant mostly in cases of flexible wage was uniform across all types of employers, but the likelihood of an increase in flexible wage was higher if the respective firm had a bigger share of particular employees.

5.4 New employees: hiring obstacles and wages

The most important obstacles to hiring employees at the end of 2013 (not relevant for only 7%–9% of firms) were insufficient supply of skilled labour and high wages

(see Table A40 and Figure A31). Insufficient supply of skilled labour was ranked as very relevant by 41% of firms and high wages by 24%. Large firms claimed insufficient supply of skilled labour as very relevant more often (see Figure A32). Manufacturing firms were more likely to face insufficient supply of skilled labour, while firms operating in business services were less likely to regard the wage level to be high (see Tables A41–A43 and Figures A32 and A33).

Economic uncertainty, access to financing, and high payroll taxes were relevant for five out of six firms (around 40% of firms claimed high payroll taxes to be a very relevant obstacle to hiring workers). All three factors were more often pointed out by smaller firms (see Figure A32). Firing costs rather than hiring costs were a somewhat more important obstacle for firms to hire a new employee (81% and 76% respectively). Both factors were most relevant in finance but less relevant in trade and business services (see Figure A32).

Overall, the wage of newly hired workers tended to be smaller than the wage of incumbent workers, after controlling for experience and task assignment (see Table A60 and Figure A41). For instance, both before 2008 and during 2008–2009, about 25% of firms claimed it was lower (compared to 3%–4% of firms claiming that it was higher). However, the situation changed significantly in the latter period: during 2010–2013, the share of firms claiming that the wage of newly hired worker was higher exceeded 10%.

Compared to the non-exporting firms, the exporting firms tended to underpay new hires more. Large firms tended to underpay new hires more both before 2008 and during 2008–2009 (see Figure A41). New hires were underpaid more often in manufacturing. Even during 2010–2013, about 40% of manufacturing firms (weighted by employment) claimed that, compared with incumbent workers, they paid lower wages to new hires. Meanwhile, financial intermediation tended to overpay its new hires, with 29% of firms paying them more than could be justified by their experience and tasks. In 2010–2013, new hires were both underpaid and overpaid more often by firms with large increases in demand (see Figure A42).

Comparing the wages of newly hired workers and similar (in terms of experience and task assignment) incumbent workers by employee skill level, we see that around 75% of firms answered for all skill types that wages were similar, while more than 20% of firms stated that wages were lower (see Table A61). Interestingly, that using the employment weights, the proportion of answers balanced out for non-manual workers (the shares of firms answering that their wages for new workers were either higher or lower were similar) for 2010–2013; however, the relative share of firms claiming prevalence of lower wages for the new manual workers declined only marginally. This indicates that in larger firms wage discrimination against newly hired manual workers in comparison with non-manual workers was slightly higher in 2010–2013.

The wage gap between newly hired and existing workers showed weak pro-cyclical behaviour during the analysed period (see Table A62). Around 12% of firms claimed that the gap between wages narrowed in 2008–2009, and around 20% of firms reported a moderate increase in 2010–2013 (14% for manual lower-skilled labour). The majority of firms reported, however, that the wage gap did not change over the cycle.

5.5 Labour force adjustment

During 2008–2009, more than one third of firms significantly reduced labour input or altered its composition; 30% of them repeated the action in 2010–2013 (see Table A32). Overall, one fourth of all firms had to undertake labour force adjustment in 2010–2013. Firms operating in manufacturing and construction as well as firms with a higher number of employees had a stronger probability to reduce labour input in 2008–2009 (see Table A33 and Figure A24), which is likely to reflect a drop in demand. Finance sector firms, at the same time, showed significant adjustment in labour force during 2010–2013. Firms with declining demand and no access to credit resources had a higher probability to reduce their labour input during both periods (see Table A33 and Figure A26). Exporting and non-exporting firms are characterised by broadly similar employment adjustment measures.

The most popular measures to reduce labour input in 2008–2009 were freezes on new hires as well as individual layoffs and reduction of working hours (see Table A34 and Figure A27). Freezes on new hires were particularly important. Of those firms that reduced labour input, more than 80% used the above measure during 2008–2009. The logistic regression analysis shows that the likelihood to apply this measure grew with the number of employees and severity of demand shocks (see Table A35 and Figures A28 and A29).

The second most widely used measure to reduce labour input in 2008–2009 was individual layoffs, implemented by two thirds of firms that reduced labour input or altered its composition (see Table A35 and Figures A28 and A29). The probability to apply individual layoffs was higher for domestic, exporting, multi-establishment firms with higher than average developments in demand. The fact that even firms with growing demand applied individual layoffs signals that they managed to improve their labour force composition by getting rid of unnecessary employees and possibly substituting them by better candidates. A similar tendency was observed in wage adjustments, when firms decreased wages even if the demand for their product was rising, in such a way taking advantage of the common trends in wage reduction and decreasing labour costs.

The high share of firms implementing individual layoffs may reflect low collective bargaining coverage, with employment conditions negotiated primarily at individual level amidst rather strict EPL environment. For instance, some firms may have fired employees because of "misconduct" or forced them to quit job at their "free will" in order not to provide a severance pay (one to four monthly wages depending on job tenure as defined in the Labour Law). Moreover, it may reflect firm's avoidance of special regulations in case of collective dismissals (45–60 day long advance notice of collective dismissal and consultations with employee representatives, the State Employment Agency and municipalities). Besides, it may partly reflect the survival bias of surveyed firms, as those firms that went bankrupt during the crisis were more likely to implement collective layoffs.

Reduction of working hours was used by two thirds of firms adjusting labour force during 2008–2009, thus reflecting flexibility of working week length. Being very popular in manufacturing and the construction sector as well as in larger firms, reduction of working hours was not so widespread in services where working time depends more on customer flows (see Table A35). Particularly, this measure was

almost non-existent in finance and was not used in more than half of firms working in the trade sector (see Figure A28).

Non-renewal of contracts was used by 30% of firms that reduced labour input or altered its composition in 2008–2009 according to the firm number weights (or 46% of firms aggregated by employment weights). The discrepancy between different weights indicates the particular importance of the measure for larger firms. The probability to use non-renewal of contracts is higher for larger firms, construction and finance sector enterprises as well as firms with credit access problems (see Table A35 and Figures A28 and A29).

Early retirement schemes were used in one quarter of firms that reduced labour input or altered its composition. However, the results are not uniform across the economy. Of firms that reduced labour input or altered its composition, early retirement schemes were used by 30%–40% firms operating in trade and business services as well as by almost 20% of manufacturing and construction firms but were virtually non-existent in finance (see Figure A28). Large firms tended to use them more often than small firms (35% and 20% respectively). Controlling for demand developments, the probability to use early retirement schemes declines in exporting and parent companies (see Table A36). Of exporting firms that reduced labour input or altered its composition, 30% used early retirement schemes, whereas among nonexporting ones the share was twice as large.

Reduction of agency workers was used by less than 20% of firms that reduced labour input or altered its composition. The probability to implement this measure was higher for exporting enterprises, firms in the construction and finance sectors as well as subsidiary firms (see Table A36 and Figures A28 and A29). The manufacturing sector, on the other hand, used this measure only marginally.

Finally, the collective lay-off measure was not widespread owing to low collective bargaining coverage and survival bias. Only 10% of firms applied it during 2008–2009, mostly in the manufacturing, trade and other business services sectors.

During 2010–2013, the economic recovery had decreased the need to reduce labour force. However, one fourth of all firms still had to use some labour force adjustments (see Table A32). The composition of measures applied changed slightly compared to the previous period (see Table A34 and Figure A27). Freezes on new hires continued to be the most applied measure, with more than 70% of firms having reduced labour input or altered its composition using it to adjust employment. Bigger firms and firms with decline in demand applied this measure more frequently (see Table A35 and Figures A28 and A29). Reduction of hours, on the other hand, was used by a larger share of firms that reduced labour input or altered its composition (53%), whereas the share of firms using individual layoffs was smaller (37%) during 2010–2013. The probability to apply reduction of hours was higher for manufacturing firms, parent firms and firms with decline in demand (see Table A35). Individual layoffs, in turn, were used more frequently by subsidiary firms with smaller export shares and demand problems.

The difficulty to adjust labour input did not change significantly over 2008–2009. A vast majority of firms claimed that there was no change between 2008–2009 and the period before 2008 with respect to the easiness of firing employees for economic or disciplinary reasons, adjusting working hours, moving employees to other locations,

adjusting wages of incumbent employees as well as hiring new employees and lowering wages at which to hire them (see Table A37 and Figure A30). Nevertheless, some firms considered that in 2010–2013 in comparison with 2008– 2009 it became more difficult to adjust labour input. Specifically, one out of three firms claimed that it had become more difficult to hire employees and adjust wages of incumbent employees. The probability of the respective measures becoming more difficult was higher for domestic firms and those with a higher share of exporting activity, for financial sector and credit constrained firms (see Tables A38 and A39). Given that no important legislation measures were introduced, the former finding is likely to suggest that it became more difficult for entrepreneurs to find suitable candidates as unemployment rate decreased. However, the latter finding may also reflect increased reluctance of employees to accept wage cuts as the general economic conditions were improving.

6. PRICE ADJUSTMENT

The degree of price and wage stickiness is a major issue determining the impact of various shocks on the economy. Moreover, price (and wage) flexibility partly determines how long it takes for inflation and real economic variables to return to their potential levels after a shock: the higher the flexibility, the faster the adjustment process is. In the previous sections, we showed that according to the survey results wage setting in Latvia is flexible (see Section 5). Responding to the demand and financial conditions shock of 2008–2009, employers were able to adjust the number of employees and wages quickly. The decline in labour costs permitted them to reduce prices of main products and services and recover competitiveness in foreign markets.

6.1 Price setting mechanism

In recent years several micro-level data studies about the price setting mechanism in Latvia, based on COICOP records for prices of individual products, have been conducted by Latvijas Banka (see Beņkovskis et al. (2010), Benkovskis et al. (2012), Beņkovskis and Fadejeva (2013)). The WDN survey gives an excellent opportunity to double-check the features of price setting mechanisms from firms' perspective and to analyse the interaction of wage and price adjustments.

According to Beņkovskis et al. (2010) and Benkovskis et al. (2012), the process of consumer price formation in Latvia is a combination of both state-dependent and time-dependent behaviour, with prices of services following the time-dependent pricing mechanism (prices change at a defined frequency) and those of goods mostly following the state-dependent mechanism (a price change is determined by changes in demand and/or other costs). The WDN survey results show that five firms out of six change the price of the main product whenever costs and/or demand conditions change, while the rest adjust prices according to a regular time pattern (see Table A79 and Figures A52 and A53). Changing prices according to a regular time pattern is somewhat more prevalent among large firms, firms operating in trade and business services as well as in multi-establishment firms.

Previous studies on price adjustment frequency have shown that during 2003–2012 on average 24.7% of consumer prices were changed each month in Latvia, meaning that the average duration of a price spell was approximately 4 months (Beņkovskis

and Fadejeva (2013)). This indicates a rather high degree of price flexibility, which exceeds the one in euro area countries (between 10.0% and 23.0% for individual countries and 15.8% for the euro area; Dhyne et al. (2005)) and is roughly equal to price flexibility in the US (24.8%; Bils and Klenow (2004)).

Calculating the average price adjustment frequency from the WDN data, a rough estimate of 9 months is obtained for firms with a regular price setting mechanism and of 12 months for firms with state-dependent pricing. Discrepancies in the estimates can be explained by the fact that the WDN depicts the frequency of producer rather than consumer price change. In addition, our sample excludes very small firms with a potentially high price changing frequency. Also, the survey examines the price adjustment frequency of only the main product or service, disregarding the whole set of products, which restricts precision and, therefore, could result in a biased estimate.

The year was the most popular period for firms to adjust their prices on a regular time pattern (22%) in 2013 (see Table A80 and Figure A54). It is noteworthy that firms with state-dependent price setting adjust prices less often (37% of firms change prices more often than once a year compared with 45% of firms with time-dependent pricing). Despite the fact that a major part of firms claim that they change prices only according to changes in demand or other costs, we nevertheless observed a widespread annual price change frequency in both groups (in around 20% of firms).

In 2013, three main price setting mechanisms were used: the price was set following the price setting behaviour of the main competitor, the price was negotiated with individual customers, and the price was regulated and therefore could not be set autonomously. Around one quarter of firms operating in the domestic or foreign market cannot set prices autonomously (see Tables A70 and A71; Figures A43 and A44). Around 30% of firms follow the main competitor in setting the price (slightly less so in the foreign market). Around 23% of firms negotiate prices individually with customers in the domestic market (27% in the foreign market). Finally, only 18% of firms in the domestic market and 12% of firms abroad set prices fully according to costs and self-determined profit margins. The results by sector differ significantly for different sets of weights. On the one hand, the employment weights place more focus on price setting being regulated in both foreign and domestic markets, thus stressing the importance of this price setting mechanism for larger firms. The firm number weights, on the other hand, attach more importance to price being negotiated with an individual customer or following the behaviour of the main competitor.

The choice of a price setting mechanism to a large extent depends on competition in the market. According to the survey, the competition level for Latvian firms is broadly similar in foreign and domestic markets (see Tables A75 and A76; Figures A48 and A49). However, the results are not uniform across sectors. For instance, in financial intermediation, 60% of firms replied that competition in the domestic market is very severe (particularly, among small firms; in comparison with 28% in the foreign market). Meanwhile, the opposite is true for manufacturing and business services. The analysis of firm exposure to change in foreign and domestic demand presented in Subsection 5.1 shows that the level of competition is positively related to the probability of a price change.

Evaluating changes in competitive pressure in 2008-2009 and 2010-2013 in comparison with the situation before 2008, firms stated that it was growing during both periods (see Table A77 and Figures A50 and A51). In 2008–2009, firms with decreasing demand had a higher probability to experience an increase in competitive pressure in the domestic market (see Table A78), which depicts extra efforts made to keep the firm afloat during the crisis. Firms in the financial sector had a lower probability to experience a decrease in competitive pressure in the domestic market in 2010–2013 and in the foreign market in 2008–2009. The level of competition is positively related to the change in competitive pressure, thus firms operating a priori in competitive market had a higher probability to experience an extra rise of competition level. It is noteworthy that the EC Business and Consumer Survey results show that in the view of Latvian firms their overall competitive positions deteriorated somehow in 2008–2009 and improved in 2010–2013. Therefore, despite the overall increase in competition pressure (as shown by the WDN survey), the Latvian firms still managed to improve their competitive positions after the crisis (as shown in the EC Business and Consumer Survey).

6.2 Changes in price setting frequency

In 2010–2013, prices were changed more frequently than before 2008, which is in line with findings by Beņkovskis and Fadejeva (2013) that since 2003, the price change frequency has been steadily growing, increasing from 20% to 27% on average. Around 25% of exporting firms and 29% of non-exporting firms admitted that they changed prices more frequently during 2010–2013 compared with the period before 2008, while only 7% and 8% of the respective firms claimed that they changed prices less frequently (see Table A72). The frequency of price changes increased markedly in the financial intermediation sector and only marginally in manufacturing. Also, the price adjusting frequency increased in domestic and non-exporting firms (see Figures A45 and A46).

The main reason behind a more frequent price adjustment in 2010–2013 was frequent changes in labour costs and other input costs (see Table A73 and Figure A47). More frequent changes in labour costs were particularly important in manufacturing, business and construction. More frequent price changes by main competitors were marked as the next important factor behind the increase in price setting frequency in many sectors. Together with volatile demand, it was the most important factor for the financial intermediation sector. Strong competition in the main product market was important in the construction and business services sectors, and less so in the other sectors.

Less frequent price adjustment during 2010–2013 was to a large extent determined by weaker competition in the main product market (see Table A74). This factor was marked as the most important one in the trade and business services sectors. Construction firms reduced their price changing frequency mainly due to less frequent changes in other input costs. Manufacturing firms, on the other hand, were more dependent on changes in labour costs.

7. CONCLUSIONS

In this paper we examine the firm level survey data collected in the framework of the Eurosystem's WDN on labour cost adjustment strategies in Latvia in 2008–2009 and 2010–2013, i.e. the crisis and post-crisis periods. The survey was conducted in the summer of 2014, collecting responses of 557 firms. The questionnaire included questions about wage, labour force and price adjustments as well as firm-specific information.

The analysis of labour cost adjustment channels in Latvia shows that in the crisis period firms decreased labour costs mainly through reducing base wages and flexible wage components, lowering the number of permanent and temporary employees, and, less so, reducing working hours per employee. Particularly, we show that, unlike what the macroeconomic picture of average wage suggests, both frequency and magnitude of wage adjustment was significant. Base wages were as likely to be reduced as were flexible wage components. For instance, almost 30% of employees faced a wage cut by 18% on average in 2009. Moreover, wage freezes were used extensively during 2010 and 2011. Wage freezes and cuts were applied relatively more often in large firms, while the average magnitude of wage cuts was larger in small firms. The improvement in demand conditions and labour productivity after 2010 (despite still tight credit conditions) resulted in increased base wages in 70% of firms, while bonuses were affected positively in 40% of firms.

Labour force reduction was used extensively as well. One third of firms reduced or altered employment structure strongly during the crisis, 30% of them had to continue the reduction after 2010. Manufacturing and construction were affected most in 2008–2009; the financial intermediation sector, on the other hand, showed significant adjustment of labour force in 2010–2013. Freezes on new hires and reduction of permanent employees' numbers were the most widespread measures. After 2010, decrease in working hours and freeze on new employment remained significant measures of labour cost adjustment.

It is interesting that during the crisis some firms with growing demand applied both individual layoffs and wage reductions, which can be explained by adjusting the composition of labour force and taking advantage of the labour cost reduction trend of the country.

According to firms' responses, problems related to adjusting labour input did not change significantly in 2008–2009. However, some firms stated that in comparison with 2008–2009 it became more difficult to adjust labour input in 2010–2013, particularly, to hire employees and adjust the wages of incumbent employees. Given that no important legislation measures were introduced, the former finding may suggest that it became more difficult for entrepreneurs to find suitable candidates as unemployment rate decreased.

As regards new employees, the study shows that the most important obstacle to hiring them in 2013 was the insufficient supply of skilled labour (especially in the manufacturing sector). Overall, wages of newly hired workers tended to be smaller than those of incumbent workers with similar experience and task assignment. This tendency is more pronounced in the manufacturing sector, and the opposite is true for the financial intermediation sector. After the crisis, the share of firms claiming that they pay lower wages to new employees decreased. The wage gap between

newly hired and existing workers, on the other hand, widened slightly, thus pointing to weak pro-cyclical behaviour.

The price section of the survey shows that the majority of firms change the price of main product whenever costs or/and demand conditions change. One third of firms set prices following the price setting behaviour of their main competitor while one fifth negotiate prices individually with customers. The level of competition for the majority of firms increased after 2008 as did the frequency of price change. A more frequent labour cost adjustment was mentioned by firms as the main reason behind a more frequent price adjustment. Our analysis also shows that the probability of a price change is positively related to the level of competition in the market. Also, firms experiencing a decrease in demand had a higher probability to face an increase in competitive pressure, which depicts an extra effort to stay afloat.

Overall, this paper affirms the flexibility of labour market in Latvia. Flexible wages, employment and prices were crucial in engineering the necessary and timely adjustments in the economy, thus paving the way for a quick recovery.

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Table A1	
WDN Questionnaire – Latvian version	

Core/ Non-core/ Country specific questions	Question/ number	Question	Answers
questions		2	4
I	2	3	4
	T	C1 Information about the firm	
C C	Sector	Sector of activity in 2013 (NACE 2) Structure of the firm at the end of 2013	 1 = Manufacturing, 3 = Construction, 4 = Trade, 5 = Business services, 6 = Financial intermediation 1 = Single establishment firm,
			2 = Multi-establishment firm
С	Ownership	Ownership status of the firm at the end of 2013	1 = Mainly domestic, $2 =$ Mainly foreign
C	Autonomy	Autonomy of the firm at the end of 2013	1 = Parent company, 2 = Subsidiary/affiliate, 3 = Does not apply
С	Size	Number of employees	1 = 5-19, 2 = 20-49, 3 = 50-199, 4 = 200
	1	C2 Changes in the economic environ	nment
C		How did the following factors affect your firm's ac	tivity during 2008–2009 and 2010–2013?
c .	C21a	Level of demand for the firm's products/services	1 = Strong decrease $2 = $ Moderate decrease
	C21b	Volatility/uncertainty of demand for your products/services	3 = Unchanged, 4 = Moderate increase, 5 = Strong increase
	C21c	Access to external financing through the usual financial channels	
	C21d	Customers' ability to pay and meet contractual terms	
	C21e	Availability of supplies from your usual suppliers	
С		For those factors which affected your firm strongly, long-lasting for 2008–2009 and 2010–2013?	, were the effects transitory, partly persistent or
	C22a	Level of demand for the firm's products/services	1 = Transitory, 2 = Only partly persistent,
	C22b	Volatility/uncertainty of demand for your products/services	3 = Long-lasting
	C22c	Access to external financing through the usual financial channels	
	C22d	Customers' ability to pay and meet contractual terms	
	C22e	Availability of supplies from your usual suppliers	
С		With regard to financing, please indicate the releva your firm in 2008–2009 and 2010–2013.	nce of each of the following happenings for
		Note: credit here refers to any kind of credit, not only	bank credit.
	C23a	Credit was not available to finance working capital	1 = Not relevant, $2 = Of little relevance$,
	C23b	Credit was not available to finance new investment	3 = Relevant, $4 = $ Very relevant
	C23c	Credit was not available to refinance debt	
	C23d	Credit was available to finance working capital, but conditions (interest rate and other contractual terms) were too onerous	
	C23e	Credit was available to finance new investment, but conditions (interest rate and other contractual terms) were too onerous	
	C23f	Credit was available to refinance debt, but conditions (interest rate and other contractual terms) were too onerous	

Table A1 (cont.)

	(
1	2	3	4					
С		How did these components of total costs evolve dur	ing 2008–2009 and 2010–2013?					
	C24a	Total costs	1 = Strong decrease, $2 =$ Moderate decrease,					
	C24b	Labour costs	3 = Unchanged, $4 = $ Moderate increase,					
	C24c	Financing costs	5 = Strong increase					
	C24d	Costs of supplies						
	C24e	Other costs						
С		Please indicate how each of the components of labour 2009 and 2010–2013.	costs listed below has changed during 2008–					
	C25a	Base wages or piece work rates	1 = Strong decrease, $2 =$ Moderate decrease,					
	C25b	Flexible wage components (bonuses, fringe	3 = Unchanged, $4 = $ Moderate increase,					
		benefits, etc.)	5 = Strong increase					
	C25c	Number of permanent employees						
	C25d	Number of temporary/fixed-term employees						
	C25e	Number of agency workers and others (freelance work etc. not hired under employment contracts)						
	C25f	Working hours per employee						
	C25g	Other components of labour costs						
C		How did prices and demand for your main product e	evolve during 2008–2009 and 2010–2013?					
	C26a	Domestic demand for your main product/service	1 = Strong decrease, $2 = $ Moderate decrease,					
	C26b	Foreign demand for your main product/service	3 = Unchanged, $4 = $ Moderate increase,					
	C26c	Prices of your main product in domestic markets	5 = Strong increase					
	C26d	Prices of your main product in foreign markets						
С		How did the following factors evolve in your firm d	uring 2008–2009 and 2010–2013?					
	C27a	Average productivity per employee (as compared to	1 = Strong decrease, $2 =$ Moderate decrease,					
		labour costs per employee)	3 = Unchanged, 4 = Moderate increase,					
	C27b	Prices (as compared to total costs)	5 = Strong increase					
	C27c	Other (non-labour) costs (as compared to labour						
		costs)						
	C3 Labour force adjustment							
С		How many employees did your firm have on the pay	yroll at the end of 2013?					
	C31a	Total number of employees	(C31a = C31b + C31c + C31d)					
	C31b	Of which permanent full-time	number of employees					
	C31c	Of which permanent part-time						
	C31d	Of which temporary or fixed-term						
	C31e	Total number of agency workers and others						
C		At the end of 2013 how were your firm's employees	s approximately distributed by occupational					
0		group or tenure?						
	G22	Occupational group						
	C32a	Higher skilled non-manual (ISCO: 1, 2, 3)	(C32a + C32b + C32c + C32d = 100%)					
	C32b	Lower skilled non-manual (ISCO: 4 and 5)	percentage					
	C32c	Higher skilled manual (ISCO: 7 and 8)						
	C32d	Lower skilled manual (ISCO: 9)						
		Tenure						
	C32e	Below 1 year	(C32e + C32f + C32g = 100%)					
	C32f	Between 1 and 5 years	percentage					
9	C32g	More than 5 years						
C		During 2008–2009 and 2010–2013did you need to s its composition?	significantly reduce your labour input or to alter					
	C33a	t	0 = No, 1 = Yes					
	1 **		7					

Table A1 (cont.)

1	2	3	4				
С		If yes in question C33a					
	Which of the following measures did you use to reduce your labour input or alte						
		when it was most urgent? (2008-2009 and 2010-20	13)				
	C33b1	Collective layoffs	1 = Not at all, 2 = Marginally,				
	C33b2	Individual layoffs	3 = Moderately, $4 =$ Strongly				
	C33b5	Non-subsidised reduction of working hours					
		(including reduction of overtime)					
	C33b6	Non-renewal of temporary contracts at expiration					
	C33b7	Early retirement schemes					
	C33b8	Freeze or reduction of new hires					
	C33b9	Reduction of agency workers and others					
С		Have any of the following actions become more or le compared to the situation before 2008 and before 20	Have any of the following actions become more or less difficult during 2008–2009 and 2010–2013, compared to the situation before 2008 and before 2010 correspondingly?				
	C34a	To lay off employees for economic reasons (Collectively)	1 = Much less difficult, $2 =$ Less difficult, 3 = More difficult $4 =$ Much more difficult				
	C34b	To lay off employees for economic reasons					
		(individually)					
	C34c	To dismiss employees for disciplinary reasons					
	C34e	To hire employees (Cost of recruitment, including administrative costs)					
	C34f	To adjust working hours					
	C34g	To move employees to positions in other locations					
	C34h	To move employees across different job positions					
	C34i	To adjust wages of incumbent employees					
	C34j	To lower wages at which you hire new employees					
С		How relevant is each of the following factors as obsopen-ended contract at the end of 2013?	tacles in hiring workers with a permanent,				
	C35a	Uncertainty about economic conditions	1 = Not relevant, $2 = Of little relevance$,				
	C35b	Insufficient availability of labour with the required skills	3 = Relevant, $4 = $ Very relevant				
	C35c	Access to financing					
	C35d	Firing costs					
	C35e	Hiring costs					
	C35f	High payroll taxes					
	C35g	High wages					
	C35h	Risks that labour laws are changed					
	C35i	Costs of other inputs complementary to labour					
	C35j	Other					
		C4 Wage adjustment					
C	C41	What percentage of your firm's total costs (all operation	ting expenses) was due to labour costs (wages,				
		salaries, bonuses, social security contributions, traini funds, etc.) in 2013?	ng, tax contributions, contributions to pension				
С	C42	What percentage of your total wage bill in 2013 was related bonuses and benefits?	related to individual or company performance				
CS		For differentt types of employees what percentage of company performance related bonuses and benefits'	of wage bill in 2013 was related to individual or ? (approximately)				
		Occupational group					
	LV42a	Higher skilled non-manual (ISCO: 1, 2, 3)	percentage				
	LV42b	Lower skilled non-manual (ISCO: 4 and 5)					
	LV42c	Higher skilled manual (ISCO: 7 and 8)					
	LV42d	Lower skilled manual (ISCO: 9)					
Table A1 (cont.)

1	2	3	4
C		In 2013, did your firm apply a collective pay agreeme firm level)? and signed outside of the firm (at the nat	ent bargained and signed inside of the firm (at the ional, regional, sectoral or occupational level)?
	C43 1	At the firm level	1 = No, such an agreement does not exist,
	C43 3	Outside the firm	2 = No, the agreement exists but the firm
			opted-out,
			3 = Yes, such an agreement is in effect
NC	NC43 2	Proportion of employees covered by an agreement at the firm level	percentage
NC	NC43 4	Proportion of employees covered by an agreement at the national level	percentage
С	C43b	What is the proportion of your employees covered in	n 2013 by any collective pay agreement (%)?
С		How often does the collective pay agreement applied	at you firm typically change?
	C44		 1 = More than once a year, 2 = Once a year, 3 = Between one and two years, 4 = Every two years, 5 = Less frequently than once every two years, 6 = Never/Not applicable
C		Did your firm adopt abangas in base wages to inflat	ion before 20082 And during 2008, 2000 and
C		2010–2013? Definition of base wage – direct remut	peration excluding bonuses (regular wage and
		salary, commissions, piecework payments).	contained contained bonases (regular wage and
	C45ax	Before 2008	1 = Yes $2 = No$ $3 = Inflation was too low so$
	C45bx	During 2008–2009	that indexation rules were no operative,
	C45h	During 2010–2013	4 = There were no legal or other types of
	0.00	2 wing 2010 2010	indexation rules specifying such an adjustment
С		How frequently was the base wage of an employee your firm typically changed in your firm?	belonging to the main occupational group in
	C46ax	Before 2008	1 = More than once a year, $2 =$ Once a year,
	C46bx	During 2008–2009	3 = Between one and two years,
	C46b	During 2010–2013	4 = Every two years,
			5 = Less frequently than once every two years, 6 = Never/Not applicable
CS		How did share of individual or company related bor during 2008–2009 and 2010–2013, compared to the correspondingly?	nuses evolve for different types of employees situation before 2008 and before 2010
	LV46ba	Higher skilled non-manual (ISCO: 1, 2, 3)	1 = Decreased strongly,
	LV46bb	Lower skilled non-manual (ISCO: 4 and 5)	2 = Decreased moderately,
	LV46bc	Higher skilled manual (ISCO: 7 and 8)	3 = Did not change,
	LV46bd	Lower skilled manual (ISCO: 9)	4 = Increased moderately,
<u></u>		0 2000 2012 1:1 6 (1	5 = Increased strongly
C		Over 2008–2013, did you freeze of cut base wages in	a given year (please indicate in which years)?
	047-	Yes, wages were frozen	$0 - N_{\rm e} = 1 - N_{\rm e}$
	C4/a	In 2008, 2009, 2010, 2011, 2012, 2013	0 = No, 1 = Yes
		X7	Percentage of workers affected
	0471	Yes, wages were cut	$0 - N_{\rm e} = 1 - N_{\rm er}$
	C4/b	In 2008, 2009, 2010, 2011, 2012, 2013	0 = NO, 1 = Yes
			Average wage cut (%)
	047	wages were neither frozen nor cut	$0 = N_{\rm eff}$ and $1 = 1 = 1 = 1$
	C4/C	III 2008, 2009, 2010, 2011, 2012, 2013	0 - Not applicable, 1 = Applicable
NC		How did the labour cost of a newly hired worker c	ompare with that of similar (in terms of
	NC49	experience and task assignment) workers at your fi	$\frac{1111}{1 - M_{\rm resh} \log 2} = \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2}$
	INC48ax	Before 2008	1 = 1 Nuch lower, $2 = 1$ Lower, $3 = 1$ Similar, 4 = 1 Lighter $5 = 1$ Nuch higher
	NC48bx	During 2008–2009	$\gamma = 11$ gner, $\beta = 10$ uch night
	NC48b	During 2010–2013	

Table A1 (cont.)

1	2	3	4
CS		How did the labour cost of a newly hired worker co	mpare with that of similar (in terms of
		experience and task assignment) workers at your fir	m? Please differentiate between types of
		employees.	21
	LV48aa	Higher skilled non-manual (ISCO: 1, 2, 3)	1 = Much lower, $2 =$ Lower, $3 =$ Similar,
	LV48ab	Lower skilled non-manual (ISCO: 4 and 5)	4 = Higher, $5 =$ Much higher
	LV48ac	Higher skilled manual (ISCO: 7 and 8)	
	LV48ad	Lower skilled manual (ISCO: 9)	
CS		How did the base wage gap between wages of a ne	why hired worker and similar workers (in terms
		of experience and task assignment) evolve for diffe	erent types of employees during 2008–2009 and
		2010–2013, compared to the situation before 2008 a	nd before 2010 correspondingly?
	LV48ba	Higher skilled non-manual (ISCO: 1, 2, 3)	1 = Decreased strongly,
	LV48bb	Lower skilled non-manual (ISCO: 4 and 5)	2 = Decreased moderately,
	LV48bc	Higher skilled manual (ISCO: 7 and 8)	3 = Did not change,
	LV48bd	Lower skilled manual (ISCO: 9)	4 = Increased moderately,
			5 = Increased strongly
NC		What was the percentage of minimum wage received	ers in your company before and after the
	NC40-	there of minimum wage (Jan 2014)?	
	NC49a	share of minimum wage receivers before the	percentage
	NC40b	change in minimum wage	
	INC490	in minimum wage	
NC		Did the increase in the minimum wage in January	2014 brought about a need to raise wages or
110		other type of compensation for those employees in	vour company who earned more than the
		minimum wage?	5 r
	nc4 10		0 = Don't know, 1 = Yes, 2 = No
NC		Please indicate the percentage of employees whose	wages or other type of compensation increased
		in response to the rise in the minimum wage (inclu	ding those who earned minimum wages and
		who earned higher wages before date).	
	nc4 11		1 = 0% - 20%, 2 = 20% - 40%, 3 = 40% - 60%,
			4 = 60%-80%, 5 = 80%-100%, 6 = Don't know
NC		Please indicate the increase in your total labour co	sts (wages and other compensation) in response
		to the rise in the minimum wage. Please give the p	ercentage change.
	NC4 12		1 = Less than 3%, 2 = 3% - 5%,
			3 = 5% - 11%, 4 = More than 11%,
NO			
NC	NG4 12	How did the minimum wage rise (Jan 2014) affect	your company?
	NC4 13a	We had to lay off people	1 = Not relevant, 2 = Of little relevance, 2 = Polyant, 4 = Vary relevant
	NC4 13b	We could hire less people	5 = Don't know
	NC4 13c	We had to increase product prices	
	NC4 13d	We had to reduce non-labour costs	
	NC4 13e	We had to increase the wages of employees	
	NC4 12f	We increased an dustinity	
	NC4 131	Other	
NO	NC4 13g		1 1: ::::::::::::::::::::::::::::::::::
NC		How many additional employees would you current had remained unchanged at the level of EUD 285 in	ty hire if the minimum wage in January 2014
		Please give a numerical answer	stead of EOK 320?
	NC4 14	Trease give a numerical answer.	[number] Don't know
	1.0111	C5 Price setting and price cha	nge
NC		In 2013, how was the selling price of your main m	roduct, activity or service typically set in its
		main market (both domestically and internationally)?
	NC51a	Domestic market	1 = There is no autonomous price setting
	NC51b	Foreign market	policy because the price is regulated,
	1,0010		

Table A1 (cont.)

1	2	3	4
			2 = There is no autonomous price setting
			policy because the price is set by a parent
			company/group.
			3 = There is no autonomous price setting
			policy because the price is set by the main
			customer(s),
			4 = The price is set following the main
			competitors,
			5 = The price is set fully according to costs and
			a completely self-determined profit margin,
			6 = Negotiated with individual customers
NC		In 2013, what share of the revenues from your firm's	s main product, activity or service was due to
		sales in domestic markets and in foreign markets res	spectively?
	NC52a	Domestic market	percentage
	NC52b	Foreign market	
NC		Over 2010–2013, did you change the frequency of p	price changes with respect to the period before
		2008?	
	NC53		0 = No,
			1 = Y es, prices have changed more frequently,
110			2 = Y es, prices have changed less frequently
NC		If recently you changed prices more frequently, high	ner frequency because of:
	NO52 1	Flease allach à ranking in order of importance to th	1 2 2 4 5 0 N $(3 - most important)$
	NC53a I	More volatile demand	1, 2, 3, 4, 5, 0 = Not marked
	NC53a 2	More frequent changes in labour costs	
	NC53a 3	More frequent changes in other input costs	
	NC53a 4	Stronger competition in the main product market	
	NC53a 5	More frequent price changes by main competitors	
NC		If recently you changed prices less frequently, lower	r frequency because of:
	10501 1	Please attach a ranking in order of importance to the	te factors listed below (5 – most important)
	NC53b I	Less volatile demand	1, 2, 3, 4, 5, 0 = Not marked
	NC53b 2	Less frequent changes in labour costs	
	NC53b 3	Less frequent changes in other input costs	
	NC53b 4	Weaker competition in the main product market	
	NC53b 5	Less frequent price changes by main competitors	
NC		How would you characterise the degree of competit	ion in the domestic and foreign markets for
		your main product?	
	NC54a	Domestic market	1 = Weak, 2 = Moderate, 3 = Severe,
	NC54b	Foreign market	4 = Very severe, $5 = $ Not applicable
NC		How has the competitive pressure on your main prod	uct domestic and foreign markets changed in
		2008–2009 and 2010–2013 compared to the situation	before 2008?
	NC55a	Domestic market	1 = Strong decrease, $2 =$ Moderate decrease,
	NC55b	Foreign market	3 = Unchanged, $4 = $ Moderate increase,
			5 = Strong increase, $6 =$ Does not apply
NC		In 2013, how and how often did you typically change	ge the price of your main product?
	NC56a	On a regular time pattern	1 = Daily, 2 = Weekly, 3 = Monthly,
	NC56b	Whenever costs and/or demand conditions changed	4 = Quarterly, $5 =$ Half-yearly,
			6 = Once a year,
			7 = Between one and two years,
			8 = Less frequently than once every two years,
			9 = Never, $10 =$ Don't know,
			11 = More than once a year (unspecified frequency)
		1	(nequency)

Table A2Explanatory variables used in the regressions

Variable name in	Explanation	Question number
regressions		in survey
Employment, In	Natural logarithm of number of employees in the firm at the end of 2013	Size
Manufacturing, D		
Construction, D		
Financial		
intermediation, D	Dummy variable is equal to 1 if the firm operates in the corresponding sector in 2013	Sector
Export share	The % of revenues in the foreign market in 2013 $(1 = 100\%)$	NC52
Mainly foreign, D	Is equal to 1 if the ownership status of the firm at the end of 2013 was mainly foreign	Ownership
Parents, D	Is equal to 1 if the autonomy status of the firm at the end of 2013 was parent	
	company	Autonomy
Subsidiary, D	Is equal to 1 if the autonomy status of the firm at the end of 2013 was	
	subsidiary/affiliate	Autonomy
Demand	Change in demand	C21a
Domestic/foreign		
demand	Change in demand	C26a, C26b
Domestic/foreign		
competition	Degree of competition – from $1 =$ Weak to $4 =$ Very severe	NC54a, NC54b
No access to	Is equal to 1 if the firm responded that credit was not available (at any level of	C23a, C23b,
credit, D	relevance – Of little relevance, Relevant, Very relevant)	C23c
Productivity	Change in labour productivity	C27a

	Single	Multi-	Total	Single	Multi-	Total
	establishment	establishment	Totur	establishment	establishment	Total
	firm	firm		firm	firm	
		wb			wl	
Size						
10–19	88.1	11.9	100.0	88.4	11.6	100.0
20–49	85.3	14.7	100.0	86.0	14.0	100.0
50-199	64.3	35.7	100.0	64.4	35.6	100.0
200–	46.8	53.2	100.0	45.6	54.4	100.0
Total	82.0	18.0	100.0	65.0	35.0	100.0
Sector						
Manufacturing	85.0	15.0	100.0	81.6	18.4	100.0
Construction	87.7	12.3	100.0	74.8	25.2	100.0
Trade	78.4	21.6	100.0	64.7	35.3	100.0
Business services	83.0	17.0	100.0	58.3	41.7	100.0
Financial intermediation	58.2	41.8	100.0	40.2	59.8	100.0
Total	82.0	18.0	100.0	65.0	35.0	100.0
Ownership status						
Mainly domestic	96.0	55.7	88.8	96.3	76.8	89.5
Mainly foreign	4.0	44.3	11.2	3.7	23.2	10.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table A3 Firm structure and ownership characteristics (at the end of 2013; %)

Note: wb - weighted to represent firm population, wl - weighted to represent employees in the population.

117

557

440

117

557

440

Observations

Table A4 Firm autonomy characteristics for multi-establishment firms (at the end of 2013; %)

	Parent company	Sub- sidiary	Does not apply	Don't know	Total	Parent company	Sub- I sidiary	Does not apply	Don't know	Total
			wb					wl		
Size										
10–19	32.8	51.2	6.1	9.9	100.0	32.5	53.5	6.6	7.4	100.0
20–49	50.8	43.7	5.5	0.0	100.0	54.2	38.2	7.5	0.0	100.0
50-199	26.4	64.5	9.1	0.0	100.0	26.2	65.2	8.6	0.0	100.0
200–	55.9	34.3	9.8	0.0	100.0	66.7	30.1	3.1	0.0	100.0
Total	38.0	51.4	7.3	3.4	100.0	51.3	42.9	5.3	0.5	100.0
Sector										
Manufacturing	50.5	36.9	12.5	0.0	100.0	51.5	42.2	6.3	0.0	100.0
Construction	29.7	66.0	4.3	0.0	100.0	61.3	33.6	5.1	0.0	100.0
Trade	34.2	63.8	2.0	0.0	100.0	21.9	76.0	2.1	0.0	100.0
Business services	39.3	45.5	5.6	9.6	100.0	58.9	36.8	3.3	1.0	100.0
Financial										
intermediation	35.2	24.0	40.7	0.0	100.0	64.3	18.9	16.8	0.0	100.0
Total	38.0	51.4	7.3	3.4	100.0	51.3	42.9	5.3	0.5	100.0
Observations	50	58	8	1	117	50	58	8	1	117

Table A5 Average number of employees and share of different contract types by sector and size of firm (at the end of 2013; %)

	Average number of employees	Permanent full-time (%)	Permanent part-time (%)	Temporary (fixed term) (%)	Total	Agency workers (%)		
wl-weighted to represent employees in the population								
Manufacturing	244	89.1	8.6	2.3	100	0.8		
Construction	88	81.4	10.8	7.8	100	1.1		
Trade	114	84.1	12.3	3.5	100	1.5		
Business services	413	84.2	12.9	2.9	100	1.8		
Financial intermediation	344	84.6	3.6	11.8	100	0.5		
Total	277	85.0	10.9	4.1	100	1.4		
Size								
10–19	13	77.5	20.7	1.9	100	2.6		
20–49	31	79.5	17.5	2.9	100	2.9		
50-199	95	86.9	9.5	3.6	100	1.2		
200–	655	89.3	4.7	6.0	100	0.3		
Total	277	85.0	10.9	4.1	100	1.4		
	wb-v	weighted to repr	esent firm popu	lation				
Manufacturing	61	81.4	17.0	1.7	100	0.7		
Construction	34	78.2	16.0	5.8	100	1.7		
Trade	33	83.5	15.2	1.3	100	2.3		
Business services	51	77.0	20.2	2.8	100	4.5		
Financial intermediation	139	82.1	9.9	8.0	100	1.1		
Total	47	79.9	17.3	2.7	100	2.7		
Size								
10–19	12	77.5	20.7	1.8	100	2.9		
20–49	30	79.7	17.2	3.0	100	3.5		
50–199	92	87.1	9.2	3.7	100	1.1		
200–	442	85.6	6.2	8.2	100	0.3		
Total	47	79.9	17.3	2.7	100	2.7		

Note: Agency workers are not employees of the firm and therefore the share of agency workers is estimated as the number of agency workers to the number of total firm employees.

Table A6Share of employee skills by size and sector of a firm (at the end of 2013; %)

	Non-manual		Manual		Total
	higher skilled (%)	lower skilled (%)	higher skilled (%)	lower skilled (%)	
	wb –	weighted to represe	nt firm population		
Manufacturing	16.5	16.6	49.8	17.1	100
Construction	23.4	15.5	48.9	12.1	100
Trade	30.3	40.6	20.0	9.1	100
Business services	33.9	28.3	26.2	11.6	100
Financial intermediation	41.3	48.4	2.8	7.6	100
Total	28.6	28.7	30.9	11.8	100
Size					
10–19	33.7	32.0	25.9	8.4	100
20–49	23.4	23.5	37.8	15.2	100
50-199	20.4	29.1	35.3	15.2	100
200–	32.7	21.9	28.4	17.0	100
Total	28.6	28.7	30.9	11.8	100
	wl-weight	ted to represent emp	loyees in the popula	ation	
Manufacturing	14.7	15.2	57.3	12.8	100
Construction	21.0	13.9	49.5	15.7	100
Trade	27.7	45.7	17.1	9.4	100
Business services	30.7	24.3	29.0	16.0	100
Financial intermediation	63.8	23.7	0.8	11.8	100
Total	28.2	25.6	32.6	13.6	100
Size					
10–19	33.4	30.4	27.8	8.4	100
20–49	22.7	22.7	39.8	14.8	100
50-199	19.8	29.3	36.5	14.4	100
200–	34.6	21.1	29.2	15.1	100
Total	28.2	25.6	32.6	13.6	100

Table A7			
Structure of employees'	tenure by size and se	ector of a firm (a	t the end of 2013; %)

			Total	
Γ	Below	Between	More than	
	1 year (%)	1 and 5 years (%)	5 years (%)	
	wb-weighted t	o represent firm population	1	
Manufacturing	10.2	32.6	57.1	100
Construction	12.5	30.0	57.5	100
Trade	9.9	29.4	60.7	100
Business services	11.3	34.0	54.7	100
Financial intermediation	13.2	31.9	54.9	100
Total	10.9	31.8	57.3	100
Size				
10–19	8.9	28.9	62.3	100
20–49	11.7	32.3	55.9	100
50-199	15.1	38.0	47.0	100
200–	15.4	42.3	42.2	100
Total	10.9	31.8	57.3	100
	wl-weighted to repre	esent employees in the pop	ulation	
Manufacturing	10.7	32.4	56.9	100
Construction	13.9	30.0	56.1	100
Trade	14.2	40.7	45.1	100
Business services	14.2	37.7	48.2	100
Financial intermediation	14.3	35.2	50.5	100
Total	13.4	36.2	50.4	100
Size				
10–19	9.3	28.8	61.9	100
20–49	12.0	32.1	55.9	100
50-199	15.3	38.5	46.3	100
200–	14.5	39.5	46.0	100
Total	13.4	36.2	50.4	100

Share of collective pay agreement bargained and signed inside the firm (at firm level) and outside the firm (at national, regional, sectoral or occupational level) in 2013 (%)

	Outside firm		Inside firm	
	wb	wl	wb	wl
No, such an agreement does not exist	95.3	93.5	90.0	76.7
No, the agreement exists but the firm opted-out	3.7	3.4	5.3	6.0
Yes, such an agreement is in effect	0.5	2.3	4.2	16.5
Don't know	0.5	0.8	0.5	0.8
Total	100	100	100	100
Number of observations	557		5	57
Proportion of employees covered by such an agreement				
(if applicable)	80.0	86.0	98.0	95.8

Table A9Frequency of collective pay agreement change at firm level (if applicable; %)

	Inside the firm	
	wb	wl
More than once a year	6.2	6.9
Once a year	36.0	40.6
Between one and two years	15.3	16.5
Every two years	0.8	6.4
Less frequently than once every two years	31.3	18.1
Never/Not applicable	10.4	11.4
Total	100	100
Number of observations	32	

Note: wb – weighted to represent firm population, wl – weighted to represent employees in the population.

Table A10

Share of revenues from the main product, activity or services due to sales in domestic and foreign markets in 2013 (%)

	wb – firm numb	ber weights	wl – employmer	nt weights
	Domestic market	Foreign market	Domestic market	Foreign market
Size				
10–19	84.6	15.4	83.0	17.0
20–49	75.9	24.1	74.8	25.2
50–199	79.2	20.8	78.6	21.4
200–	58.6	41.4	61.9	38.1
Total	80.1	19.9	72.7	27.3
Sector				
Manufacturing	58.5	41.5	38.3	61.7
Construction	92.8	7.2	95.0	5.0
Trade	85.8	14.2	79.4	20.6
Business services	80.6	19.4	83.8	16.2
Financial intermediation	82.4	17.6	66.0	34.0
Total	80.1	19.9	72.7	27.3

Table A11 Change in the level of demand, availability of external financing, customers' ability to pay and availability of supplies during 2008–2009 and 2010–2013 (%)

	Le	vel of dem	and (C21a)		Availability of external financing (C21c)				
	2008-2009		2010-2013		2008-2009		2010-2013		
	wb	wl	wb	wl	wb	wl	wb	wl	
Strong decrease	28.3	21.3	11.0	7.4	11.8	10.5	8.1	4.1	
Moderate decrease	25.3	28.8	17.6	14.4	8.3	12.1	6.2	7.0	
Unchanged	18.2	18.8	15.1	14.0	67.7	63.6	60.4	56.6	
Moderate increase	21.1	23.5	45.2	46.7	9.0	10.3	21.0	22.8	
Strong increase	7.1	7.6	11.1	17.4	3.2	3.5	4.3	9.5	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Number of observations	532		556		398		414		

	Custon	ners' abilit	y to pay (C21	d)	Availability of supplies (C21e)				
	2008-20)09	2010-2013		2008-	-2009	2010-2013		
	wb	wl	wb	wl	wb	wl	wb	wl	
Strong decrease	20.9	22.9	10.8	6.2	5.7	3.7	4.5	2.8	
Moderate decrease	25.8	29.0	17.9	19.7	11.2	15.9	6.5	5.5	
Unchanged	46.9	43.0	48.1	46.5	72.2	70.2	69.5	69.9	
Moderate increase	5.2	3.5	20.3	25.1	9.1	8.9	16.6	19.1	
Strong increase	1.3	1.6	2.9	2.5	1.9	1.4	3.0	2.7	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Number of observations	519		534			507	519		

Note: wb – weighted to represent firm population, wl – weighted to represent employees in the population.

Table A12

Comparison of a change in the level of demand, availability of external financing, customers' ability to pay and availability of supplies in 2010–2013 to the change in 2008–2009 (cross tabulations; rows – 2008–2009; %)

							2010-	-2013						
]	Level of	demano	d (C21a)			Availability of external financing (C21c)						
	Decre	ase	Uncha	nged	ged Increase		Total	Total Decrease		Unchanged		Increase		Total
	wb	wl	wb	wl	wb	wl		wb	wl	wb	wl	wb	wl	
Decrease	22.8	18.0	9.1	6.9	68.2	75.1	100.0	33.1	16.8	13.5	5.6	53.5	77.6	100.0
Unchanged	30.1	22.6	38.9	49.0	31.0	28.4	100.0	3.9	2.5	84.8	84.3	11.3	13.2	100.0
Increase	39.1	29.8	10.4	5.5	50.4	64.7	100.0	34.0	41.7	15.4	11.0	50.6	47.3	100.0
		Cust	omers' a	bility to	pay (C2	21d)			Ava	ilability	of supp	olies (C2	1e)	
	Decre	ease	Uncha	nged	Incre	ase	Total	Decre	ease	Uncha	nged	Incre	ase	Total
	wb	wl	wb	wl	wb	wl		wb	wl	wb	wl	wb	wl	
Decrease	35.5	33.9	21.4	17.3	43.0	48.8	100.0	22.8	12.2	25.6	33.9	51.6	53.5	100.0
Unchanged	17.5	14.2	78.7	82.3	3.7	3.5	100.0	4.7	3.1	89.8	90.6	5.5	6.3	100.0
Increase	48.9	51.7	24.3	22.1	26.9	26.2	100.0	31.6	34.4	10.7	5.3	57.7	60.3	100.0

Note: wb – weighted to represent firm population, wl – weighted to represent employees in the population.

Explanation: According to the firm number weights, 22.8% of firms having answered that the demand for their production decreased in 2008–2009, answered the same in 2010–2013. On the other hand, 68.2% of firms experienced improvement in the level of demand in 2010–2013.

Factors explaining probability of a firm to experience a decrease, increase or no change in the level of demand for the firm's main product and availability of external financing in 2008–2009 and 2010–2013 (marginal effect of generalised ordered logit)

		Level of den	nand (C21a)		Availability of external financing (C21c)				
	2008-	2009	2010-	-2013	2008-	-2009	2010-	2013	
	wb	wl	wb	wl	wb	wl	wb	wl	
Decrease									
Employment, In	-0.026	-0.015	-0.060**	-0.039*	0.022	0.014	-0.024*	-0.008	
	(0.03)	(0.04)	(0.02)	(0.02)	(0.02)	(0.03)	(0.01)	(0.01)	
Manufacturing, D	0.044	-0.066	-0.077	-0.010	-0.017	-0.128*	0.025	-0.007	
	(0.07)	(0.10)	(0.05)	(0.05)	(0.03)	(0.06)	(0.03)	(0.03)	
Construction, D	0.076	-0.057	0.142*	0.119	0.006	-0.045	-0.014	0.019	
	(0.07)	(0.09)	(0.07)	(0.06)	(0.05)	(0.06)	(0.03)	(0.03)	
Export share	-0.156	-0.001	-0.165*	-0.315***	-0.028	0.090	-0.001	0.012	
	(0.09)	(0.16)	(0.07)	(0.09)	(0.04)	(0.09)	(0.04)	(0.04)	
Mainly foreign, D	0.079	0.087	-0.110	-0.079	-0.041	0.015	-0.042	-0.027	
	(0.09)	(0.11)	(0.06)	(0.05)	(0.03)	(0.08)	(0.03)	(0.02)	
Parents, D	-0.073	-0.006	0.027	0.192	0.059	-0.158*	0.083	0.068	
	(0.10)	(0.16)	(0.09)	(0.11)	(0.06)	(0.07)	(0.06)	(0.06)	
Subsidiary, D	0.067	0.165	-0.109	-0.085	-0.024	-0.154**	0.055	0.102	
	(0.09)	(0.13)	(0.06)	(0.05)	(0.03)	(0.05)	(0.05)	(0.06)	
Demand					-0.124***	-0.095***	-0.074***	-0.063***	
					(0.01)	(0.03)	(0.01)	(0.01)	
Unchanged									
Employment, In	0.005	0.002	-0.015**	-0.023	-0.041*	-0.005	-0.019	-0.020	
	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.02)	
Manufacturing, D	-0.009	0.008	-0.023	-0.006	0.002	0.008	0.015	-0.017	
	(0.02)	(0.01)	(0.02)	(0.03)	(0.00)	(0.04)	(0.02)	(0.07)	
Construction, D	-0.106*	0.007	-0.085*	0.051*	-0.001	0.013	-0.013	0.036	
	(0.04)	(0.01)	(0.04)	(0.02)	(0.01)	(0.01)	(0.03)	(0.04)	
Export share	0.030	0.000	-0.041*	0.043	0.005	-0.036	-0.000	0.029	
	(0.02)	(0.02)	(0.02)	(0.09)	(0.01)	(0.04)	(0.03)	(0.10)	
Mainly foreign, D	-0.018	-0.016	-0.037	-0.056	-0.002	-0.007	-0.054	-0.093	
	(0.02)	(0.02)	(0.03)	(0.04)	(0.02)	(0.04)	(0.06)	(0.10)	
Parents, D	0.011	0.001	0.006	0.072*	-0.024	-0.002	0.017	0.090	
	(0.01)	(0.02)	(0.02)	(0.03)	(0.03)	(0.05)	(0.02)	(0.05)	
Subsidiary, D	-0.015	-0.036	-0.037	-0.059	0.001	-0.028	0.020	0.091*	
	(0.02)	(0.04)	(0.03)	(0.04)	(0.01)	(0.05)	(0.01)	(0.04)	
Demand					0.069***	0.038	-0.057**	-0.151***	
					(0.02)	(0.02)	(0.02)	(0.04)	
Increase (next page)									
Observations		530		553		396	412		

Note: ln - logarithm, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Table A13 (cont.)

	L	evel of dem	and (C21a)		Availability of external financing (C21c)				
	2008-2	009	2010-2	2013	2008-	2009	2010-2	2013	
	wb	wl	wb	wl	wb	wl	wb	wl	
Increase									
Employment, In	0.021	0.013	0.075**	0.062*	0.019	-0.008	0.042*	0.028	
	(0.02)	(0.03)	(0.03)	(0.03)	(0.01)	(0.02)	(0.02)	(0.03)	
Manufacturing, D	-0.035	0.058	0.101	0.016	0.015	0.120	-0.039	0.024	
	(0.05)	(0.09)	(0.07)	(0.08)	(0.03)	(0.08)	(0.05)	(0.10)	
Construction, D	0.030	0.051	-0.057	-0.170*	-0.004	0.032	0.027	-0.054	
	(0.07)	(0.09)	(0.08)	(0.08)	(0.03)	(0.05)	(0.06)	(0.07)	
Export share	0.127	0.001	0.206*	0.272*	0.022	-0.054	0.001	-0.042	
	(0.07)	(0.14)	(0.09)	(0.12)	(0.03)	(0.06)	(0.07)	(0.14)	
Mainly foreign, D	-0.061	-0.070	0.147	0.136	0.043	-0.009	0.096	0.120	
	(0.06)	(0.08)	(0.09)	(0.09)	(0.04)	(0.04)	(0.09)	(0.12)	
Parents, D	0.062	0.005	-0.033	-0.263	-0.035	0.160	-0.100*	-0.158	
	(0.09)	(0.13)	(0.10)	(0.14)	(0.03)	(0.10)	(0.05)	(0.10)	
Subsidiary, D	-0.052	-0.129	0.146	0.144	0.023	0.182*	-0.075	-0.193**	
	(0.07)	(0.10)	(0.09)	(0.10)	(0.04)	(0.08)	(0.06)	(0.07)	
Demand					0.055***	0.057***	0.131***	0.214***	
					(0.01)	(0.02)	(0.02)	(0.04)	
Observations	53	30	5	53		396	412		

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Comment: Groups are combined into Decrease, Unchanged and Increase due to a small number of observations. Explanatory variables are described in Table A2.

Interpretation of coefficients:

Marginal effect shows by how much the probability of a firm to experience the defined event (e.g. decrease, increase, or unchanged level of demand) changes if the value of the corresponding level of the explanatory variable changes by one unit.

Explanation (0.206^*) : an increase in the share of revenues in the foreign market by 1% increased the probability of the firm to experience an increase in the demand by 0.206%.

Factors explaining probability of a firm to experience a decrease, increase or no change in the availability of supplies and customers' ability to pay in 2008–2009 and 2010–2013 (marginal effect of generalised ordered logit)

	Cust	Customers' ability to pay (C21d)				Availability of supplies (C21e)			
	2008-	2009	2010-	-2013	2008-	2009	2010-	2013	
	wb	wl	wb	wl	wb	wl	wb	wl	
Decrease									
Employment, ln	0.078**	0.064	0.023	0.015	0.021	0.038*	-0.014	0.005	
	(0.03)	(0.04)	(0.02)	(0.02)	(0.01)	(0.02)	(0.01)	(0.01)	
Manufacturing, D	0.029	-0.012	-0.034	-0.078	-0.011	-0.055	-0.006	-0.020	
	(0.08)	(0.10)	(0.05)	(0.06)	(0.03)	(0.06)	(0.02)	(0.02)	
Construction, D	0.025	-0.087	-0.058	0.004	0.084	0.045	-0.041**	0.003	
	(0.08)	(0.12)	(0.05)	(0.08)	(0.05)	(0.05)	(0.02)	(0.03)	
Export share	-0.072	-0.047	-0.125	0.099	0.037	0.088	0.009	0.055	
	(0.09)	(0.13)	(0.08)	(0.09)	(0.04)	(0.08)	(0.02)	(0.03)	
Mainly foreign, D	-0.121	-0.294**	0.136	0.136	-0.079**	-0.047	0.060	0.059	
	(0.10)	(0.10)	(0.08)	(0.10)	(0.03)	(0.05)	(0.04)	(0.04)	
Parents, D	0.087	-0.034	-0.097*	-0.196**	0.059	-0.144***	-0.023	-0.015	
	(0.10)	(0.18)	(0.05)	(0.06)	(0.08)	(0.04)	(0.02)	(0.03)	
Subsidiary, D	0.051	0.155	-0.118*	-0.140	0.090	0.140	-0.000	0.058	
	(0.11)	(0.12)	(0.06)	(0.08)	(0.07)	(0.11)	(0.03)	(0.07)	
Demand	-0.240***	-0.249***	-0.148***	-0.116***	-0.095***	-0.091***	-0.061***	-0.043***	
	(0.03)	(0.04)	(0.02)	(0.03)	(0.01)	(0.02)	(0.01)	(0.01)	
Unchanged									
Employment, ln	-0.076**	-0.063	-0.007	-0.002	-0.009	-0.020	-0.014	0.008	
	(0.03)	(0.04)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	
Manufacturing, D	-0.029	0.012	0.009	-0.005	0.004	0.023	-0.007	-0.041	
	(0.08)	(0.10)	(0.01)	(0.02)	(0.01)	(0.02)	(0.02)	(0.06)	
Construction, D	-0.024	0.086	0.012	-0.000	-0.192**	-0.144*	-0.083	0.005	
	(0.08)	(0.12)	(0.01)	(0.01)	(0.07)	(0.06)	(0.06)	(0.05)	
Export share	0.070	0.046	0.161*	-0.011	-0.017	-0.046	0.009	0.089	
	(0.09)	(0.13)	(0.08)	(0.02)	(0.02)	(0.05)	(0.02)	(0.05)	
Mainly foreign, D	0.161	0.323***	-0.065	-0.046	0.119***	0.018	0.015	0.036	
	(0.10)	(0.10)	(0.05)	(0.05)	(0.03)	(0.01)	(0.01)	(0.02)	
Parents, D	-0.086	0.033	0.006	-0.089	-0.170	-0.040	-0.037	-0.030	
	(0.10)	(0.18)	(0.02)	(0.06)	(0.09)	(0.08)	(0.06)	(0.07)	
Subsidiary, D	-0.060	-0.161	0.002	-0.043	-0.209*	-0.256*	-0.000	-0.336**	
	(0.11)	(0.12)	(0.03)	(0.08)	(0.09)	(0.10)	(0.03)	(0.12)	
Demand	0.236***	0.246***	-0.024	-0.101*	0.043**	0.048*	-0.059***	-0.068**	
	(0.03)	(0.04)	(0.02)	(0.04)	(0.01)	(0.02)	(0.02)	(0.02)	
Increase (next page)			1						
Observations		516		531		504	516		

Note: ln - logarithm, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Table A14 (cont.)

	Cust	omers' abilit	y to pay (C21	d)	Availability of supplies (C21e)			
	2008-2	2009	2010-	2013	2008-	2009	2010-2	2013
	wb	wl	wb	wl	wb	wl	wb	wl
Increase								
Employment, In	-0.001*	-0.001	-0.016	-0.013	-0.011	-0.018**	0.028	-0.013
	(0.00)	(0.00)	(0.01)	(0.02)	(0.01)	(0.01)	(0.02)	(0.02)
Manufacturing, D	-0.000	0.000	0.025	0.084	0.006	0.032	0.013	0.062
	(0.00)	(0.00)	(0.04)	(0.07)	(0.02)	(0.04)	(0.04)	(0.08)
Construction, D	-0.000	0.001	0.046	-0.003	0.108*	0.098*	0.123	-0.008
	(0.00)	(0.00)	(0.05)	(0.07)	(0.05)	(0.05)	(0.07)	(0.08)
Export share	0.001	0.001	-0.035	-0.089	-0.020	-0.042	-0.018	-0.144
	(0.00)	(0.00)	(0.05)	(0.08)	(0.02)	(0.03)	(0.05)	(0.07)
Mainly foreign, D	-0.040***	-0.029**	-0.072*	-0.090	-0.040*	0.029	-0.075*	-0.095*
	(0.01)	(0.01)	(0.03)	(0.05)	(0.02)	(0.04)	(0.03)	(0.05)
Parents, D	-0.001	0.000	0.092	0.285**	0.111	0.184	0.061	0.045
	(0.00)	(0.00)	(0.06)	(0.10)	(0.08)	(0.10)	(0.09)	(0.10)
Subsidiary, D	0.009	0.006	0.116	0.183	0.119	0.116	0.001	0.279*
	(0.01)	(0.00)	(0.08)	(0.15)	(0.07)	(0.08)	(0.06)	(0.14)
Demand	0.004***	0.003***	0.173***	0.217***	0.052***	0.043***	0.120***	0.111***
	(0.00)	(0.00)	(0.02)	(0.03)	(0.01)	(0.01)	(0.01)	(0.03)
Observations	510	6	53	1	504	4	510	6

Note: ln - logarithm, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

	Level o	f domestic	demand (C20	6a)	Level of foreign demand (C26b)			
	2008–20	09	2010-2	2013	2008-	2009	2010-2	2013
	wb	wl	wb	wl	wb	wl	wb	wl
Strong decrease	25.7	18.7	9.3	6.3	10.7	8.3	5.1	3.9
Moderate decrease	22.4	25.6	13.9	11.1	14.6	16.4	5.6	4.5
Unchanged	28.7	34.3	22.3	29.1	61.7	58.1	51.7	43.7
Moderate increase	20.6	19.2	46.4	44.5	9.2	13.1	27.7	34.5
Strong increase	2.6	2.1	8.1	8.9	3.8	4.1	9.9	13.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Observations	15 528		540)	40:	5	41	5
	Price in	n domestic	e market (C26	c)	Pri	ce in foreign	market (C26	d)
Strong decrease	12.5	10.5	5.0	3.6	7.5	5.9	2.4	1.6
Moderate decrease	17.8	14.4	9.1	7.7	12.1	10.5	7.7	5.3
Unchanged	41.2	45.2	31.6	35.3	61.8	57.4	50.3	51.1
Moderate increase	27.6	29.3	50.7	51.3	18.1	26.1	36.9	37.1
Strong increase	0.9	0.7	3.7	2.0	0.5	0.2	2.7	4.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Observations	523 537			7	392	2	400	

Table A15Change in the demand and price of the firm's main product during 2008–2009 and 2010–2013 (%)

Factors explaining probability of a firm to experience a decrease, increase or no change in the level of domestic and foreign demand in 2008–2009 and 2010–2013 (marginal effect of generalised ordered logit)

	Level	of domestic	demand (C2	26a)	Level of foreign demand (C26b)				
	2008–2	009	2010-	-2013	2008-	-2009	2010-	2013	
	wb	wl	wb	wl	wb	wl	wb	wl	
Decrease									
Employment, In	-0.052	-0.014	-0.057*	-0.046***	-0.026	-0.034	-0.016	-0.023*	
	(0.03)	(0.03)	(0.02)	(0.01)	(0.03)	(0.04)	(0.01)	(0.01)	
Manufacturing, D	0.076	-0.021	-0.035	-0.014	0.058	0.047	-0.057**	-0.053**	
	(0.07)	(0.10)	(0.04)	(0.04)	(0.06)	(0.08)	(0.02)	(0.02)	
Construction, D	0.172*	0.132	0.038	-0.012	-0.017	0.023	0.014	0.022	
	(0.07)	(0.09)	(0.06)	(0.05)	(0.08)	(0.08)	(0.03)	(0.03)	
Export share	-0.072	-0.055	-0.049	-0.097	0.193**	0.227	0.048	0.064	
	(0.08)	(0.15)	(0.05)	(0.07)	(0.07)	(0.13)	(0.04)	(0.05)	
Mainly foreign, D	0.032	0.042	-0.072	0.019	-0.079	0.009	0.012	-0.030	
	(0.10)	(0.11)	(0.05)	(0.06)	(0.07)	(0.11)	(0.04)	(0.02)	
Parents, D	0.094	0.108	-0.008	0.048	0.154	0.144	0.017	0.159	
	(0.10)	(0.16)	(0.07)	(0.08)	(0.11)	(0.19)	(0.06)	(0.12)	
Subsidiary, D	0.110	0.145	-0.119**	-0.124**	0.122	0.127	-0.059**	-0.055*	
	(0.10)	(0.15)	(0.04)	(0.04)	(0.10)	(0.13)	(0.02)	(0.02)	
Unchanged									
Employment, ln	0.015	0.006	0.042	0.062*	0.014	0.011	-0.024	-0.071	
	(0.01)	(0.01)	(0.02)	(0.03)	(0.01)	(0.01)	(0.02)	(0.04)	
Manufacturing, D	-0.025	0.008	-0.017	-0.014	-0.034	-0.018	-0.122*	-0.211*	
	(0.03)	(0.04)	(0.02)	(0.05)	(0.04)	(0.04)	(0.06)	(0.09)	
Construction, D	-0.185***	-0.064	-0.112*	-0.120*	0.009	-0.009	0.019	0.056	
	(0.05)	(0.05)	(0.05)	(0.05)	(0.04)	(0.03)	(0.04)	(0.06)	
Export share	0.021	0.022	-0.022	-0.095	-0.416***	-0.480***	-0.533***	-0.461**	
	(0.02)	(0.06)	(0.02)	(0.07)	(0.05)	(0.07)	(0.08)	(0.16)	
Mainly foreign, D	-0.010	-0.018	-0.040	0.017	0.032	-0.003	0.016	-0.117	
	(0.03)	(0.05)	(0.03)	(0.05)	(0.02)	(0.04)	(0.05)	(0.10)	
Parents, D	-0.033	0.119	-0.003	0.040	-0.146	-0.069	-0.264**	-0.184	
	(0.04)	(0.15)	(0.03)	(0.05)	(0.08)	(0.11)	(0.09)	(0.17)	
Subsidiary, D	-0.039	-0.070	-0.077*	-0.175*	-0.080	-0.062	-0.146	-0.243*	
	(0.04)	(0.08)	(0.04)	(0.08)	(0.07)	(0.08)	(0.08)	(0.12)	
Increase (next page)									
Observations	52	26		537		402	412		

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Table A16 (cont.)

	Leve	l of domestic	demand (C2	6a)	Lev	el of foreign	demand (C26	b)
	2008-	2009	2010-	2013	2008-	2009	2010-2	2013
	wb	wl	wb	wl	wb	wl	wb	wl
Increase								
Employment, In	0.037*	0.008	0.016	-0.016	0.012	0.022	0.040	0.095*
	(0.02)	(0.02)	(0.03)	(0.03)	(0.01)	(0.03)	(0.03)	(0.05)
Manufacturing, D	-0.051	0.013	0.052	0.028	-0.024	-0.029	0.179*	0.263**
	(0.05)	(0.06)	(0.07)	(0.09)	(0.02)	(0.05)	(0.08)	(0.10)
Construction, D	0.013	-0.068	0.074	0.133	0.008	-0.014	-0.033	-0.078
	(0.07)	(0.04)	(0.07)	(0.09)	(0.04)	(0.05)	(0.08)	(0.09)
Export share	0.051	0.033	0.071	0.192	0.223***	0.253*	0.485***	0.397*
	(0.05)	(0.09)	(0.08)	(0.14)	(0.04)	(0.10)	(0.10)	(0.18)
Mainly foreign, D	-0.022	-0.024	0.111	-0.036	0.047	-0.006	-0.028	0.147
	(0.06)	(0.06)	(0.08)	(0.11)	(0.05)	(0.07)	(0.09)	(0.12)
Parents, D	-0.061	-0.228***	0.011	-0.088	-0.008	-0.075	0.247*	0.025
	(0.06)	(0.05)	(0.10)	(0.13)	(0.04)	(0.09)	(0.11)	(0.19)
Subsidiary, D	-0.071	-0.075	0.195*	0.299**	-0.042	-0.066	0.205*	0.299*
	(0.06)	(0.07)	(0.08)	(0.11)	(0.03)	(0.06)	(0.10)	(0.14)
Observations		526	5	537	2	402	412	

Note: ln – logarithm, D – dummy variable, wb – weighted to represent firm population, wl – weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Factors explaining probability of a firm to experience a decrease, increase or no change in the domestic and foreign price for the firm's main product in 2008–2009 and 2010–2013 (marginal effect of generalised ordered logit)

	Pric	e in domestic	e market (C2	6c)	Price in foreign market (C26d)			
	2008-	2009	2010-	-2013	2008-	-2009	2010-	-2013
	wb	wl	wb	wl	wb	wl	wb	wl
Decrease								
Employment, In	-0.005	-0.019	0.005	0.003	-0.022	-0.023	0.005	0.001
	(0.02)	(0.02)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)
Manufacturing, D	-0.079*	-0.023	-0.027	-0.006	-0.064	0.016	-0.021	-0.003
	(0.04)	(0.06)	(0.02)	(0.01)	(0.04)	(0.04)	(0.02)	(0.02)
Construction, D	0.190*	0.175*	0.018	0.037	-0.002	-0.012	0.057	0.024
	(0.08)	(0.07)	(0.03)	(0.04)	(0.09)	(0.06)	(0.04)	(0.03)
Export share	0.079	0.012	0.031	-0.038	0.145*	0.097	0.066	0.039
	(0.06)	(0.12)	(0.03)	(0.02)	(0.06)	(0.06)	(0.04)	(0.03)
Mainly foreign, D	0.047	0.128	0.062	0.038	-0.026	-0.042	0.021	0.005
	(0.08)	(0.10)	(0.04)	(0.04)	(0.04)	(0.03)	(0.03)	(0.03)
Parents, D	0.115	0.025	-0.041*	-0.014	0.033	0.010	-0.020	-0.003
	(0.08)	(0.10)	(0.02)	(0.02)	(0.05)	(0.06)	(0.02)	(0.03)
Subsidiary, D	-0.161***	-0.137*	-0.051**	-0.054**	0.041	0.064	-0.039*	-0.008
	(0.05)	(0.07)	(0.02)	(0.02)	(0.05)	(0.06)	(0.02)	(0.02)
Domestic demand	-0.213***	-0.165***	-0.087***	-0.051***				
	(0.02)	(0.03)	(0.01)	(0.01)				
Domestic competition	0.024	0.017	0.014	0.021				
	(0.02)	(0.02)	(0.01)	(0.01)				
Foreign demand					-0.127***	-0.128***	-0.063***	-0.045**
					(0.02)	(0.03)	(0.01)	(0.01)
Foreign competition					0.011	-0.000	0.019**	0.001
					(0.01)	(0.01)	(0.01)	(0.01)
Unchanged								
Employment, ln	-0.001	-0.004	0.011	0.018	0.016	0.006	0.013	0.004
	(0.00)	(0.01)	(0.02)	(0.03)	(0.01)	(0.00)	(0.02)	(0.03)
Manufacturing, D	-0.025	-0.006	-0.070	-0.031	0.077*	-0.005	-0.065	-0.013
	(0.02)	(0.02)	(0.05)	(0.07)	(0.04)	(0.01)	(0.06)	(0.09)
Construction, D	-0.226**	-0.190*	0.037	0.133	0.169*	0.227**	0.089**	0.074
	(0.08)	(0.09)	(0.05)	(0.08)	(0.09)	(0.07)	(0.03)	(0.07)
Export share	0.008	0.002	0.069	-0.190	-0.164**	-0.188***	-0.330***	-0.641***
	(0.01)	(0.02)	(0.06)	(0.11)	(0.06)	(0.05)	(0.09)	(0.14)
Mainly foreign, D	-0.001	-0.017	0.100*	0.136	0.018	-0.004	0.044	0.018
	(0.01)	(0.04)	(0.05)	(0.09)	(0.03)	(0.02)	(0.06)	(0.11)
Parents, D	-0.019	0.003	-0.119	-0.076	-0.026	-0.003	-0.066	-0.011
	(0.03)	(0.01)	(0.06)	(0.12)	(0.04)	(0.02)	(0.09)	(0.13)
Subsidiary, D	0.202**	0.258**	-0.155**	0.040	-0.032	-0.031	-0.157	-0.035
	(0.08)	(0.08)	(0.06)	(0.16)	(0.04)	(0.04)	(0.08)	(0.11)

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Table A17 (cont.)

	Price	Price in domestic market (C26c)			Price in foreign market (C26d)			
	2008-2	2009	2010-	-2013	2008-	2009	2010-2	2013
	wb	wl	wb	wl	wb	wl	wb	wl
Domestic demand	0.053*	-0.031	-0.110***	-0.147***				
	(0.03)	(0.03)	(0.03)	(0.04)				
Domestic competition	-0.061**	0.003	-0.054*	-0.087 **				
	(0.02)	(0.01)	(0.02)	(0.03)				
Foreign demand					0.094***	0.032	-0.164***	-0.181**
					(0.02)	(0.04)	(0.04)	(0.06)
Foreign competition					-0.019	0.000	-0.055**	0.002
					(0.01)	(0.00)	(0.02)	(0.03)
Increase								
Employment, In	0.006	0.022	-0.016	-0.021	0.006	0.017	-0.019	-0.004
	(0.02)	(0.03)	(0.03)	(0.04)	(0.00)	(0.01)	(0.03)	(0.04)
Manufacturing, D	0.104	0.029	0.098	0.037	-0.013	-0.011	0.086	0.016
	(0.05)	(0.08)	(0.07)	(0.08)	(0.01)	(0.03)	(0.08)	(0.11)
Construction, D	0.036	0.016	-0.055	-0.169	-0.168***	-0.215***	-0.145*	-0.098
	(0.08)	(0.07)	(0.08)	(0.12)	(0.02)	(0.05)	(0.07)	(0.11)
Export share	-0.087	-0.014	-0.100	0.228	0.020	0.090	0.264*	0.602***
	(0.06)	(0.14)	(0.08)	(0.12)	(0.02)	(0.05)	(0.11)	(0.16)
Mainly foreign, D	-0.046	-0.111	-0.162	-0.174	0.008	0.046	-0.065	-0.023
	(0.07)	(0.07)	(0.08)	(0.12)	(0.01)	(0.05)	(0.09)	(0.14)
Parents, D	-0.097	-0.028	0.160*	0.090	-0.007	-0.007	0.086	0.014
	(0.05)	(0.11)	(0.08)	(0.13)	(0.01)	(0.04)	(0.11)	(0.16)
Subsidiary, D	-0.041	-0.121	0.206**	0.014	-0.009	-0.034	0.196*	0.043
	(0.08)	(0.07)	(0.07)	(0.16)	(0.01)	(0.03)	(0.10)	(0.14)
Domestic demand	0.159***	0.196***	0.197***	0.197***				
	(0.02)	(0.03)	(0.03)	(0.04)				
Domestic competition	0.038	-0.021	0.039	0.067*				
	(0.02)	(0.02)	(0.02)	(0.03)				
Foreign demand					0.033***	0.096***	0.227***	0.226***
					(0.01)	(0.02)	(0.04)	(0.07)
Foreign competition					0.008*	0.000	0.035	-0.003
					(0.00)	(0.01)	(0.02)	(0.03)
Observations	5	521		534		389	3	897

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * <math>p<0.1, ** p<0.05, *** p<0.01.

able A18	
inancial condition of firms during 2008–2009 and 2010–2013 (%)

	Credit was N	Credit was NOT available to finance working capital (C23a)				Credit CONDITIONS to finance working capital were onerous (C23d)			
	2008-20)09	2010-2013		2008-2009		2010-	2013	
	wb	wl	wb	wl	wb	wl	wb	wl	
Not relevant	53.0	51.4	49.4	49.9	57.7	51.9	55.5	53.4	
Of little relevance	12.7	16.2	15.7	16.4	12.5	21.0	14.9	20.2	
Relevant	24.6	23.2	25.3	25.7	20.2	17.4	18.6	17.5	
Very relevant	9.8	9.1	9.5	8.0	9.6	9.7	11.0	8.9	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Observations	52	.3	4	531		502		512	
	Credit was	NOT avai	lable to finan (C^{23b})	ce new	Credit CON	DITIONS to	finance new $(C^{23}e)$	investment	
Not relevant	62.4	59.7	60.9	61.0	66.0	56.2	62 0	56.6	
Of little relevance	15.6	56.7 15.0	16.5	16.1	11.5	20.4	13.0	24.2	
Relevant	14.1	16.3	10.5	10.1	12.7	12.0	13.9	24.2	
Very relevant	6.8	10.5	69	53	89	11.3	9.0	7.5	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Observations	50	19	5	517	4	492	2	199	
	Credit wa	as NOT ava debt (C	uilable to refine 23c)	nance	Credit CO	NDITIONS onerous	to refinance (C23f)	debt were	
Not relevant	72.2	61.8	69.9	64.5	71.7	61.7	70.0	63.7	
Of little relevance	11.7	16.8	12.4	15.0	11.4	20.8	12.8	23.5	
Relevant	10.2	11.2	11.3	15.1	9.3	7.7	9.8	7.3	
Very relevant	6.0	10.1	6.4	5.4	7.5	9.8	7.5	5.5	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Observations	49	95	4	505	4	484	2	489	

Table A19 **Persistence of the financial condition of firms from 2008–2009 to 2010–2013 (diagonal elements of cross tabulations; %)**

		2010–2013								
	Not rele	vant	Of little relevance		Relevant		Very relevant			
	wb	wl	wb	wl	wb	wl	wb	wl		
Credit was NOT available										
to finance working capital (C23a)	88.4	91.5	73.8	49.9	68.8	61.1	50.9	42.0		
to finance new investment (C23b)	93.9	96.1	76.9	77.6	76.6	80.7	61.8	36.1		
to refinance debt (C23c)	95.5	95.6	78.3	69.5	76.5	81.9	59.6	32.0		
Credit CONDITIONS to (re)finance										
working capital were onerous (C23d)	93.3	96.2	76.8	74.2	64.4	63.2	68.9	63.1		
new investment were onerous (C23e)	93.4	95.3	83.5	90.1	71.7	74.2	68.6	49.1		
debt were onerous (C23f)	96.7	98.4	86.8	91.4	76.0	70.9	71.8	44.5		

Note: wb - weighted to represent firm population, wl - weighted to represent employees in the population.

Explanation: 68.8% of firms, who answered that credit was not available to finance working capital and used option "Relevant" for 2008-2009, answered the same for 2010–2013.

Table A20 Factors explaining probability of a firm to experience problems with financing working capital and new investment (marginal effect of logit model)

	Credit was	NOT availab	le to finance $(C23a)$	working	Credit CONDITIONS to finance			
	2000		C25a)	2012	worki	ng capital we	ere onerous (C	23d)
	2008	2009	2010-	-2013	2008-	2009	2010-	2013
	wb	wl	wb	wl	wb	wl	wb	wl
Employment, In	0.062*	0.019	0.051	0.002	0.076**	0.076*	0.057*	0.054
	(0.03)	(0.03)	(0.03)	(0.04)	(0.03)	(0.04)	(0.03)	(0.04)
Manufacturing, D	0.175*	0.159	0.141*	0.114	0.034	0.050	-0.003	-0.029
	(0.07)	(0.10)	(0.07)	(0.09)	(0.07)	(0.10)	(0.07)	(0.10)
Construction, D	0.038	-0.019	0.026	0.065	0.028	0.011	0.030	0.009
	(0.08)	(0.08)	(0.07)	(0.10)	(0.08)	(0.09)	(0.08)	(0.09)
Export share	-0.049	-0.132	-0.072	-0.159	0.043	-0.269	0.051	-0.221
	(0.09)	(0.14)	(0.08)	(0.14)	(0.09)	(0.15)	(0.08)	(0.15)
Mainly foreign, D	0.034	-0.042	0.023	0.004	0.018	0.099	0.019	0.093
	(0.09)	(0.11)	(0.09)	(0.12)	(0.09)	(0.12)	(0.09)	(0.13)
Parents, D	-0.012	-0.240	-0.091	-0.247	0.005	-0.227	-0.103	-0.248
	(0.09)	(0.13)	(0.09)	(0.14)	(0.10)	(0.14)	(0.09)	(0.13)
Subsidiary, D	-0.072	-0.019	-0.144	-0.099	-0.127	-0.279*	-0.186*	-0.320**
	(0.09)	(0.14)	(0.09)	(0.15)	(0.08)	(0.13)	(0.08)	(0.11)
Demand	-0.043*	-0.079**	0.007	-0.014	-0.042*	-0.045	0.027	0.001
	(0.02)	(0.03)	(0.02)	(0.03)	(0.02)	(0.03)	(0.02)	(0.04)
	Credit w	as NOT avai	lable to finar	ice new	Credit CON	DITIONS to	finance new	investment
		investmen	t (C23b)			were oner	ous (C23e)	
Employment, In	0.035	0.013	0.026	-0.010	0.068**	0.101**	0.031	0.055
	(0.03)	(0.04)	(0.03)	(0.03)	(0.03)	(0.04)	(0.03)	(0.04)
Manufacturing, D	0.208**	0.200	0.203**	0.129	0.046	0.058	-0.006	-0.046
	(0.07)	(0.11)	(0.07)	(0.10)	(0.07)	(0.11)	(0.07)	(0.10)
Construction, D	-0.007	-0.021	-0.014	0.019	-0.032	-0.041	-0.023	-0.025
	(0.07)	(0.09)	(0.07)	(0.09)	(0.07)	(0.10)	(0.07)	(0.09)
Export share	-0.044	-0.113	0.004	0.026	0.016	-0.282	0.034	-0.237
*	(0.08)	(0.16)	(0.08)	(0.14)	(0.08)	(0.17)	(0.08)	(0.16)
Mainly foreign, D	-0.021	-0.121	0.027	-0.052	0.008	-0.016	-0.009	-0.060
	(0.08)	(0.10)	(0.09)	(0.11)	(0.09)	(0.13)	(0.09)	(0.12)
Parents, D	0.087	0.062	-0.072	-0.145	0.073	-0.034	0.024	-0.011
,	(0.09)	(0.16)	(0.09)	(0.13)	(0.10)	(0.15)	(0.09)	(0.15)
Subsidiary, D	0.112	0.156	0.085	0.118	-0.060	-0.213	-0.040	-0.205
ر ر	(0.10)	(0.15)	(0.09)	(0.15)	(0.08)	(0.14)	(0.09)	(0.14)
Demand	-0.032	-0.026	0.009	-0.022	-0.030	-0.016	0.037	0.044
	(0.02)	(0.03)	(0.02)	(0.03)	(0.02)	(0.03)	(0.02)	(0.04)

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Explained variable: 0 - Not relevant, 1 - Relevant. Explanatory variables are described in Table A2.

Comment: Groups are combined into Not relevant and Relevant due to a small number of observations in some groups. Scale of Demand – from 1 – Strong decrease to 5 – Strong increase.

Table A21 Factors explaining probability of a firm to experience problems with debt refinancing (marginal effect of logit model)

	Credit was NOT available to refinance debt (C23c)				Credit CONDITIONS to refinance debt were onerous (C23f)			
	2008-2	009	2010-2	2010-2013		2008–2009		2013
	wb	wl	wb	wl	wb	wl	wb	wl
Employment, In	0.081***	0.076	0.056*	0.041	0.085***	0.095*	0.061*	0.058
	(0.02)	(0.04)	(0.02)	(0.04)	(0.02)	(0.04)	(0.02)	(0.04)
Manufacturing, D	0.090	0.142	0.087	0.072	0.009	0.027	-0.026	-0.055
	(0.07)	(0.11)	(0.07)	(0.10)	(0.07)	(0.11)	(0.07)	(0.10)
Construction, D	0.023	-0.009	0.047	0.149	-0.036	-0.076	-0.046	-0.083
	(0.07)	(0.09)	(0.07)	(0.10)	(0.06)	(0.09)	(0.07)	(0.08)
Export share	-0.054	-0.162	-0.024	-0.054	-0.026	-0.219	0.009	-0.199
	(0.08)	(0.16)	(0.08)	(0.15)	(0.08)	(0.17)	(0.08)	(0.16)
Mainly foreign, D	-0.076	-0.149	-0.022	-0.096	0.059	0.039	0.076	0.022
	(0.07)	(0.10)	(0.09)	(0.11)	(0.09)	(0.13)	(0.10)	(0.13)
Parents, D	-0.022	-0.093	-0.111	-0.192	-0.018	-0.088	-0.080	-0.077
	(0.09)	(0.17)	(0.08)	(0.13)	(0.08)	(0.15)	(0.08)	(0.14)
Subsidiary, D	0.087	0.089	0.038	0.017	-0.110	-0.259*	-0.120	-0.281**
	(0.09)	(0.15)	(0.09)	(0.16)	(0.07)	(0.12)	(0.08)	(0.10)
Demand	-0.040*	-0.069*	0.019	0.006	-0.046**	-0.044	0.012	0.063
	(0.02)	(0.03)	(0.02)	(0.03)	(0.02)	(0.03)	(0.02)	(0.04)
Observations	4	92	51	02	4	81	4	186

Note: ln - logarithm, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Explained variable: 0 – Not relevant, 1 – Relevant. Explanatory variables are described in Table A2.

Comment: Groups are combined into Not relevant and Relevant due to a small number of observations in some groups. Scale of Demand – from 1 – Strong decrease to 5 – Strong increase.

		Total costs (C24a)				Labour costs (C24b)			
	2008-2	2008-2009		2010-2013		2008-2009		2013	
	wb	wl	wb	wl	wb	wl	wb	wl	
Strong decrease	13.5	18.8	5.0	7.4	14.9	16.1	4.5	4.8	
Moderate decrease	23.1	23.1	11.8	8.7	20.6	24.9	8.1	7.8	
Unchanged	22.7	21.3	13.8	18.5	30.9	20.7	15.2	18.6	
Moderate increase	32.7	29.3	48.8	46.1	27.8	32.5	54.5	51.6	
Strong increase	7.9	7.4	20.6	19.3	5.7	5.8	17.6	17.2	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Observations	5	528		545		532		549	
		Financial co	sts (C24c)		Costs of supplies (C24d)				
Strong decrease	5.4	4.9	3.5	2.4	4.8	5.4	0.8	0.9	
Moderate decrease	14.0	22.7	9.5	14.1	14.8	23.9	4.5	6.1	
Unchanged	50.7	42.2	44.1	41.4	31.0	22.2	16.6	16.1	
Moderate increase	26.0	25.6	33.0	32.6	40.2	38.9	54.0	55.5	
Strong increase	3.9	4.7	10.0	9.5	9.3	9.6	24.0	21.4	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Observations	4	53		472		510		525	

Table A22Change in total cost components during 2008–2009 and 2010–2013 (%)

Factors explaining probability of a firm to experience a decrease, increase or no change in total costs and labour costs during 2008–2009 and 2010–2013 (marginal effect of generalised ordered logit)

		Total costs (C24a)				Labour co	sts (C24b)	
	2008-	2009	2010-	-2013	2008-	-2009	2010-	2013
	wb	wl	wb	wl	wb	wl	wb	wl
Decrease								
Employment, In	0.025	0.043	-0.007	0.014	0.055*	0.127***	0.003	0.010
	(0.03)	(0.03)	(0.02)	(0.02)	(0.03)	(0.04)	(0.01)	(0.01)
Manufacturing, D	-0.079	-0.194*	-0.004	-0.050	-0.046	-0.166*	-0.038	-0.019
	(0.06)	(0.08)	(0.04)	(0.04)	(0.05)	(0.07)	(0.02)	(0.02)
Construction, D	0.152*	0.093	0.060	0.028	0.217**	0.211*	0.015	-0.001
	(0.07)	(0.09)	(0.05)	(0.04)	(0.07)	(0.08)	(0.03)	(0.01)
Financial								
intermediation, D	0.325	0.504**	0.148	0.238	0.337	0.154	0.229	0.500*
	(0.17)	(0.17)	(0.13)	(0.24)	(0.20)	(0.19)	(0.15)	(0.20)
Export share	0.030	0.162	-0.023	-0.084	-0.062	0.088	-0.023	-0.019
	(0.07)	(0.14)	(0.04)	(0.08)	(0.06)	(0.10)	(0.03)	(0.03)
Mainly foreign, D	0.105	0.000	0.082	0.009	0.023	-0.081	-0.019	-0.026*
	(0.08)	(0.10)	(0.07)	(0.06)	(0.08)	(0.08)	(0.03)	(0.01)
Parents, D	0.216*	0.127	0.037	0.012	0.233*	-0.034	-0.016	-0.029
	(0.09)	(0.14)	(0.06)	(0.08)	(0.10)	(0.11)	(0.03)	(0.02)
Subsidiary, D	0.086	0.151	-0.066	-0.046	0.034	0.106	0.014	0.042
•	(0.09)	(0.14)	(0.04)	(0.06)	(0.07)	(0.10)	(0.04)	(0.03)
Demand	-0.219***	-0.272***	-0.082***	-0.073***	-0.216***	-0.240***	-0.069***	-0.052***
	(0.02)	(0.04)	(0.01)	(0.02)	(0.02)	(0.03)	(0.01)	(0.01)
Unchanged								
Employment, In	-0.038*	-0.003	-0.006	0.015	-0.071***	-0.156***	0.004	0.043
	(0.02)	(0.01)	(0.01)	(0.02)	(0.02)	(0.03)	(0.02)	(0.03)
Manufacturing, D	-0.020	-0.021	-0.003	-0.064	-0.007	-0.017	-0.065	-0.188*
Ċ,	(0.02)	(0.03)	(0.03)	(0.06)	(0.01)	(0.02)	(0.04)	(0.07)
Construction, D	-0.001	-0.014	0.041	0.029	-0.039	-0.038	0.023	-0.005
,	(0.01)	(0.02)	(0.03)	(0.04)	(0.03)	(0.03)	(0.04)	(0.06)
Financial			× ,	~ /	~ /	~ /		× /
intermediation, D	-0.068	-0.194	0.074*	0.120***	-0.381*	-0.022	0.157***	-0.183
	(0.08)	(0.11)	(0.03)	(0.03)	(0.15)	(0.05)	(0.03)	(0.15)
Export share	0.005	-0.011	-0.018	-0.096	-0.005	-0.001	-0.036	-0.082
	(0.01)	(0.02)	(0.03)	(0.09)	(0.01)	(0.01)	(0.05)	(0.12)
Mainly foreign, D	0.004	-0.000	0.053	0.010	0.001	-0.005	-0.032	-0.133
	(0.01)	(0.01)	(0.04)	(0.06)	(0.00)	(0.01)	(0.05)	(0.07)
Parents, D	-0.020	-0.019	0.026	0.013	-0.196**	-0.000	-0.026	-0.141
	(0.03)	(0.03)	(0.04)	(0.09)	(0.06)	(0.00)	(0.05)	(0.08)
Subsidiary, D	0.004	-0.028	-0.062	-0.209***	0.001	-0.010	0.022	0.149
•	(0.01)	(0.04)	(0.05)	(0.06)	(0.00)	(0.02)	(0.06)	(0.11)
Demand	0.078***	0.124**	0.003	0.022	0.092***	0.004	-0.040**	-0.071**
	(0.02)	(0.04)	(0.01)	(0.02)	(0.02)	(0.02)	(0.01)	(0.03)
Increase (next page)	, ,	. ,		· · · ·		. /		. ,
Observations		526		542		530		546

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Table A23 (cont.)

	Total costs (C24a)				Labour costs (C24b)				
	2008-	2009	2010-	2013	2008-	2009	2010-2	2013	
	wb	wl	wb	wl	wb	wl	wb	wl	
Increase									
Employment, In	0.013	-0.040	0.013	-0.029	0.016	0.029	-0.007	-0.053	
	(0.03)	(0.03)	(0.03)	(0.04)	(0.02)	(0.04)	(0.03)	(0.04)	
Manufacturing, D	0.100	0.215*	0.007	0.114	0.053	0.184*	0.103	0.206*	
	(0.08)	(0.10)	(0.07)	(0.10)	(0.07)	(0.09)	(0.06)	(0.08)	
Construction, D	-0.151*	-0.079	-0.101	-0.057	-0.178***	-0.173**	-0.038	0.007	
	(0.06)	(0.07)	(0.07)	(0.08)	(0.05)	(0.06)	(0.07)	(0.07)	
Financial									
intermediation, D	-0.257**	-0.310***	-0.222	-0.357	0.044	-0.131	-0.386*	-0.317	
	(0.09)	(0.07)	(0.16)	(0.24)	(0.21)	(0.14)	(0.16)	(0.20)	
Export share	-0.034	-0.151	0.041	0.179	0.067	-0.087	0.059	0.101	
	(0.08)	(0.13)	(0.08)	(0.17)	(0.07)	(0.10)	(0.08)	(0.15)	
Mainly foreign, D	-0.109	-0.000	-0.135	-0.019	-0.024	0.087	0.050	0.159*	
	(0.07)	(0.09)	(0.10)	(0.12)	(0.08)	(0.09)	(0.08)	(0.08)	
Parents, D	-0.196**	-0.107	-0.063	-0.025	-0.038	0.034	0.042	0.169	
	(0.06)	(0.11)	(0.09)	(0.16)	(0.08)	(0.12)	(0.08)	(0.10)	
Subsidiary, D	-0.091	-0.124	0.128	0.255**	-0.034	-0.096	-0.036	-0.191	
	(0.08)	(0.10)	(0.09)	(0.10)	(0.07)	(0.08)	(0.10)	(0.14)	
Demand	0.141***	0.148***	0.079***	0.052	0.124***	0.237***	0.109***	0.123***	
	(0.02)	(0.03)	(0.02)	(0.04)	(0.02)	(0.03)	(0.02)	(0.03)	
Observations		526	5	42	4	530	5	546	

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * <math>p<0.1, ** p<0.05, *** p<0.01.

Factors explaining probability of a firm to experience a decrease, increase or no change in financial costs and costs of supplies during 2008–2009 and 2010–2013 (marginal effect of generalised ordered logit)

		Financial co	osts (C24c)		Costs of supplies (C24d)			
	2008-	2009	2010-	-2013	2008-	-2009	2010-	2013
	wb	wl	wb	wl	wb	wl	wb	wl
Decrease								
Employment, In	0.042*	0.062*	-0.016	-0.009	0.022	0.116***	0.001	0.008
	(0.02)	(0.03)	(0.01)	(0.02)	(0.02)	(0.03)	(0.01)	(0.01)
Manufacturing, D	-0.072*	-0.096	-0.024	-0.024	-0.002	-0.112*	-0.010	-0.029*
	(0.03)	(0.06)	(0.03)	(0.04)	(0.04)	(0.06)	(0.01)	(0.01)
Construction, D	0.120	0.244	-0.020	-0.072*	0.039	0.039	-0.014	-0.019
	(0.07)	(0.15)	(0.03)	(0.03)	(0.05)	(0.07)	(0.01)	(0.01)
Financial								
intermediation, D	-0.016	0.005	0.473*	0.689***	0.168	-0.012	0.053	0.143
	(0.09)	(0.24)	(0.21)	(0.17)	(0.14)	(0.16)	(0.07)	(0.12)
Export share	0.091	0.077	0.031	0.038	0.083	0.212*	-0.006	0.008
	(0.05)	(0.12)	(0.04)	(0.06)	(0.04)	(0.08)	(0.02)	(0.02)
Mainly foreign, D	-0.018	-0.165**	0.042	0.006	-0.101**	-0.223***	0.031	0.022
	(0.05)	(0.06)	(0.04)	(0.05)	(0.04)	(0.05)	(0.02)	(0.03)
Parents, D	0.027	-0.024	0.053	-0.023	0.010	0.079	-0.028**	-0.021
	(0.06)	(0.13)	(0.05)	(0.06)	(0.05)	(0.11)	(0.01)	(0.02)
Subsidiary, D	0.041	0.290*	0.113	0.173	-0.001	0.081	-0.004	0.054
	(0.06)	(0.13)	(0.07)	(0.13)	(0.04)	(0.11)	(0.02)	(0.05)
Demand	-0.081***	-0.122***	-0.016	-0.029	-0.097***	-0.075***	-0.025***	-0.040***
	(0.01)	(0.03)	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)	(0.01)
Unchanged								```´
Employment, In	-0.062**	-0.072*	-0.019	0.008	-0.041	-0.138***	0.002	0.032
1 5 7	(0.02)	(0.03)	(0.01)	(0.02)	(0.02)	(0.03)	(0.02)	(0.03)
Manufacturing. D	-0.072	-0.045	-0.032	0.024	-0.164**	-0.045	-0.035	-0.118*
6,	(0.04)	(0.04)	(0.04)	(0.04)	(0.05)	(0.03)	(0.05)	(0.06)
Construction. D	-0.148	-0.244**	-0.026	0.071*	0.030	0.010	-0.048	-0.078
,	(0.08)	(0.09)	(0.05)	(0.03)	(0.03)	(0.02)	(0.04)	(0.05)
Financial	~ /	, , , , , , , , , , , , , , , , , , ,	~ /	()	· · · ·	()		()
intermediation, D	-0.012	0.001	-0.045	-0.242	0.056**	-0.004	0.132	-0.310**
	(0.08)	(0.05)	(0.21)	(0.17)	(0.02)	(0.05)	(0.12)	(0.10)
Export share	0.055	0.018	0.036	-0.038	0.076	0.062	-0.020	0.030
	(0.03)	(0.03)	(0.04)	(0.06)	(0.04)	(0.03)	(0.05)	(0.08)
Mainly foreign, D	-0.012	0.202*	0.036	-0.006	0.135	0.212*	0.089	0.074
5 6 5	(0.04)	(0.10)	(0.03)	(0.05)	(0.08)	(0.10)	(0.06)	(0.08)
Parents, D	0.012	-0.007	0.041	0.022	0.008	-0.237***	-0.105**	-0.085
,	(0.02)	(0.04)	(0.02)	(0.06)	(0.04)	(0.07)	(0.04)	(0.08)
Subsidiary, D	0.017	-0.327***	0.057***	-0.172	-0.001	0.017	-0.014	-0.134*
5,7	(0.02)	(0.09)	(0.02)	(0.13)	(0.04)	(0.02)	(0.06)	(0.06)
Demand	0.043*	0.063*	-0.018	0.028	0.035*	-0.022**	-0.005	-0.012
	(0.02)	(0.03)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)	(0.02)
Increase (next nage)	((0.00)	(****)	((=)	(0.01)	(****)	(:::=)
Observations		451	4	469		508		522
	1			-	1	-		

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Table A24 (cont.)

	Financial costs (C24c)				Costs of supplies (C24d)			
	2008-2	009	2010-	-2013	2008-	2009	2010-2	013
	wb	wl	wb	wl	wb	wl	wb	wl
Increase								
Employment, In	0.020	0.011	0.035	0.000	0.019	0.022	-0.002	-0.040
	(0.03)	(0.03)	(0.03)	(0.00)	(0.03)	(0.03)	(0.03)	(0.03)
Manufacturing, D	0.144*	0.142	0.055	0.000	0.166*	0.157	0.045	0.147*
	(0.07)	(0.10)	(0.07)	(0.00)	(0.07)	(0.08)	(0.06)	(0.06)
Construction, D	0.029	-0.001	0.046	0.001	-0.068	-0.049	0.062	0.097
	(0.08)	(0.10)	(0.09)	(0.00)	(0.08)	(0.08)	(0.05)	(0.06)
Financial								
intermediation, D	0.027	-0.006	-0.428***	-0.448***	-0.225	0.015	-0.185	0.167*
	(0.17)	(0.28)	(0.03)	(0.05)	(0.13)	(0.21)	(0.19)	(0.07)
Export share	-0.146	-0.095	-0.068	-0.000	-0.159	-0.274*	0.026	-0.037
	(0.08)	(0.14)	(0.08)	(0.00)	(0.08)	(0.11)	(0.07)	(0.10)
Mainly foreign, D	0.030	-0.037	-0.078	-0.000	-0.035	0.010	-0.120	-0.095
	(0.08)	(0.11)	(0.07)	(0.00)	(0.08)	(0.11)	(0.09)	(0.11)
Parents, D	-0.039	0.031	-0.094	0.000	-0.018	0.157	0.133**	0.106
	(0.08)	(0.17)	(0.08)	(0.00)	(0.09)	(0.11)	(0.05)	(0.10)
Subsidiary, D	-0.057	0.036	-0.170*	-0.001*	0.002	-0.098	0.018	0.080
	(0.07)	(0.11)	(0.07)	(0.00)	(0.09)	(0.12)	(0.08)	(0.09)
Demand	0.039*	0.059*	0.034	0.000	0.062**	0.097***	0.030	0.052*
	(0.02)	(0.03)	(0.02)	(0.00)	(0.02)	(0.03)	(0.02)	(0.02)
Observations	45	51		469	4	508	5	22

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * <math>p<0.1, ** p<0.05, *** p<0.01.

Table A25		
Change in labour cost components o	f firm during 2008–2009) and 2010–2013 (%)

	Base wag	work rates (C25a)	Flexible wage components (C25b)				
	2008-20)09	2010-	2013	2008-	2009	2010-	2013
	wb	wl	wb	wl	wb	wl	wb	wl
Strong decrease	12.1	8.9	4.8	2.6	14.9	20.9	8.0	7.6
Moderate decrease	21.3	23.5	7.3	7.7	14.4	16.0	4.5	3.3
Unchanged	33.3	36.3	17.1	20.4	54.3	44.2	48.5	40.3
Moderate increase	28.9	27.3	61.7	60.4	14.5	17.6	35.4	42.3
Strong increase	4.4	3.9	9.1	8.9	1.9	1.2	3.7	6.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Observations	53	5	550			509		526
	Number of perma		nt employees (C25c)		Number of temporary (C.		/fixed-term employees 25d)	
Strong decrease	12.5	10.9	5.9	5.6	10.1	7.6	7.7	7.1
Moderate decrease	18.2	20.9	15.7	15.0	5.0	9.3	4.5	6.9
Unchanged	48.4	44.9	38.3	32.1	76.9	74.6	70.9	62.9
Moderate increase	18.9	21.4	32.1	31.9	7.3	8.1	15.3	21.9
Strong increase	2.0	1.9	8.1	15.5	0.7	0.4	1.6	1.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Observations	53	534 548			453 462			162
	Number of agency workers (C25e)			5e)	Working hours per employee (C25f)			
Strong decrease	7.8	9.9	7.7	11.0	6.5	3.9	2.7	1.6
Moderate decrease	2.3	2.4	4.1	2.7	9.5	11.1	7.0	5.4
Unchanged	84.8	83.9	75.2	69.3	75.2	77.5	70.8	75.0
Moderate increase	4.5	3.6	11.6	16.5	7.9	7.2	16.6	15.7
Strong increase	0.7	0.2	1.4	0.6	0.9	0.4	2.8	2.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Observations	41	3	4	23	-	522	535	

Factors explaining probability of a firm to experience a decrease, increase or no change in base and flexible wage components during 2008–2009 and 2010–2013 (marginal effect of generalised ordered logit)

	Base wages or piece work rates (C25a)				Flexible wage components (C25b)			
	2008-	2009	2010-	-2013	2008-	-2009	2010-	2013
	wb	wl	wb	wl	wb	wl	wb	wl
Decrease								
Employment, In	0.015	0.058	0.005	0.006	0.047*	0.117***	0.005	-0.005
	(0.02)	(0.03)	(0.01)	(0.00)	(0.02)	(0.03)	(0.01)	(0.01)
Manufacturing, D	0.014	-0.018	-0.045**	-0.025	-0.100	-0.056	-0.001	0.001
	(0.06)	(0.08)	(0.02)	(0.01)	(0.06)	(0.08)	(0.02)	(0.03)
Construction, D	0.268***	0.268**	0.034	0.008	0.063	0.077	0.101	0.026
	(0.07)	(0.09)	(0.03)	(0.01)	(0.06)	(0.09)	(0.06)	(0.04)
Financial								
intermediation, D	-0.115	-0.181*	0.057	0.073	-0.055	0.307*	0.044	0.354
	(0.12)	(0.08)	(0.08)	(0.07)	(0.16)	(0.14)	(0.06)	(0.25)
Export share	-0.034	0.180	0.010	0.003	0.113	-0.015	0.029	-0.065
	(0.07)	(0.10)	(0.02)	(0.02)	(0.07)	(0.12)	(0.03)	(0.05)
Mainly foreign, D	-0.009	-0.059	-0.033	-0.014	-0.136*	-0.188**	-0.064**	-0.020
	(0.08)	(0.07)	(0.02)	(0.01)	(0.05)	(0.07)	(0.02)	(0.03)
Parents, D	0.148	-0.052	0.015	-0.020	0.247*	0.037	-0.043	-0.017
	(0.09)	(0.11)	(0.04)	(0.01)	(0.10)	(0.14)	(0.02)	(0.05)
Subsidiary, D	-0.117	-0.086	0.073	0.067	0.055	0.140	0.003	-0.015
	(0.07)	(0.08)	(0.06)	(0.04)	(0.08)	(0.13)	(0.04)	(0.04)
Demand	-0.181***	-0.173***	-0.066***	-0.042**	-0.131***	-0.199***	-0.050***	-0.036**
	(0.02)	(0.03)	(0.01)	(0.01)	(0.02)	(0.03)	(0.01)	(0.01)
Unchanged			, í					
Employment, In	0.001	-0.001	0.010	0.034	-0.081***	-0.134***	-0.074**	-0.013
1 5 7	(0.00)	(0.01)	(0.02)	(0.03)	(0.02)	(0.04)	(0.03)	(0.02)
Manufacturing, D	0.001	-0.000	-0.107*	-0.163*	0.149*	0.028	-0.001	0.003
Ċ,	(0.00)	(0.00)	(0.04)	(0.08)	(0.06)	(0.04)	(0.04)	(0.08)
Construction, D	-0.192**	-0.238**	0.063	0.043	-0.030	-0.046	-0.132	0.057
,	(0.07)	(0.09)	(0.04)	(0.06)	(0.04)	(0.06)	(0.07)	(0.06)
Financial	-0.046	-0.089	-0.146	0.257	0.015	-0.219	0.048	-0.147
intermediation, D								
	(0.10)	(0.08)	(0.08)	(0.13)	(0.02)	(0.11)	(0.04)	(0.15)
Export share	-0.003	-0.003	0.021	0.019	-0.046	0.312*	0.046	0.320*
-	(0.01)	(0.03)	(0.05)	(0.12)	(0.03)	(0.13)	(0.05)	(0.14)
Mainly foreign, D	-0.001	-0.006	-0.077	-0.092	0.011	0.045	-0.167*	-0.059
	(0.01)	(0.02)	(0.05)	(0.08)	(0.03)	(0.03)	(0.08)	(0.10)
Parents, D	-0.022	-0.003	0.029	-0.134	-0.230**	-0.020	-0.100	-0.409***
	(0.03)	(0.02)	(0.07)	(0.08)	(0.08)	(0.08)	(0.07)	(0.08)
Subsidiary, D	0.181*	-0.012	0.117	0.257*	-0.027	-0.216*	0.004	-0.042
	(0.08)	(0.03)	(0.07)	(0.11)	(0.05)	(0.09)	(0.06)	(0.12)
Demand	0.038	0.003	-0.070***	-0.129***	0.053***	0.105***	-0.080***	-0.092**
	(0.02)	(0.03)	(0.02)	(0.03)	(0.01)	(0.03)	(0.02)	(0.03)
Increase (next page)	, , ,	· · · ·	/					· · · ·
Observations		533		547		506		523
	l		l				i	

Note: ln - logarithm, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Table A26 (cont.)

	Base wages or piece work rates (C25a)				Flexible wage components (C25b)				
	2008-2	2009	2010-2013		2008-2009		2010-2	2013	
	wb	wl	wb	wl	wb	wl	wb	wl	
Increase									
Employment, In	-0.016	-0.056*	-0.014	-0.040	0.034*	0.017	0.069*	0.018	
	(0.02)	(0.03)	(0.03)	(0.03)	(0.02)	(0.03)	(0.03)	(0.03)	
Manufacturing, D	-0.015	0.018	0.152**	0.188*	-0.049	0.029	0.002	-0.004	
	(0.06)	(0.09)	(0.06)	(0.08)	(0.03)	(0.04)	(0.07)	(0.11)	
Construction, D	-0.076	-0.030	-0.097	-0.051	-0.032	-0.031	0.031	-0.083	
	(0.07)	(0.08)	(0.07)	(0.08)	(0.03)	(0.03)	(0.08)	(0.10)	
Financial									
intermediation, D	0.161	0.270	0.088	-0.330	0.040	-0.087**	-0.092	-0.207	
	(0.21)	(0.15)	(0.13)	(0.19)	(0.14)	(0.03)	(0.10)	(0.18)	
Export share	0.037	-0.177	-0.031	-0.022	-0.067	-0.297**	-0.075	-0.255	
	(0.07)	(0.10)	(0.08)	(0.14)	(0.04)	(0.10)	(0.08)	(0.15)	
Mainly foreign, D	0.010	0.065	0.110	0.106	0.125	0.143	0.231*	0.079	
	(0.09)	(0.08)	(0.07)	(0.09)	(0.08)	(0.08)	(0.10)	(0.13)	
Parents, D	-0.126	0.055	-0.043	0.154	-0.017	-0.016	0.143	0.427***	
	(0.06)	(0.12)	(0.10)	(0.09)	(0.05)	(0.06)	(0.10)	(0.10)	
Subsidiary, D	-0.065	0.098	-0.190	-0.324*	-0.029	0.076	-0.007	0.056	
	(0.08)	(0.10)	(0.12)	(0.14)	(0.04)	(0.09)	(0.09)	(0.16)	
Demand	0.143***	0.169***	0.136***	0.172***	0.078***	0.093***	0.130***	0.128**	
	(0.02)	(0.04)	(0.02)	(0.03)	(0.01)	(0.02)	(0.02)	(0.04)	
Observations	5	533	5	47	4	506	5	523	

Note: ln - logarithm, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

Factors explaining probability of a firm to experience a decrease, increase or no change in the number of permanent and temporary employees during 2008–2009 and 2010–2013 (marginal effect of generalised ordered logit)

	Number of permanent employees (C25c)				Number of temporary/fixed-term employees (C25d)			
	2008-	2009	2010-	-2013	2008–2009		2010-	2013
	wb	wl	wb	wl	wb	wl	wb	wl
Decrease								
Employment, In	0.038	0.044	-0.011	0.021	0.021	0.013	0.004	-0.007
	(0.03)	(0.04)	(0.02)	(0.02)	(0.02)	(0.02)	(0.01)	(0.01)
Manufacturing, D	0.033	0.305	-0.023	-0.039	0.007	-0.035	-0.021	-0.087***
	(0.06)	(0.16)	(0.03)	(0.03)	(0.05)	(0.04)	(0.02)	(0.03)
Construction, D	0.270***	0.286**	0.138*	0.002	0.142*	0.059	0.132*	0.021
	(0.08)	(0.09)	(0.06)	(0.04)	(0.06)	(0.08)	(0.06)	(0.03)
Financial								
intermediation, D	-0.159**	-0.023	-0.012	0.272	0.027	0.035	-0.001	-0.018
	(0.06)	(0.13)	(0.07)	(0.29)	(0.10)	(0.15)	(0.05)	(0.05)
Export share	-0.075	0.077	-0.098*	-0.062	0.003	-0.004	0.009	-0.011
	(0.06)	(0.13)	(0.05)	(0.06)	(0.05)	(0.08)	(0.04)	(0.03)
Mainly foreign, D	0.123	0.058	0.013	0.035	-0.003	0.030	0.071	-0.020
	(0.09)	(0.10)	(0.05)	(0.06)	(0.05)	(0.08)	(0.06)	(0.02)
Parents, D	-0.003	-0.020	-0.029	-0.074	0.063	0.084	0.010	0.077
	(0.06)	(0.13)	(0.04)	(0.05)	(0.06)	(0.10)	(0.04)	(0.06)
Subsidiary, D	0.000	-0.024	0.083	0.173	0.058	0.086	0.029	0.415*
-	(0.07)	(0.09)	(0.07)	(0.15)	(0.07)	(0.10)	(0.07)	(0.17)
Demand	-0.175***	-0.142***	-0.126***	-0.132***	-0.054***	-0.074***	-0.054***	-0.041**
	(0.02)	(0.04)	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)	(0.01)
Unchanged								
Employment, In	-0.052*	-0.009	-0.009	0.025	-0.013	-0.011	0.002	-0.012
	(0.02)	(0.01)	(0.01)	(0.02)	(0.01)	(0.02)	(0.00)	(0.02)
Manufacturing, D	-0.008	-0.276*	-0.021	-0.055	-0.004	0.031	-0.013	0.092
•	(0.02)	(0.12)	(0.03)	(0.06)	(0.03)	(0.04)	(0.02)	(0.08)
Construction, D	-0.316***	-0.325***	-0.204**	0.003	-0.210**	-0.083	-0.285***	-0.235*
,	(0.07)	(0.09)	(0.08)	(0.05)	(0.07)	(0.07)	(0.08)	(0.10)
Financial			~ /	· · · ·		~ /		× ,
intermediation, D	-0.103	0.004	-0.010	-0.271	0.038	0.013	-0.000	-0.044
	(0.13)	(0.02)	(0.07)	(0.18)	(0.10)	(0.15)	(0.02)	(0.17)
Export share	0.014	-0.016	-0.076*	-0.076	-0.002	0.029	0.004	-0.019
	(0.01)	(0.03)	(0.04)	(0.07)	(0.04)	(0.08)	(0.01)	(0.05)
Mainly foreign, D	-0.047	-0.017	0.009	0.035	0.002	-0.017	-0.003	-0.050
	(0.05)	(0.04)	(0.03)	(0.05)	(0.03)	(0.08)	(0.02)	(0.08)
Parents, D	0.001	0.004	-0.028	-0.123	-0.047	-0.078	0.003	0.048
-	(0.01)	(0.02)	(0.05)	(0.10)	(0.05)	(0.09)	(0.01)	(0.03)
Subsidiary, D	-0.000	0.004	0.034**	-0.244*	-0.043	-0.157*	0.005	-0.318*
	(0.01)	(0.01)	(0.01)	(0.11)	(0.06)	(0.08)	(0.01)	(0.13)
Demand	0.079***	0.029	-0.098***	-0.161***	0.035***	0.072***	-0.023	-0.070**
	(0.02)	(0.02)	(0.02)	(0.05)	(0.01)	(0.02)	(0.01)	(0.03)
Increase (next page)				. /	/	. /		. /
Observations		531		545	4	450		459

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * <math>p<0.1, ** p<0.05, *** p<0.01.

Table A27 (cont.)

	Number of permanent employees (C25c)				Number of temporary/fixed-term employees (C25d)			
	2008-20	009	2010-2013		2008-2009		2010-2013	
	wb	wl	wb	wl	wb	wl	wb	wl
Increase								
Employment, In	0.014	-0.035	0.020	-0.046	-0.007	-0.001	-0.006	0.019
	(0.02)	(0.03)	(0.03)	(0.04)	(0.01)	(0.00)	(0.02)	(0.03)
Manufacturing, D	-0.025	-0.029	0.044	0.094	-0.002	0.004	0.034	-0.005
	(0.04)	(0.08)	(0.07)	(0.09)	(0.02)	(0.01)	(0.04)	(0.07)
Construction, D	0.046	0.038	0.066	-0.005	0.068	0.024	0.153*	0.215*
	(0.06)	(0.08)	(0.08)	(0.08)	(0.04)	(0.02)	(0.07)	(0.10)
Financial								
intermediation, D	0.261	0.019	0.022	-0.002	-0.066***	-0.048***	0.001	0.062
	(0.18)	(0.12)	(0.14)	(0.22)	(0.01)	(0.01)	(0.07)	(0.22)
Export share	0.061	-0.061	0.174*	0.138	-0.001	-0.024*	-0.013	0.031
	(0.05)	(0.10)	(0.08)	(0.13)	(0.02)	(0.01)	(0.05)	(0.08)
Mainly foreign, D	-0.076	-0.041	-0.022	-0.070	0.001	-0.013***	-0.069	0.070
	(0.04)	(0.07)	(0.08)	(0.12)	(0.02)	(0.00)	(0.04)	(0.10)
Parents, D	0.003	0.016	0.056	0.197	-0.016	-0.006	-0.014	-0.125*
	(0.05)	(0.11)	(0.10)	(0.15)	(0.01)	(0.00)	(0.05)	(0.06)
Subsidiary, D	-0.000	0.020	-0.117	0.071	-0.015	0.071	-0.034	-0.096
	(0.06)	(0.07)	(0.07)	(0.17)	(0.01)	(0.05)	(0.06)	(0.08)
Demand	0.096***	0.113*	0.224***	0.294***	0.019***	0.002	0.077***	0.111***
	(0.01)	(0.05)	(0.02)	(0.05)	(0.00)	(0.00)	(0.01)	(0.03)
Observations	53	31	545		450		459	

Note: ln - logarithm, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Factors explaining probability of a firm to experience a decrease, increase or no change in the number of agency workers and working hours per employee during 2008–2009 and 2010–2013 (marginal effect of generalised ordered logit)

	Number of agency workers (C25e)				Working hours per employee (C25f)			
	2008–2	2009	2010-	-2013	2008-	-2009	2010-	2013
	wb	wl	wb	wl	wb	wl	wb	wl
Decrease								
Employment, ln	0.035**	0.018	-0.004	0.001	0.003	0.012	-0.001	0.003
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Manufacturing, D	-0.064*	-0.059	-0.053*	-0.031	0.036	-0.039	-0.015	0.001
	(0.03)	(0.05)	(0.02)	(0.03)	(0.04)	(0.03)	(0.01)	(0.01)
Construction, D	-0.006	0.002	0.011	-0.018	0.099	0.063	0.012	0.001
	(0.03)	(0.04)	(0.04)	(0.03)	(0.06)	(0.04)	(0.02)	(0.01)
Financial								
intermediation, D	0.002	0.268	0.084	0.592**	-0.032	-0.076**	0.011	-0.014
	(0.07)	(0.18)	(0.13)	(0.22)	(0.08)	(0.03)	(0.03)	(0.03)
Export share	-0.001	-0.100	0.012	-0.040	-0.007	0.073	0.015	0.015
	(0.06)	(0.08)	(0.05)	(0.05)	(0.04)	(0.06)	(0.02)	(0.02)
Mainly foreign, D	0.064	0.064	0.045	0.059	-0.033	-0.029	0.010	-0.007
	(0.06)	(0.08)	(0.05)	(0.06)	(0.03)	(0.03)	(0.03)	(0.01)
Parents, D	-0.034	-0.041	-0.040	0.092	0.043	-0.004	0.015	0.037
	(0.04)	(0.06)	(0.03)	(0.07)	(0.05)	(0.04)	(0.03)	(0.04)
Subsidiary, D	-0.062*	-0.065	0.087	0.031	-0.042	-0.052*	0.023	0.008
	(0.03)	(0.03)	(0.08)	(0.06)	(0.03)	(0.03)	(0.03)	(0.02)
Demand	-0.029**	-0.029**	-0.039***	-0.053***	-0.090***	-0.080***	-0.056***	-0.038***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
Unchanged								
Employment, ln	-0.029**	-0.018	-0.000	0.001	-0.001	-0.010	-0.001	0.012
	(0.01)	(0.01)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.02)
Manufacturing, D	0.076*	0.059	-0.028	-0.024	-0.020	0.030	-0.030	0.003
	(0.03)	(0.05)	(0.03)	(0.03)	(0.03)	(0.02)	(0.04)	(0.04)
Construction, D	0.005	-0.002	-0.000	-0.013	-0.067	-0.057	0.016	0.002
	(0.03)	(0.04)	(0.00)	(0.03)	(0.05)	(0.04)	(0.02)	(0.04)
Financial								
intermediation, D	-0.002	-0.268	-0.031	-0.580***	0.115	0.140***	0.014	-0.069
	(0.06)	(0.18)	(0.09)	(0.17)	(0.08)	(0.03)	(0.03)	(0.20)
Export share	-0.025	0.100	0.001	-0.019	0.003	-0.061	0.024	0.052
	(0.06)	(0.08)	(0.00)	(0.03)	(0.02)	(0.04)	(0.04)	(0.06)
Mainly foreign, D	-0.057	-0.064	-0.009	0.000	0.009	0.023	0.014	-0.028
	(0.05)	(0.08)	(0.02)	(0.02)	(0.01)	(0.02)	(0.03)	(0.07)
Parents, D	0.072	0.066	-0.020	-0.008	-0.025	0.003	0.019	0.065
	(0.04)	(0.06)	(0.03)	(0.04)	(0.04)	(0.03)	(0.03)	(0.03)
Subsidiary, D	0.039***	0.065	-0.188*	0.006	0.008	0.036	0.025	0.022
	(0.01)	(0.03)	(0.08)	(0.01)	(0.01)	(0.02)	(0.02)	(0.05)
Demand	0.024**	0.029**	-0.002	-0.025	0.077***	0.075***	0.003	0.039
	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.02)	(0.02)	(0.03)
Increase (next page)								
Observations	4	410	4	420		519		532

Note: ln - logarithm, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Table A28 (cont.)

	Numb	per of agency	workers (C2	5e)	Working hours per employee (C25f)			
	2008-2	2009	2010-2013		2008-2009		2010-2	2013
	wb	wl	wb	wl	wb	wl	wb	wl
Increase								
Employment, In	-0.006*	-0.000	0.004	-0.002	-0.002	-0.002	0.002	-0.015
	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.00)	(0.02)	(0.02)
Manufacturing, D	-0.012	-0.000**	0.080	0.056	-0.016	0.009	0.045	-0.004
	(0.01)	(0.00)	(0.05)	(0.06)	(0.02)	(0.01)	(0.05)	(0.05)
Construction, D	0.001	-0.000	-0.011	0.031	-0.033**	-0.006	-0.027	-0.003
	(0.01)	(0.00)	(0.04)	(0.06)	(0.01)	(0.01)	(0.05)	(0.05)
Financial								
intermediation, D	-0.000	0.000	-0.052	-0.012	-0.083***	-0.064***	-0.025	0.083
	(0.01)	(0.00)	(0.05)	(0.12)	(0.01)	(0.02)	(0.06)	(0.23)
Export share	0.026*	0.000	-0.013	0.059	0.004	-0.012	-0.038	-0.067
	(0.01)	(0.00)	(0.05)	(0.08)	(0.02)	(0.02)	(0.06)	(0.08)
Mainly foreign, D	-0.007	-0.000	-0.037	-0.059	0.024	0.007	-0.024	0.035
	(0.01)	(0.00)	(0.03)	(0.05)	(0.03)	(0.01)	(0.07)	(0.08)
Parents, D	-0.039***	-0.025*	0.060	-0.084*	-0.018	0.001	-0.034	-0.102
	(0.01)	(0.01)	(0.06)	(0.04)	(0.02)	(0.01)	(0.05)	(0.07)
Subsidiary, D	0.023	0.000	0.102	-0.038	0.034	0.017	-0.049	-0.029
	(0.02)	(0.00)	(0.09)	(0.06)	(0.03)	(0.02)	(0.05)	(0.07)
Demand	0.005*	0.000*	0.041***	0.077**	0.013	0.005	0.053**	-0.001
	(0.00)	(0.00)	(0.01)	(0.02)	(0.01)	(0.00)	(0.02)	(0.03)
Observations	4	10	4	20		519	532	

Note: ln - logarithm, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Change in labour productivity, prices to total costs and non-labour costs to total costs in 2008–2009 and 2010–2013 (marginal effect of generalised ordered logit; %)

		Labour product	tivity (C27a)	
	2008-2009		2010–2013	
	wb	wl	wb	wl
Strong decrease	7.8	8.8	5.7	2.7
Moderate decrease	14.9	12.6	8.4	7.5
Unchanged	54.9	53.0	38.9	38.4
Moderate increase	21.2	24.9	42.2	44.0
Strong increase	1.2	0.7	4.9	7.4
Total	100.0	100.0	100.0	100.0
Observations	514		501	
		Prices to total	costs (C27b)	
Strong decrease	10.7	10.1	5.2	3.2
Moderate decrease	19.7	18.6	10.8	9.6
Unchanged	45.2	44.7	33.2	32.3
Moderate increase	23.1	25.7	47.0	49.9
Strong increase	1.3	0.9	3.8	5.0
Total	100.0	100.0	100.0	100.0
Observations	512		500	
	Non	-labour costs to la	abour costs (C27c)	
Strong decrease	6.1	3.6	2.5	1.1
Moderate decrease	15.5	19.1	6.6	6.5
Unchanged	42.1	46.1	27.5	27.7
Moderate increase	33.4	29.5	53.3	56.9
Strong increase	2.9	1.8	10.1	7.7
Total	100.0	100.0	100.0	100.0
Observations	482		471	
Factors explaining probability of a firm to experience a decrease, increase or no change in the average productivity per employee and prices during 2008–2009 and 2010–2013 (marginal effect of generalised ordered logit)

	Average pro	verage productivity per employee (as compared				Prices				
	to labo	our costs per	employee) (C	C27a)	(as c	ompared to te	otal costs) (C	27b)		
	2008-	2009	2010-	-2013	2008-	-2009	2010-	2013		
	wb	wl	wb	wl	wb	wl	wb	wl		
Decrease										
Employment, In	0.001	0.002	-0.004	0.004	0.000	0.004	0.001	-0.003		
	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)		
Manufacturing, D	-0.056	-0.047	-0.030	-0.034	-0.006	-0.073	-0.009	-0.004		
	(0.03)	(0.04)	(0.02)	(0.02)	(0.05)	(0.07)	(0.03)	(0.03)		
Financial										
intermediation, D	0.010	0.070	-0.057	-0.033	-0.003	-0.022	-0.020	0.043		
	(0.08)	(0.11)	(0.04)	(0.04)	(0.13)	(0.12)	(0.06)	(0.10)		
Construction, D	0.074	0.070	-0.010	-0.036	0.185	0.280	-0.027	0.122		
	(0.06)	(0.06)	(0.02)	(0.02)	(0.10)	(0.20)	(0.03)	(0.07)		
Export share	0.023	0.122	0.017	0.007	0.086	0.113	0.035	0.043		
	(0.05)	(0.08)	(0.03)	(0.03)	(0.06)	(0.11)	(0.04)	(0.04)		
Mainly foreign, D	-0.093**	-0.064	-0.041	-0.017	-0.173***	-0.054	0.004	-0.007		
	(0.03)	(0.03)	(0.02)	(0.03)	(0.04)	(0.06)	(0.04)	(0.04)		
Parents, D	0.115	-0.024	0.003	-0.021	0.068	-0.094	-0.009	-0.045		
	(0.09)	(0.06)	(0.03)	(0.03)	(0.08)	(0.08)	(0.03)	(0.03)		
Subsidiary, D	0.066	-0.065	-0.014	-0.012	-0.044	-0.176**	-0.026	-0.040		
	(0.07)	(0.04)	(0.03)	(0.03)	(0.05)	(0.06)	(0.03)	(0.03)		
Demand	-0.125***	-0.123***	-0.080***	-0.055***	-0.137***	-0.099**	-0.073***	-0.052***		
	(0.02)	(0.02)	(0.01)	(0.01)	(0.02)	(0.04)	(0.01)	(0.01)		
No access to credit, D	0.007	0.037	-0.008	-0.003	-0.046	-0.081	-0.060**	-0.054*		
	(0.03)	(0.04)	(0.02)	(0.02)	(0.03)	(0.06)	(0.02)	(0.03)		
Base wage					-0.131***	-0.150***	-0.054***	-0.035*		
-					(0.03)	(0.04)	(0.01)	(0.02)		
Unchanged										
Employment, In	0.000	0.002	-0.009	0.010	-0.000	0.000	0.002	-0.006		
	(0.00)	(0.01)	(0.02)	(0.02)	(0.00)	(0.00)	(0.02)	(0.02)		
Manufacturing, D	-0.019	-0.044	-0.076	-0.110	0.000	0.201**	-0.014	-0.009		
	(0.02)	(0.05)	(0.06)	(0.07)	(0.00)	(0.07)	(0.04)	(0.06)		
Financial										
intermediation, D	0.001	0.015	-0.199	-0.119	0.000	-0.002	-0.033	-0.240*		
	(0.00)	(0.02)	(0.24)	(0.18)	(0.00)	(0.02)	(0.11)	(0.09)		
Construction, D	-0.007	0.015	-0.023	-0.132	-0.247***	-0.258*	-0.045	-0.121		
	(0.02)	(0.02)	(0.05)	(0.09)	(0.07)	(0.13)	(0.05)	(0.08)		
Export share	0.003	0.079	0.037	0.020	-0.002	-0.263**	0.051	0.097		
	(0.01)	(0.04)	(0.06)	(0.09)	(0.01)	(0.09)	(0.05)	(0.09)		
Mainly foreign, D	-0.060	-0.088	-0.116	-0.053	0.128	-0.009	0.005	-0.016		
	(0.04)	(0.08)	(0.08)	(0.09)	(0.07)	(0.02)	(0.05)	(0.08)		

Note: ln - logarithm, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Table A30 (cont.)

	Average productivity per employee (as compared to labour costs per employee)				Prices (as compared to total costs)			
·	2008-2	2009	2010-	-2013	2008-	2009	2010-2	2013
	wb	wl	wb	wl	wb	wl	wb	wl
Parents, D	-0.199*	-0.301**	0.005	-0.067	-0.013	-0.022	-0.014	-0.119
	(0.08)	(0.11)	(0.06)	(0.11)	(0.02)	(0.05)	(0.05)	(0.10)
Subsidiary, D	-0.171*	-0.085	-0.033	-0.036	-0.005	0.269***	-0.044	-0.106
	(0.08)	(0.07)	(0.07)	(0.11)	(0.01)	(0.08)	(0.06)	(0.10)
Demand	0.071***	0.072*	-0.081**	-0.152***	0.105***	0.077*	0.008	-0.029
	(0.02)	(0.03)	(0.02)	(0.04)	(0.02)	(0.03)	(0.02)	(0.03)
No access to credit, D	0.001	0.025	-0.017	-0.008	0.002	0.001	-0.082**	-0.115*
	(0.00)	(0.03)	(0.03)	(0.06)	(0.01)	(0.02)	(0.03)	(0.05)
Base wage					0.004	-0.002	-0.078***	-0.078*
					(0.02)	(0.03)	(0.02)	(0.04)
Increase								
Employment, In	-0.001	-0.004	0.013	-0.013	-0.000	-0.004	-0.003	0.009
	(0.02)	(0.02)	(0.03)	(0.03)	(0.02)	(0.02)	(0.03)	(0.04)
Manufacturing, D	0.075	0.091	0.106	0.144	0.006	-0.127*	0.022	0.013
	(0.05)	(0.09)	(0.08)	(0.09)	(0.05)	(0.06)	(0.07)	(0.09)
Financial								
intermediation, D	-0.010	-0.084	0.256	0.153	0.003	0.024	0.054	0.196
	(0.08)	(0.10)	(0.28)	(0.21)	(0.13)	(0.13)	(0.17)	(0.16)
Construction, D	-0.068	-0.085	0.033	0.168	0.062	-0.021	0.072	-0.001
	(0.04)	(0.05)	(0.07)	(0.11)	(0.08)	(0.11)	(0.08)	(0.10)
Export share	-0.026	-0.201	-0.054	-0.028	-0.084	0.150	-0.086	-0.140
	(0.05)	(0.11)	(0.08)	(0.12)	(0.06)	(0.10)	(0.09)	(0.12)
Mainly foreign, D	0.153*	0.152	0.158	0.071	0.046	0.063	-0.009	0.024
	(0.07)	(0.11)	(0.11)	(0.12)	(0.07)	(0.08)	(0.08)	(0.12)
Parents, D	0.084	0.326*	-0.008	0.089	-0.056	0.117	0.024	0.163
	(0.09)	(0.14)	(0.09)	(0.14)	(0.05)	(0.12)	(0.09)	(0.13)
Subsidiary, D	0.105	0.149	0.048	0.048	0.049	-0.093	0.070	0.145
	(0.08)	(0.10)	(0.10)	(0.14)	(0.06)	(0.07)	(0.09)	(0.12)
Demand	0.054***	0.051	0.161***	0.207***	0.033	0.022	0.065**	0.081*
	(0.02)	(0.03)	(0.03)	(0.04)	(0.02)	(0.03)	(0.02)	(0.04)
No access to credit, D	-0.007	-0.061	0.025	0.011	0.044	0.079	0.142**	0.170*
	(0.03)	(0.06)	(0.05)	(0.08)	(0.03)	(0.05)	(0.05)	(0.08)
Base wage					0.127***	0.152***	0.132***	0.114*
					(0.02)	(0.04)	(0.03)	(0.05)
Observations	4	187	:	508	4	185	5	05

Note: ln - logarithm, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Factors explaining probability of a firm to experience a decrease, increase or no change in nonlabour costs as compared to labour costs per employee during 2008–2009 and 2010–2013 (marginal effect of generalised ordered logit)

	Other (non-labo	Other (non-labour) costs (as compared to labour costs per employee) (C27c)							
	2008-20)09	2010-2	2013					
	wb	wl	wb	wl					
Decrease									
Employment, ln	0.017	0.041*	0.004	0.007					
	(0.02)	(0.02)	(0.01)	(0.01)					
Manufacturing, D	-0.101***	-0.140*	-0.032*	-0.036*					
	(0.03)	(0.06)	(0.02)	(0.01)					
Financial									
intermediation, D	-0.069	-0.033	-0.046*	-0.048**					
	(0.07)	(0.08)	(0.02)	(0.02)					
Construction, D	0.098	0.242	0.019	0.027					
	(0.06)	(0.14)	(0.03)	(0.03)					
Export share	0.103	0.116	-0.003	0.010					
	(0.06)	(0.10)	(0.02)	(0.03)					
Mainly foreign, D	-0.108**	-0.013	0.048	0.026					
	(0.04)	(0.05)	(0.04)	(0.03)					
Parents, D	0.097	-0.078	-0.023	-0.037					
	(0.08)	(0.07)	(0.02)	(0.02)					
Subsidiary, D	-0.051	-0.077	-0.028	-0.036*					
•	(0.04)	(0.05)	(0.02)	(0.02)					
Demand	-0.099***	-0.084***	-0.043***	-0.034***					
	(0.02)	(0.02)	(0.01)	(0.01)					
No access to credit, D	0.056	-0.018	-0.040*	-0.019					
,	(0.04)	(0.05)	(0.02)	(0.02)					
Unchanged	\$ {	· · · · · ·	· · · · · ·						
Employment, In	0.011	0.012	0.011	0.027					
1 5 7	(0.01)	(0.01)	(0.02)	(0.03)					
Manufacturing, D	-0.105*	-0.110	-0.098	-0.148*					
Ċ,	(0.05)	(0.07)	(0.05)	(0.07)					
Financial		× ´							
intermediation, D	-0.073	-0.014	-0.168	-0.225*					
	(0.12)	(0.05)	(0.09)	(0.10)					
Construction, D	-0.123	-0.211*	0.046	0.083					
	(0.07)	(0.10)	(0.06)	(0.07)					
Export share	0.064	0.035	-0.008	0.034					
-	(0.04)	(0.03)	(0.06)	(0.10)					
Mainly foreign, D	0.135	-0.004	0.103	0.081					
	(0.08)	(0.02)	(0.07)	(0.09)					
Parents, D	0.026*	-0.041	-0.070	-0.150					
	(0.01)	(0.06)	(0.07)	(0.10)					
Subsidiary, D	-0.045	-0.045	-0.088	-0.151					
•	(0.05)	(0.05)	(0.07)	(0.09)					
Demand	0.043*	-0.025	0.010	0.006					
	(0.02)	(0.02)	(0.02)	(0.03)					
No access to credit, D	-0.118*	-0.005	-0.102**	-0.068					
	(0.05)	(0.02)	(0.03)	(0.06)					
Increase (next page)									
Observations	469)	4	80					

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Table A31 (cont.)

	Other (1	non-labour) costs (as con	mpared to labour costs) (C	227c)
	2008-2	009	2010-	2013
	wb	wl	wb	wl
Increase				
Employment, ln	-0.028	-0.053*	-0.015	-0.034
	(0.03)	(0.02)	(0.03)	(0.03)
Manufacturing, D	0.206**	0.250*	0.130	0.183*
	(0.08)	(0.12)	(0.07)	(0.08)
Financial				
intermediation, D	0.142	0.047	0.214*	0.273**
	(0.19)	(0.13)	(0.10)	(0.10)
Construction, D	0.025	-0.030	-0.065	-0.110
	(0.08)	(0.10)	(0.08)	(0.10)
Export share	-0.167	-0.151	0.011	-0.044
	(0.09)	(0.12)	(0.09)	(0.12)
Mainly foreign, D	-0.028	0.017	-0.151	-0.107
	(0.08)	(0.07)	(0.11)	(0.12)
Parents, D	-0.123	0.119	0.093	0.187
	(0.08)	(0.13)	(0.09)	(0.12)
Subsidiary, D	0.096	0.123	0.116	0.187
	(0.09)	(0.10)	(0.09)	(0.10)
Demand	0.056**	0.109***	0.034	0.028
	(0.02)	(0.03)	(0.02)	(0.03)
No access to credit, D	0.062	0.023	0.142**	0.087
	(0.05)	(0.07)	(0.05)	(0.08)
Observations	46	9	4	80

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

able A32	
need to significantly reduce labour input or alter its composition during 2008-2009 and 2010-201	3
C33a) (%)	

	2008–2009		2010-201	13	Share of firms which repeated the action in 2010–2013		
	wb	wl	wb	wl	wb	wl	
No	64.4	62.3	75.6	74.4	79.0	83.3	
Yes, we had to reduce labour input or alter its composition	35.6	37.7	24.4	25.6	29.4	38.6	
Total	100.0	100.0	100.0	100.0			
Observations	548		557		548		

Note: wb - weighted to represent firm population, wl - weighted to represent employees in the population.

Explanation: 79.0% of firms having answered that there was no need to reduce labour input or alter its composition in 2008–2009, answered the same in 2010–2013 according to the firm number weights.

Table A33

Factors explaining probability of a firm to significantly reduce labour input or to alter its composition during 2008–2009 and 2010–2013 (logit regression coefficients and marginal effects)

		N	lecessity to sig	gnificantly r	educe labour i	nput (C33a))			
		Coeffi	cients			Marginal effects				
	2008-2	009	2010-	2010-2013		2009	2010-2013			
	wb	wl	wb	wl	wb	wl	wb	wl		
Employment, In	0.289*	0.203	-0.069	0.337	0.063*	0.046	-0.011	0.059		
	(0.13)	(0.15)	(0.16)	(0.21)	(0.03)	(0.04)	(0.03)	(0.04)		
Manufacturing, D	0.680*	1.144*	0.112	0.952	0.158*	0.272*	0.019	0.188		
	(0.31)	(0.47)	(0.38)	(0.60)	(0.08)	(0.11)	(0.06)	(0.14)		
Construction, D	0.544	0.990*	0.800*	0.754	0.126	0.239*	0.153*	0.152		
	(0.31)	(0.43)	(0.33)	(0.46)	(0.08)	(0.11)	(0.07)	(0.11)		
Financial										
intermediation, D	-1.915*	-1.681	2.083**	1.736*	-0.264***	-0.273*	0.467**	0.387*		
	(0.77)	(1.22)	(0.77)	(0.77)	(0.05)	(0.12)	(0.17)	(0.18)		
Export share	-0.408	-0.211	0.442	-0.386	-0.089	-0.048	0.073	-0.067		
	(0.39)	(0.58)	(0.44)	(0.57)	(0.08)	(0.13)	(0.07)	(0.10)		
Mainly foreign, D	0.424	0.764	0.232	-0.057	0.097	0.183	0.040	-0.010		
	(0.38)	(0.50)	(0.52)	(0.62)	(0.09)	(0.12)	(0.09)	(0.11)		
Parents, D	0.274	-0.802	-0.709	-0.917	0.062	-0.164	-0.096	-0.134		
	(0.45)	(0.64)	(0.59)	(0.71)	(0.11)	(0.12)	(0.06)	(0.10)		
Subsidiary, D	-0.219	-0.653	-0.266	-0.784	-0.046	-0.135	-0.041	-0.116		
	(0.40)	(0.63)	(0.57)	(0.70)	(0.08)	(0.11)	(0.08)	(0.09)		
Demand	-0.592***	-0.253	-0.690***	-0.534*	-0.129***	-0.057	-0.113***	-0.093**		
	(0.11)	(0.16)	(0.11)	(0.23)	(0.02)	(0.04)	(0.02)	(0.03)		
No access to credit, D	0.556*	0.339	0.758**	0.152	0.120*	0.076	0.123**	0.026		
	(0.22)	(0.36)	(0.25)	(0.45)	(0.05)	(0.08)	(0.04)	(0.08)		
Constant	-0.527	-1.057	0.505	-0.956						
Observations	5.	37	5	54						

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Explained variable: 0 - no need for labour input adjustment, 1 - significant reduction in labour input. Explanatory variables are described in Table A2.

Relevance of measures a firm used to reduce labour input or alter its composition when it was most urgent during 2008–2009 and 2010–2013 (for firms which reduced labour input or altered its composition; %)

	Col	Collective layoff (C33b1)				Individual layoffs (C33b2)			
	2008–20	09	2010-2	013	2008-2	009	2010-2	013	
	wb	wl	wb	wl	wb	wl	wb	wl	
Not at all	89.3	92.3	90.6	81.6	44.0	33.5	63.0	60.6	
Marginally	5.1	2.8	5.6	4.5	21.2	32.0	18.4	18.3	
Moderately	1.5	0.5	0.8	0.2	22.0	23.1	10.3	10.2	
Strongly	4.1	4.3	3.1	13.7	12.8	11.3	8.3	10.9	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Observations	19	6	12	23	19	94	12	24	
	Reductio	n of worki	ng hours (C33	b5)	Non-r	enewal of c	ontracts (C331	o6)	
Not at all	37.6	24.7	46.6	41.8	71.3	53.9	70.7	44.2	
Marginally	22.7	40.3	18.2	37.6	14.6	23.2	14.2	35.6	
Moderately	16.7	18.6	16.2	8.6	8.1	4.5	7.1	3.0	
Strongly	22.9	16.4	19.0	12.1	6.0	18.4	8.0	17.2	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Observations	195		12	22	19	91	12	22	
	Ear	ly retirem	ent (C33b7)		Freeze of new hires (C33				
Not at all	78.9	73.4	87.0	79.6	19.0	11.5	29.6	23.2	
Marginally	15.7	17.5	9.0	18.8	17.2	19.6	19.3	39.5	
Moderately	3.3	8.2	3.1	1.4	23.9	18.9	25.5	25.5	
Strongly	2.1	1.0	0.9	0.2	39.9	50.0	25.5	11.8	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Observations	194	4	12	21	18	36	12	20	
	Reduction	n of agency	workers (C33	3b9)					
Not at all	82.3	75.3	80.8	55.0					
Marginally	8.2	7.1	10.7	36.8					
Moderately	5.3	3.6	1.6	5.0					
Strongly	4.2	14.0	6.9	3.1					
Total	100.0	100.0	100.0	100.0					
Observations	18	5	11	.8					

Factors explaining probability of applying individual layoffs, hour reduction, non-renewal of contracts and freeze or reduction of new hires during 2008–2009 and 2010–2013 (marginal effects of logit analysis) for firms which reduced labour input or altered its composition

-	I	Individual layoffs (C33b2)				Reduction of working hours (C33b5)			
	2008-2	2009	2010-	-2013	2008-	2009	2010-2	2013	
	wb	wl	wb	wl	wb	wl	wb	wl	
Employment, In	0.073	0.035	0.052	0.032	0.075	0.108***	-0.000	0.059	
	(0.05)	(0.03)	(0.06)	(0.05)	(0.04)	(0.02)	(0.07)	(0.05)	
Manufacturing, D	0.081	0.044	0.080	0.353	0.256**	0.145	0.103	0.327*	
	(0.12)	(0.07)	(0.18)	(0.20)	(0.09)	(0.09)	(0.18)	(0.16)	
Construction, D	0.094	0.088	-0.135	-0.090	0.209*	0.137*	-0.092	-0.071	
	(0.11)	(0.05)	(0.11)	(0.12)	(0.09)	(0.06)	(0.13)	(0.17)	
Financial									
intermediation, D	-0.045	0.008	-0.077	0.058	-0.347	-0.798***	-0.577***	-0.336	
	(0.49)	(0.28)	(0.23)	(0.22)	(0.35)	(0.04)	(0.07)	(0.25)	
Export share	0.394*	0.219*	-0.498*	-0.494*	0.001	0.024	0.011	0.369	
	(0.19)	(0.11)	(0.22)	(0.24)	(0.16)	(0.13)	(0.23)	(0.27)	
Mainly foreign, D	-0.363*	-0.609***	0.054	0.006	-0.136	-0.326	0.222	0.200	
	(0.16)	(0.17)	(0.29)	(0.31)	(0.15)	(0.18)	(0.16)	(0.15)	
Parents, D	0.282*	0.227***	0.256	0.171	0.106	-0.032	0.510***	0.107	
	(0.12)	(0.05)	(0.27)	(0.29)	(0.13)	(0.14)	(0.06)	(0.29)	
Subsidiary, D	0.463***	0.264***	0.623***	0.722***	-0.186	-0.039	-0.187	-0.350	
	(0.05)	(0.05)	(0.11)	(0.09)	(0.17)	(0.14)	(0.22)	(0.22)	
Demand	0.006	0.063**	-0.078	-0.191**	-0.035	-0.011	-0.050	-0.127*	
	(0.03)	(0.02)	(0.05)	(0.06)	(0.03)	(0.03)	(0.05)	(0.06)	
No access to credit, D	-0.069	0.028	0.158	-0.050	0.011	-0.010	0.148	-0.178	
	(0.09)	(0.08)	(0.11)	(0.14)	(0.09)	(0.08)	(0.11)	(0.14)	
Observations]	191		124		192]	22	
	Non-	renewal of c	ontracts (C33	b6)	Freeze	or reduction of	of new hires (O	C33b8)	
Employment, In	0.110**	0.145*	0.109	0.365***	0.093*	0.068***	-0.043	0.104*	
	(0.04)	(0.07)	(0.06)	(0.09)	(0.04)	(0.02)	(0.06)	(0.05)	
Manufacturing, D	0.039	0.030	0.023	-0.103	0.008	-0.023	-0.048	-0.188	
	(0.10)	(0.16)	(0.15)	(0.26)	(0.09)	(0.06)	(0.20)	(0.26)	
Construction, D	0.396**	0.326**	0.333**	0.426***	0.050	0.038	0.054	0.059	
	(0.13)	(0.12)	(0.13)	(0.10)	(0.08)	(0.04)	(0.11)	(0.09)	
Financial									
intermediation, D	0.317	0.467***	0.103	0.257	0.126	0.088**	0.089	-0.069	
	(0.25)	(0.09)	(0.22)	(0.14)	(0.08)	(0.03)	(0.18)	(0.20)	
Export share	0.020	0.128	-0.010	0.229	0.017	0.086	0.317	0.282	
	(0.14)	(0.20)	(0.17)	(0.31)	(0.11)	(0.07)	(0.22)	(0.24)	
Mainly foreign, D	-0.131	0.047	0.026	0.123	-0.164	-0.082	0.160	0.136	
	(0.09)	(0.18)	(0.19)	(0.25)	(0.14)	(0.10)	(0.12)	(0.08)	
Parents, D	0.230	-0.109	0.066	-0.710***			0.130	-0.267	
	(0.16)	(0.26)	(0.36)	(0.11)			(0.17)	(0.35)	
Subsidiary, D	0.058	0.008	-0.136	-0.172	-0.278	-0.258	-0.016	-0.305	
	(0.16)	(0.21)	(0.12)	(0.25)	(0.18)	(0.14)	(0.20)	(0.23)	
Demand	0.021	0.079	-0.004	-0.035	-0.022	-0.030	-0.116**	-0.034	
	(0.03)	(0.05)	(0.04)	(0.07)	(0.02)	(0.02)	(0.04)	(0.04)	
No access to credit, D	0.193**	0.106	0.115	0.048	0.069	0.021	0.082	0.037	
	(0.07)	(0.13)	(0.09)	(0.14)	(0.07)	(0.05)	(0.11)	(0.10)	
Observations	1 1	188		122		165	1	20	

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Comment: Groups are combined into Not applied and Applied due to a small number of observations in some groups. 0 - Not applied, 1 - Applied. Explanatory variables are described in Table A2.

Factors explaining probability of applying early retirement or reduction of agency workers during 2008–2009 and 2010–2013 (marginal effects of logit analysis) for firms which reduced labour input or altered its composition

	Early retirement (C33b7)				Reduction of agency workers (C33b9)			
	2008-2	2009	2010-	2013	2008-	-2009	2010-2	2013
	wb	wl	wb	wl	wb	wl	wb	wl
Employment, In	0.038	0.041	0.032	0.106*	-0.002	-0.013	0.043	0.269**
	(0.03)	(0.03)	(0.03)	(0.04)	(0.03)	(0.03)	(0.06)	(0.09)
Manufacturing, D	0.151	0.118	0.173	0.266	-0.126*	-0.010	0.097	0.336
	(0.12)	(0.11)	(0.15)	(0.19)	(0.05)	(0.07)	(0.14)	(0.25)
Construction, D	0.073	-0.078	-0.016	-0.102	0.225	0.423*	0.244	0.205
	(0.10)	(0.06)	(0.07)	(0.06)	(0.12)	(0.19)	(0.14)	(0.28)
Export share	-0.199	-0.370*	-0.266	-0.528*	0.312**	0.396***	0.164	0.253
	(0.16)	(0.17)	(0.21)	(0.21)	(0.10)	(0.11)	(0.11)	(0.35)
Mainly foreign, D	-0.078	-0.132	0.272	0.100	-0.155*	-0.263***	-0.137**	-0.294
	(0.12)	(0.08)	(0.19)	(0.22)	(0.06)	(0.06)	(0.05)	(0.15)
Parents, D	-0.140**	0.021	-0.098 **	-0.111	0.199	-0.085	0.133	-0.181
	(0.05)	(0.11)	(0.04)	(0.07)	(0.15)	(0.09)	(0.45)	(0.31)
Subsidiary, D	0.031	0.083			0.234	0.766***	0.485**	0.389
	(0.16)	(0.15)			(0.27)	(0.14)	(0.18)	(0.20)
Demand	0.009	0.010	-0.036	-0.070	0.015	0.047*	-0.057	0.024
	(0.02)	(0.03)	(0.03)	(0.05)	(0.02)	(0.02)	(0.03)	(0.10)
No access to credit, D	0.105	0.174	0.088	0.094	0.058	-0.039	0.071	0.146
	(0.06)	(0.09)	(0.07)	(0.08)	(0.06)	(0.07)	(0.08)	(0.21)
Financial								
intermediation, D					0.709***	0.788***	0.095	0.359
					(0.16)	(0.09)	(0.23)	(0.23)
Observations	1	87	1	07	182		118	

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Comment: Groups are combined into Not applied and Applied due to a small number of observations in some groups. 0 - Not applied, 1 - Applied. Explanatory variables are described in Table A2.

Table A37 Evaluation of whether the following actions became more or less difficult for a firm during 2008– 2009 and 2010–2013 compared to the previous period (%)

	Layoff due	e to econon	nical reasons	(C34b)	Layoff d	ue to discipl	inary reasons	(C34c)
	2008-20)09	2010-	2013	2008-	2009	2010-	2013
	wb	wl	wb	wl	wb	wl	wb	wl
Much less difficult	3.9	2.6	1.5	0.5	4.3	2.5	2.7	2.2
Less difficult	8.3	5.5	6.8	6.7	5.3	5.7	4.8	4.0
Unchanged	79.6	80.9	77.7	74.1	83.2	82.5	79.8	76.1
More difficult	5.8	7.1	8.7	11.6	5.3	7.3	7.7	13.6
Much more difficult	2.4	3.9	5.3	7.2	1.9	2.0	5.0	4.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Observations	45	1	4	51	2	471	4	175
	To hire emplo		oyees (C34e)		To lower w	age for new e	employees (C	34j)
Much less difficult	4.4	4.3	1.9	1.2	3.0	2.4	2.4	4.1
Less difficult	11.2	12.0	9.2	7.4	10.5	9.9	7.7	4.1
Unchanged	69.5	67.8	58.8	53.3	74.5	69.6	69.1	68.0
More difficult	9.8	13.2	19.4	24.8	7.8	11.1	14.1	12.8
Much more difficult	5.0	2.7	10.8	13.4	4.3	6.9	6.8	10.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Observations	48	8	4	97	2	176	480	
	To mo	To move employees to position in other location (C34g)To move employees acro job positions (C3		es across diffons (C34h)	erent			
Much less difficult	1.3	0.8	0.9	0.4	2.2	1.8	1.5	0.7
Less difficult	3.7	7.6	3.0	3.1	6.6	9.1	6.2	5.3
Unchanged	90.7	87.4	89.1	83.7	86.0	82.7	82.0	78.2
More difficult	3.2	3.9	5.3	10.0	4.1	4.7	8.8	12.9
Much more difficult	1.0	0.4	1.6	2.8	1.2	1.8	1.6	3.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Observations	45	2	4	56	4	178	481	
	To ad	just workir	ng hours (C34	lf)	To adjust v	vages of incl	umbent worke	ers (C34i)
Much less difficult	2.3	2.5	0.9	0.8	3.7	1.5	1.5	1.1
Less difficult	9.2	6.9	5.9	4.0	13.0	13.8	11.9	9.9
Unchanged	78.9	79.9	75.5	74.7	63.8	58.7	56.5	54.3
More difficult	8.1	8.7	14.0	14.6	14.0	16.0	19.8	17.8
Much more difficult	1.4	2.0	3.7	5.9	5.5	9.9	10.3	16.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Observations	48	6	4	90	4	199	5	504
	To lay off	employees	collectively	(C34a)				
Much less difficult	1.5	1.1	0.3	0.1				
Less difficult	2.2	3.2	1.4	4.3				
Unchanged	93.4	93.5	91.8	89.1				
More difficult	1.8	1.5	2.7	1.5				
Much more difficult	1.1	0.7	3.8	5.1				
Total	100.0	100.0	100.0	100.0				
Observations	39	0	3	95				

Factors explaining probability of wage and working hours adjustment becoming more or less difficult during 2008–2009 and 2010–2013 compared to the previous period (marginal effect of generalised ordered logit)

	To adjust v	To adjust wages of incumbent workers (C34i)				To adjust working hours (C34f)			
	2008-	2009	2010-	-2013	2008-	2009	2010-	-2013	
	wb	wl	wb	wl	wb	wl	wb	wl	
Less difficult									
Employment, In	-0.009	-0.019	-0.003	-0.006	-0.001	-0.010	0.003	0.000	
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	
Manufacturing, D	0.072	0.047	0.020	0.042	0.080	0.015	0.033	-0.003	
	(0.05)	(0.07)	(0.03)	(0.04)	(0.05)	(0.03)	(0.03)	(0.00)	
Construction, D	0.037	0.006	-0.009	-0.001	0.030	0.018	-0.004	0.005	
	(0.05)	(0.04)	(0.03)	(0.02)	(0.04)	(0.03)	(0.01)	(0.00)	
Financial									
intermediation, D	0.222	0.580***	-0.049	0.038	0.023	-0.008	-0.056***	-0.033*	
	(0.17)	(0.16)	(0.04)	(0.11)	(0.14)	(0.07)	(0.01)	(0.01)	
Export share	0.092	0.067	0.042	0.010	0.010	-0.059	0.012	0.007	
	(0.05)	(0.07)	(0.04)	(0.05)	(0.03)	(0.04)	(0.02)	(0.00)	
Mainly foreign, D	0.059	0.072	0.105	0.090	0.012	0.047	0.041	0.014	
	(0.06)	(0.07)	(0.07)	(0.06)	(0.03)	(0.06)	(0.02)	(0.01)	
Parents, D	0.108	0.049	-0.050*	-0.044	0.056	-0.034	-0.031**	-0.015*	
	(0.08)	(0.08)	(0.02)	(0.03)	(0.07)	(0.04)	(0.01)	(0.01)	
Subsidiary, D	-0.015	-0.014	-0.010	-0.036	0.024	0.009	-0.004	-0.005	
	(0.04)	(0.06)	(0.03)	(0.03)	(0.03)	(0.03)	(0.01)	(0.00)	
Demand	0.006	-0.019	-0.001	-0.017	-0.033**	-0.006	-0.022***	-0.006**	
	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	
No access to credit, D	0.030	0.061	0.056	-0.023	0.096**	0.095**	0.012	0.003	
	(0.04)	(0.04)	(0.03)	(0.02)	(0.03)	(0.03)	(0.02)	(0.01)	
Unchanged									
Employment, In	0.000	-0.001	-0.004	-0.015	0.000	-0.002	0.007	0.006	
	(0.00)	(0.00)	(0.01)	(0.02)	(0.00)	(0.00)	(0.01)	(0.02)	
Manufacturing, D	-0.016	-0.005	0.024	0.075	-0.028	0.002	-0.089	-0.056	
0.	(0.02)	(0.02)	(0.03)	(0.06)	(0.03)	(0.00)	(0.05)	(0.07)	
Construction, D	-0.006	0.000	-0.014	-0.003	-0.007	0.001	-0.011	0.051	
	(0.01)	(0.00)	(0.04)	(0.06)	(0.02)	(0.01)	(0.04)	(0.04)	
Financial									
intermediation, D	-0.370*	-0.784***	-0.118	-0.520***	-0.005	-0.003	-0.239	-0.509***	
	(0.17)	(0.07)	(0.14)	(0.08)	(0.05)	(0.04)	(0.17)	(0.15)	
Export share	-0.129*	-0.247***	-0.156*	-0.357**	-0.000	0.157*	0.029	0.098	
	(0.06)	(0.07)	(0.07)	(0.11)	(0.00)	(0.08)	(0.04)	(0.07)	
Mainly foreign, D	-0.013	-0.016	-0.105	0.105**	-0.001	-0.006	0.044**	0.090*	
	(0.02)	(0.03)	(0.07)	(0.04)	(0.01)	(0.03)	(0.02)	(0.04)	
Parents, D	-0.038	-0.006	-0.113	-0.142	-0.020	-0.025	-0.187*	-0.035	
	(0.05)	(0.02)	(0.06)	(0.10)	(0.04)	(0.06)	(0.09)	(0.12)	
Subsidiary, D	-0.001	-0.002	-0.014	-0.111	-0.005	0.001	-0.010	-0.103	
	(0.01)	(0.01)	(0.05)	(0.10)	(0.01)	(0.00)	(0.04)	(0.12)	
Demand	-0.000	0.064**	-0.002	-0.041	0.058***	-0.001	0.060***	0.027	
	(0.00)	(0.02)	(0.01)	(0.03)	(0.01)	(0.00)	(0.02)	(0.03)	
No access to credit, D	-0.097*	-0.102*	-0.152**	-0.055	-0.126***	-0.155**	-0.129***	-0.192**	
	(0.04)	(0.05)	(0.05)	(0.06)	(0.04)	(0.06)	(0.04)	(0.06)	
More difficult (next p	age)								
Observations		481	2	494	2	478		487	

Note: ln - logarithm, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Table A38 (cont.)

	To adjust w	To adjust wages of incumbent workers (C34i)				To adjust working hours (C34f)			
	2008–2	2009	2010-	-2013	2008-	-2009	2010-	2013	
	wb	wl	wb	wl	wb	wl	wb	wl	
More difficult									
Employment, In	0.009	0.020	0.007	0.021	0.001	0.013	-0.010	-0.007	
	(0.01)	(0.01)	(0.02)	(0.03)	(0.01)	(0.01)	(0.02)	(0.02)	
Manufacturing, D	-0.056	-0.042	-0.044	-0.117	-0.052*	-0.017	0.057	0.059	
	(0.03)	(0.05)	(0.05)	(0.09)	(0.02)	(0.03)	(0.05)	(0.07)	
Construction, D	-0.031	-0.006	0.023	0.005	-0.024	-0.019	0.016	-0.056	
	(0.04)	(0.04)	(0.07)	(0.08)	(0.03)	(0.03)	(0.06)	(0.04)	
Financial									
intermediation, D	0.149	0.204	0.167	0.482***	-0.018	0.012	0.295	0.542***	
	(0.15)	(0.17)	(0.18)	(0.11)	(0.09)	(0.11)	(0.17)	(0.15)	
Export share	0.037	0.180*	0.114	0.347**	-0.009	-0.098	-0.042	-0.105	
	(0.05)	(0.09)	(0.08)	(0.13)	(0.03)	(0.07)	(0.05)	(0.07)	
Mainly foreign, D	-0.046	-0.056	0.001	-0.194*	-0.011	-0.041	-0.085**	-0.104*	
	(0.04)	(0.05)	(0.07)	(0.09)	(0.03)	(0.04)	(0.03)	(0.05)	
Parents, D	-0.069	-0.044	0.163*	0.186	-0.036	0.059	0.218*	0.050	
	(0.04)	(0.06)	(0.08)	(0.13)	(0.03)	(0.10)	(0.10)	(0.12)	
Subsidiary, D	0.015	0.016	0.024	0.147	-0.019	-0.011	0.013	0.108	
	(0.05)	(0.07)	(0.08)	(0.13)	(0.02)	(0.04)	(0.05)	(0.13)	
Demand	-0.006	-0.046*	0.003	0.059	-0.025*	0.007	-0.038*	-0.022	
	(0.01)	(0.02)	(0.02)	(0.04)	(0.01)	(0.01)	(0.02)	(0.03)	
No access to credit, D	0.067	0.041	0.095*	0.078	0.030	0.061	0.117**	0.189**	
	(0.03)	(0.05)	(0.05)	(0.08)	(0.03)	(0.05)	(0.04)	(0.06)	
Observations	4	181	4	194		478	487		

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Factors explaining probability of hiring new employees and lowering their wages becoming more or less difficult during 2008–2009 and 2010–2013 compared to the previous period (marginal effect of generalised ordered logit)

	To hire new employees (C34e)				To lower wage for new employees (C34j)			s (C34j)	
	2008-	2009	2010-	-2013	2008-	2009	2010-	-2013	
	wb	wl	wb	wl	wb	wl	wb	wl	
Less difficult									
Employment, ln	-0.009	-0.019	-0.003	-0.006	-0.001	-0.010	0.003	0.000	
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	
Manufacturing, D	0.072	0.047	0.020	0.042	0.080	0.015	0.033	-0.003	
	(0.05)	(0.07)	(0.03)	(0.04)	(0.05)	(0.03)	(0.03)	(0.00)	
Construction, D	0.037	0.006	-0.009	-0.001	0.030	0.018	-0.004	0.005	
	(0.05)	(0.04)	(0.03)	(0.02)	(0.04)	(0.03)	(0.01)	(0.00)	
Financial									
intermediation, D	0.222	0.580***	-0.049	0.038	0.023	-0.008	-0.056***	-0.033*	
	(0.17)	(0.16)	(0.04)	(0.11)	(0.14)	(0.07)	(0.01)	(0.01)	
Export share	0.092	0.067	0.042	0.010	0.010	-0.059	0.012	0.007	
	(0.05)	(0.07)	(0.04)	(0.05)	(0.03)	(0.04)	(0.02)	(0.00)	
Mainly foreign, D	0.059	0.072	0.105	0.090	0.012	0.047	0.041	0.014	
	(0.06)	(0.07)	(0.07)	(0.06)	(0.03)	(0.06)	(0.02)	(0.01)	
Parents, D	0.108	0.049	-0.050*	-0.044	0.056	-0.034	-0.031**	-0.015*	
	(0.08)	(0.08)	(0.02)	(0.03)	(0.07)	(0.04)	(0.01)	(0.01)	
Subsidiary, D	-0.015	-0.014	-0.010	-0.036	0.024	0.009	-0.004	-0.005	
-	(0.04)	(0.06)	(0.03)	(0.03)	(0.03)	(0.03)	(0.01)	(0.00)	
Demand	0.006	-0.019	-0.001	-0.017	-0.033**	-0.006	-0.022***	-0.006**	
	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	
No access to credit, D	0.030	0.061	0.056	-0.023	0.096**	0.095**	0.012	0.003	
	(0.04)	(0.04)	(0.03)	(0.02)	(0.03)	(0.03)	(0.02)	(0.01)	
Unchanged									
Employment, In	0.000	-0.001	-0.004	-0.015	0.000	-0.002	0.007	0.006	
	(0.00)	(0.00)	(0.01)	(0.02)	(0.00)	(0.00)	(0.01)	(0.02)	
Manufacturing, D	-0.016	-0.005	0.024	0.075	-0.028	0.002	-0.089	-0.056	
	(0.02)	(0.02)	(0.03)	(0.06)	(0.03)	(0.00)	(0.05)	(0.07)	
Construction, D	-0.006	0.000	-0.014	-0.003	-0.007	0.001	-0.011	0.051	
	(0.01)	(0.00)	(0.04)	(0.06)	(0.02)	(0.01)	(0.04)	(0.04)	
Financial									
intermediation, D	-0.370*	-0.784***	-0.118	-0.520***	-0.005	-0.003	-0.239	-0.509***	
	(0.17)	(0.07)	(0.14)	(0.08)	(0.05)	(0.04)	(0.17)	(0.15)	
Export share	-0.129*	-0.247***	-0.156*	-0.357**	-0.000	0.157*	0.029	0.098	
	(0.06)	(0.07)	(0.07)	(0.11)	(0.00)	(0.08)	(0.04)	(0.07)	
Mainly foreign, D	-0.013	-0.016	-0.105	0.105**	-0.001	-0.006	0.044**	0.090*	
	(0.02)	(0.03)	(0.07)	(0.04)	(0.01)	(0.03)	(0.02)	(0.04)	
Parents, D	-0.038	-0.006	-0.113	-0.142	-0.020	-0.025	-0.187*	-0.035	
	(0.05)	(0.02)	(0.06)	(0.10)	(0.04)	(0.06)	(0.09)	(0.12)	
Subsidiary, D	-0.001	-0.002	-0.014	-0.111	-0.005	0.001	-0.010	-0.103	
	(0.01)	(0.01)	(0.05)	(0.10)	(0.01)	(0.00)	(0.04)	(0.12)	
Demand	-0.000	0.064**	-0.002	-0.041	0.058***	-0.001	0.060***	0.027	
	(0.00)	(0.02)	(0.01)	(0.03)	(0.01)	(0.00)	(0.02)	(0.03)	
No access to credit, D	-0.097*	-0.102*	-0.152**	-0.055	-0.126***	-0.155**	-0.129***	-0.192**	
	(0.04)	(0.05)	(0.05)	(0.06)	(0.04)	(0.06)	(0.04)	(0.06)	
More difficult (next p	oage)								
Observations		481	4	494	4	478		487	

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Table A39 (cont.)

	To l	To hire new employees (C34e)				To lower wage for new employees (C34j)			
	2008–2	2009	2010-	2013	2008-	2009	2010-	2013	
	wb	wl	wb	wl	wb	wl	wb	wl	
More difficult									
Employment, In	0.009	0.020	0.007	0.021	0.001	0.013	-0.010	-0.007	
	(0.01)	(0.01)	(0.02)	(0.03)	(0.01)	(0.01)	(0.02)	(0.02)	
Manufacturing, D	-0.056	-0.042	-0.044	-0.117	-0.052*	-0.017	0.057	0.059	
	(0.03)	(0.05)	(0.05)	(0.09)	(0.02)	(0.03)	(0.05)	(0.07)	
Construction, D	-0.031	-0.006	0.023	0.005	-0.024	-0.019	0.016	-0.056	
	(0.04)	(0.04)	(0.07)	(0.08)	(0.03)	(0.03)	(0.06)	(0.04)	
Financial									
intermediation, D	0.149	0.204	0.167	0.482***	-0.018	0.012	0.295	0.542***	
	(0.15)	(0.17)	(0.18)	(0.11)	(0.09)	(0.11)	(0.17)	(0.15)	
Export share	0.037	0.180*	0.114	0.347**	-0.009	-0.098	-0.042	-0.105	
	(0.05)	(0.09)	(0.08)	(0.13)	(0.03)	(0.07)	(0.05)	(0.07)	
Mainly foreign, D	-0.046	-0.056	0.001	-0.194*	-0.011	-0.041	-0.085**	-0.104*	
	(0.04)	(0.05)	(0.07)	(0.09)	(0.03)	(0.04)	(0.03)	(0.05)	
Parents, D	-0.069	-0.044	0.163*	0.186	-0.036	0.059	0.218*	0.050	
	(0.04)	(0.06)	(0.08)	(0.13)	(0.03)	(0.10)	(0.10)	(0.12)	
Subsidiary, D	0.015	0.016	0.024	0.147	-0.019	-0.011	0.013	0.108	
	(0.05)	(0.07)	(0.08)	(0.13)	(0.02)	(0.04)	(0.05)	(0.13)	
Demand	-0.006	-0.046*	0.003	0.059	-0.025*	0.007	-0.038*	-0.022	
	(0.01)	(0.02)	(0.02)	(0.04)	(0.01)	(0.01)	(0.02)	(0.03)	
No access to credit, D	0.067	0.041	0.095*	0.078	0.030	0.061	0.117**	0.189**	
	(0.03)	(0.05)	(0.05)	(0.08)	(0.03)	(0.05)	(0.04)	(0.06)	
Observations	4	481	4	194	2	478	487		

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Table A40	
Obstacles in hiring workers with a permanent, open-ended contract (%)	

	Uncertainty about economic conditions (C35a)		Insufficient availabili with the required sk	ity of labour ills (C35b)	Access to financing (C35c)	
	wb	wl	wb	wl	wb	wl
Not relevant	10.6	15.9	8.8	6.0	12.9	16.3
Of little relevance	12.3	19.6	8.0	9.1	19.7	20.4
Relevant	48.6	44.4	42.6	40.8	45.7	44.2
Very relevant	28.4	20.2	40.6	44.0	21.8	19.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Observations	524		521		514	
	Firing costs (C	35d)	Hiring costs (C35e)		High payroll taxes (C35f)	
Not relevant	19.2	19.4	23.8	23.9	9.3	15.9
Of little relevance	35.6	34.5	42.1	40.7	11.7	10.5
Relevant	35.6	38.0	28.2	29.3	38.1	41.1
Very relevant	9.7	8.0	5.9	6.0	41.0	32.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Observations	518		519		530	
	High wages (C	35g)	Risks that labour changed (C3	laws are 5h)	Other labour costs (C35i)	
Not relevant	6.8	7.8	17.3	19.2	20.0	21.9
Of little relevance	12.9	16.2	29.8	37.2	30.5	37.2
Relevant	56.5	53.2	38.7	31.3	36.2	30.6
Very relevant	23.8	22.8	14.3	12.3	13.3	10.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Observations	505		485		451	

Factors explaining relevance of obstacles in hiring workers with a permanent, open-ended contract at the end of 2013 (marginal effect of generalised ordered logit)

	Uncertainty about economic I conditions (C35a)		Insufficient availa with the required	bility of labour skills (C35b)	Access to financing (C35c)	
·	wb	wl	wb	wl	wb	wl
Not relevant						
Employment, In	0.022**	0.030**	-0.003	-0.010	0.018	0.011
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Manufacturing, D	-0.037*	-0.075**	-0.024	-0.037*	-0.030	-0.027
	(0.02)	(0.03)	(0.01)	(0.02)	(0.02)	(0.04)
Construction, D	-0.049**	-0.076**	-0.007	-0.013	-0.032	-0.040
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.04)
Export share	-0.000	0.014	0.030	0.022	0.017	-0.012
	(0.03)	(0.05)	(0.02)	(0.03)	(0.03)	(0.07)
Mainly foreign, D	-0.041	0.032	-0.031	-0.001	0.046	0.062
	(0.03)	(0.05)	(0.02)	(0.02)	(0.04)	(0.07)
Parents, D	0.053	0.194	0.020	0.027	0.023	0.047
	(0.05)	(0.13)	(0.03)	(0.04)	(0.04)	(0.12)
Subsidiary, D	-0.026	0.134	-0.008	-0.020	-0.011	0.028
	(0.03)	(0.13)	(0.03)	(0.02)	(0.03)	(0.09)
Demand	0.032***	0.028	-0.002	-0.002	0.022**	0.030
	(0.01)	(0.03)	(0.01)	(0.01)	(0.01)	(0.02)
No access to credit, D	-0.042*	-0.027	-0.055*	-0.017	-0.139***	-0.087
	(0.02)	(0.03)	(0.03)	(0.02)	(0.03)	(0.05)
Of little relevance						
Employment, In	0.022*	0.038*	-0.003	-0.014	0.023	0.009
	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)
Manufacturing, D	-0.040*	-0.110*	-0.022	-0.052*	-0.041	-0.023
	(0.02)	(0.06)	(0.01)	(0.02)	(0.03)	(0.04)
Construction, D	-0.054**	-0.122**	-0.006	-0.019	-0.044	-0.036
	(0.02)	(0.05)	(0.02)	(0.03)	(0.03)	(0.04)
Export share	-0.000	0.019	0.025	0.030	0.022	-0.009
	(0.03)	(0.07)	(0.02)	(0.03)	(0.03)	(0.05)
Mainly foreign, D	0.064	0.037	-0.029	-0.002	0.050	0.041
	(0.06)	(0.05)	(0.02)	(0.03)	(0.03)	(0.04)
Parents, D	0.046	-0.027	0.016	0.035	0.026	0.166
	(0.04)	(0.13)	(0.02)	(0.05)	(0.04)	(0.14)
Subsidiary, D	-0.028	-0.198**	-0.007	-0.027	-0.014	0.021
	(0.03)	(0.07)	(0.02)	(0.03)	(0.05)	(0.06)
Demand	0.032***	-0.028	-0.002	-0.002	0.028**	0.024
	(0.01)	(0.03)	(0.01)	(0.01)	(0.01)	(0.02)
No access to credit, D	-0.041*	-0.034	0.031	-0.023	0.013	-0.066*
	(0.02)	(0.04)	(0.02)	(0.02)	(0.04)	(0.03)
Relevant (next page)						
Observations	52	1	5	18	5	511

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Table A41 (cont.)

	Uncertainty about economic		Insufficient availability of labour		Access to financing (C35c)	
	conditions	(C35a)	with the required	skills (C35b)		
	wb	wl	wb	wl	wb	wl
Relevant						
Employment, In	0.007	-0.025	-0.004	-0.024	-0.010	-0.007
	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
Manufacturing, D	-0.029	0.031	-0.042	-0.125	0.010	0.016
	(0.02)	(0.02)	(0.03)	(0.07)	(0.01)	(0.02)
Construction, D	-0.053	0.001	-0.011	-0.039	0.009	0.022
	(0.04)	(0.04)	(0.03)	(0.06)	(0.01)	(0.02)
Export share	-0.000	-0.012	0.041	0.053	-0.009	0.008
	(0.01)	(0.05)	(0.03)	(0.07)	(0.01)	(0.04)
Mainly foreign, D	0.120	-0.030	-0.062	-0.003	-0.033	-0.048
	(0.07)	(0.05)	(0.04)	(0.06)	(0.03)	(0.06)
Parents, D	-0.008	-0.286*	0.021	0.049	-0.015	-0.300**
	(0.03)	(0.13)	(0.02)	(0.04)	(0.03)	(0.10)
Subsidiary, D	-0.018	-0.014	-0.012	-0.060	0.005	-0.020
	(0.03)	(0.14)	(0.04)	(0.09)	(0.01)	(0.06)
Demand	0.010	0.057	-0.003	-0.004	-0.012*	-0.020
	(0.01)	(0.03)	(0.01)	(0.02)	(0.01)	(0.02)
No access to credit, D	-0.011	0.022	0.058	-0.041	0.037	0.058
	(0.01)	(0.03)	(0.05)	(0.04)	(0.05)	(0.04)
Very relevant						
Employment, In	-0.052**	-0.043***	0.010	0.048	-0.031	-0.013
	(0.02)	(0.01)	(0.02)	(0.03)	(0.02)	(0.01)
Manufacturing, D	0.106	0.153	0.088	0.214*	0.061	0.033
	(0.06)	(0.08)	(0.06)	(0.10)	(0.04)	(0.05)
Construction, D	0.156*	0.197*	0.024	0.071	0.067	0.054
	(0.07)	(0.09)	(0.07)	(0.10)	(0.05)	(0.07)
Export share	0.001	-0.021	-0.096	-0.105	-0.030	0.013
	(0.06)	(0.08)	(0.07)	(0.12)	(0.05)	(0.08)
Mainly foreign, D	-0.143*	-0.040	0.122	0.007	-0.063	-0.056
	(0.06)	(0.05)	(0.08)	(0.12)	(0.04)	(0.06)
Parents, D	-0.091	0.119	-0.057	-0.112	-0.034	0.087
	(0.06)	(0.10)	(0.07)	(0.13)	(0.05)	(0.15)
Subsidiary, D	0.071	0.078	0.026	0.107	0.020	-0.029
-	(0.09)	(0.10)	(0.09)	(0.15)	(0.07)	(0.08)
Demand	-0.073***	-0.056***	0.006	0.008	-0.038**	-0.033
	(0.02)	(0.02)	(0.02)	(0.04)	(0.01)	(0.02)
No access to credit, D	0.094**	0.039	-0.033	0.081	0.090*	0.096*
	(0.04)	(0.05)	(0.05)	(0.07)	(0.04)	(0.04)
Observations	521		51	8	511	

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Factors explaining relevance of obstacles in hiring workers with a permanent, open-ended contract at the end of 2013 (marginal effect of generalised ordered logit)

	Firing costs (C35d)		Hiring cos	ts (C35e)	High payroll taxes (C35f)		
	wb	wl	wb	wl	wb	wl	
Not relevant							
Employment, In	0.000	-0.002	0.008	-0.004	0.008	0.096***	
	(0.01)	(0.02)	(0.02)	(0.02)	(0.01)	(0.02)	
Manufacturing, D	-0.022	-0.026	-0.011	0.021	-0.010	-0.031	
	(0.04)	(0.05)	(0.04)	(0.06)	(0.02)	(0.02)	
Construction, D	0.001	0.024	0.031	0.050	-0.017	0.029	
	(0.04)	(0.05)	(0.05)	(0.06)	(0.02)	(0.06)	
Export share	0.074	0.049	0.115*	-0.002	0.007	-0.191***	
	(0.04)	(0.07)	(0.05)	(0.09)	(0.02)	(0.05)	
Mainly foreign, D	0.001	0.008	-0.095*	-0.072	0.025	-0.031	
	(0.04)	(0.07)	(0.04)	(0.06)	(0.02)	(0.03)	
Parents, D	0.009	0.048	-0.020	0.023	0.059	-0.046	
	(0.05)	(0.11)	(0.06)	(0.10)	(0.03)	(0.04)	
Subsidiary, D	0.044	0.079	-0.001	0.058	0.060	0.036	
	(0.05)	(0.12)	(0.06)	(0.10)	(0.04)	(0.04)	
Demand	0.035**	0.042	0.020	0.053	0.013*	0.115***	
	(0.01)	(0.02)	(0.02)	(0.04)	(0.01)	(0.02)	
No access to credit, D	-0.082**	-0.169**	-0.129**	-0.193**	-0.073**	0.011	
	(0.03)	(0.06)	(0.04)	(0.07)	(0.03)	(0.02)	
Of little relevance							
Employment, In	0.000	-0.002	0.002	-0.001	0.010	-0.108***	
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	
Manufacturing, D	-0.015	-0.022	-0.003	0.006	-0.013	-0.036	
	(0.03)	(0.04)	(0.01)	(0.02)	(0.02)	(0.03)	
Construction, D	0.000	0.017	0.006	0.010	-0.021	-0.145**	
	(0.03)	(0.03)	(0.01)	(0.01)	(0.02)	(0.05)	
Export share	0.048	0.037	0.031	-0.001	0.008	0.157*	
	(0.03)	(0.06)	(0.02)	(0.03)	(0.02)	(0.07)	
Mainly foreign, D	0.001	0.006	-0.050	-0.038	0.029	0.201**	
	(0.03)	(0.05)	(0.03)	(0.05)	(0.03)	(0.07)	
Parents, D	0.005	0.031	-0.007	0.007	0.060*	0.202*	
	(0.03)	(0.05)	(0.02)	(0.02)	(0.03)	(0.10)	
Subsidiary, D	0.023	-0.099	-0.000	0.012	0.062	0.037	
	(0.02)	(0.09)	(0.02)	(0.01)	(0.03)	(0.04)	
Demand	0.023**	0.032*	-0.011	-0.062	0.015*	-0.123***	
	(0.01)	(0.02)	(0.02)	(0.03)	(0.01)	(0.03)	
No access to credit, D	-0.050**	0.085	0.098*	0.171*	0.027	0.013	
	(0.02)	(0.08)	(0.05)	(0.08)	(0.03)	(0.03)	
Relevant (next page)							
Observations	515		5	516	527		

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * <math>p<0.1, ** p<0.05, *** p<0.01.

Table A42 (cont.)

	Firing costs (C35d)		Hiring cos	ts (C35e)	High payroll taxes (C35f)		
-	wb	wl	wb	wl	wb	wl	
Relevant							
Employment, In	-0.000	0.004	-0.008	0.004	0.009	0.042	
	(0.02)	(0.02)	(0.02)	(0.02)	(0.01)	(0.03)	
Manufacturing, D	0.024	0.038	0.012	-0.021	-0.013	-0.031	
	(0.04)	(0.07)	(0.04)	(0.06)	(0.02)	(0.03)	
Construction, D	-0.001	-0.033	-0.029	-0.048	-0.023	0.092	
	(0.05)	(0.07)	(0.05)	(0.06)	(0.03)	(0.08)	
Export share	-0.081	-0.069	-0.115*	0.002	0.008	0.134	
	(0.05)	(0.10)	(0.05)	(0.10)	(0.02)	(0.12)	
Mainly foreign, D	-0.002	-0.012	0.110*	0.084	0.020	-0.027	
	(0.04)	(0.09)	(0.05)	(0.08)	(0.01)	(0.09)	
Parents, D	-0.010	-0.064	0.021	-0.024	0.024*	0.126	
	(0.05)	(0.13)	(0.06)	(0.10)	(0.01)	(0.13)	
Subsidiary, D	-0.046	0.106	0.001	-0.056	0.026*	0.009	
	(0.05)	(0.14)	(0.06)	(0.09)	(0.01)	(0.01)	
Demand	-0.038**	-0.059	0.012	0.032	0.014*	0.005	
	(0.01)	(0.03)	(0.02)	(0.03)	(0.01)	(0.03)	
No access to credit, D	0.088**	0.103	0.059	0.053	0.022	0.007	
	(0.03)	(0.09)	(0.04)	(0.08)	(0.05)	(0.02)	
Very relevant							
Employment, In	-0.000	0.001	-0.002	0.001	-0.027	-0.031	
	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.03)	
Manufacturing, D	0.013	0.010	0.003	-0.006	0.036	0.098	
	(0.02)	(0.02)	(0.01)	(0.02)	(0.06)	(0.08)	
Construction, D	-0.000	-0.008	-0.007	-0.012	0.061	0.025	
	(0.02)	(0.02)	(0.01)	(0.01)	(0.08)	(0.07)	
Export share	-0.041	-0.017	-0.030*	0.001	-0.023	-0.100	
	(0.02)	(0.03)	(0.01)	(0.03)	(0.06)	(0.11)	
Mainly foreign, D	-0.001	-0.003	0.035	0.027	-0.074	-0.143	
	(0.02)	(0.02)	(0.02)	(0.03)	(0.06)	(0.07)	
Parents, D	-0.005	-0.015	0.006	-0.006	-0.143*	-0.282**	
	(0.03)	(0.03)	(0.02)	(0.03)	(0.06)	(0.09)	
Subsidiary, D	-0.021	-0.086***	0.000	-0.014	-0.147*	-0.083	
	(0.02)	(0.02)	(0.02)	(0.02)	(0.07)	(0.08)	
Demand	-0.019**	-0.015	-0.020**	-0.024**	-0.043*	0.002	
	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	
No access to credit, D	0.044**	-0.019	-0.028	-0.031	0.023	-0.031	
	(0.02)	(0.02)	(0.02)	(0.03)	(0.05)	(0.06)	
Observations	515		4	516	527		

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Factors explaining relevance of obstacles in hiring workers with a permanent, open-ended contract at the end of 2013 (marginal effect of generalised ordered logit)

	High wages (C35g)		Risks that	labour	Other labour costs (C35i)	
	0 0		laws are chang	ged (C35h)		
	wb	wl	wb	wl	wb	wl
Not relevant						
Employment, In	-0.005	0.002	0.002	0.022	0.030	0.041
	(0.00)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)
Manufacturing, D	0.012	0.006	-0.082**	-0.098*	-0.066*	-0.055
	(0.01)	(0.02)	(0.03)	(0.05)	(0.03)	(0.06)
Construction, D	0.002	-0.002	-0.012	-0.049	-0.040	-0.019
	(0.01)	(0.06)	(0.05)	(0.05)	(0.05)	(0.07)
Export share	0.009	0.024	0.034	0.004	0.016	-0.055
	(0.01)	(0.04)	(0.04)	(0.07)	(0.05)	(0.09)
Mainly foreign, D	0.011	0.027	-0.003	0.001	0.023	0.045
	(0.02)	(0.04)	(0.04)	(0.07)	(0.05)	(0.09)
Parents, D	0.037	0.168	0.019	-0.016	-0.014	-0.037
	(0.03)	(0.09)	(0.07)	(0.11)	(0.04)	(0.08)
Subsidiary, D	0.088	0.148	0.042	0.047	0.007	0.028
	(0.05)	(0.09)	(0.06)	(0.10)	(0.05)	(0.10)
Demand	0.007	-0.001	0.024	-0.002	0.024	-0.029
	(0.00)	(.)	(0.01)	(0.03)	(0.01)	(0.03)
No access to credit, D	-0.086***	-0.002	-0.049	-0.009	-0.081*	-0.037
	(0.02)	(0.02)	(0.03)	(0.05)	(0.03)	(0.06)
Of little relevance						
Employment, In	-0.011	0.004	0.001	0.014	0.017	0.018*
	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)
Manufacturing, D	0.028	0.012	-0.081*	-0.089	-0.048	-0.031
-	(0.03)	(0.04)	(0.03)	(0.06)	(0.03)	(0.04)
Construction, D	0.004	-0.153**	-0.010	-0.040	-0.027	-0.009
	(0.03)	(0.05)	(0.04)	(0.05)	(0.04)	(0.04)
Export share	0.022	-0.123	0.026	0.003	0.010	-0.025
-	(0.03)	(0.10)	(0.03)	(0.04)	(0.03)	(0.04)
Mainly foreign, D	0.025	0.051	-0.003	0.001	0.012	0.015
	(0.03)	(0.06)	(0.03)	(0.05)	(0.03)	(0.03)
Parents, D	0.076	0.210**	0.220*	0.348**	-0.008	-0.020
	(0.05)	(0.08)	(0.09)	(0.12)	(0.03)	(0.05)
Subsidiary, D	-0.012	0.008	0.027	0.023	0.004	0.011
	(0.05)	(0.13)	(0.03)	(0.04)	(0.03)	(0.03)
Demand	0.017	-0.002	0.018	0.026	0.014	0.023
	(0.01)	(0.02)	(0.01)	(0.03)	(0.01)	(0.03)
No access to credit, D	-0.029	-0.004	-0.037	-0.006	-0.045**	-0.016
	(0.03)	(0.04)	(0.02)	(0.03)	(0.02)	(0.02)
Relevant (next page)	· ·					
Observations	50	2	48	82	4	48

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Table A43 (cont.)

	High wages (C35g)		Risks that labour		Other labour costs (C35i)		
			laws are chan	iged (C35h)			
	wb	wl	wb	wl	wb	wl	
Relevant							
Employment, ln	-0.002	-0.001	-0.002	-0.022	-0.026	-0.039*	
	(0.00)	(0.00)	(0.01)	(0.02)	(0.01)	(0.02)	
Manufacturing, D	0.002	-0.002	0.069***	0.101*	0.057*	0.054	
	(0.00)	(0.01)	(0.02)	(0.04)	(0.03)	(0.06)	
Construction, D	0.001	0.226**	0.011	0.052	0.034	0.018	
	(0.00)	(0.07)	(0.04)	(0.05)	(0.04)	(0.07)	
Export share	0.005	0.333**	-0.032	-0.004	-0.014	0.052	
	(0.01)	(0.12)	(0.04)	(0.07)	(0.04)	(0.09)	
Mainly foreign, D	0.002	-0.020	0.003	-0.001	-0.020	-0.040	
	(0.00)	(0.04)	(0.04)	(0.07)	(0.04)	(0.08)	
Parents, D	-0.017	-0.186	-0.242***	-0.302***	0.012	0.036	
	(0.03)	(0.11)	(0.07)	(0.06)	(0.04)	(0.08)	
Subsidiary, D	-0.025	-0.186	-0.039	-0.045	-0.006	-0.026	
	(0.08)	(0.10)	(0.06)	(0.09)	(0.05)	(0.09)	
Demand	0.004	0.000	-0.022	0.012	-0.021	0.029	
	(0.00)	(0.00)	(0.01)	(0.02)	(0.01)	(0.03)	
No access to credit, D	0.064	0.001	0.045	0.009	0.070*	0.035	
	(0.05)	(0.01)	(0.03)	(0.05)	(0.03)	(0.05)	
Very relevant							
Employment, ln	0.018	-0.005	-0.001	-0.014	-0.021	-0.021*	
	(0.02)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	
Manufacturing, D	-0.042	-0.015	0.095*	0.085	0.057	0.032	
	(0.04)	(0.06)	(0.04)	(0.06)	(0.03)	(0.04)	
Construction, D	-0.007	-0.071	0.011	0.038	0.032	0.010	
	(0.04)	(0.05)	(0.04)	(0.05)	(0.04)	(0.04)	
Export share	-0.036	-0.234*	-0.029	-0.003	-0.012	0.027	
	(0.05)	(0.11)	(0.04)	(0.04)	(0.04)	(0.05)	
Mainly foreign, D	-0.038	-0.058	0.003	-0.001	-0.015	-0.020	
	(0.05)	(0.06)	(0.04)	(0.05)	(0.03)	(0.04)	
Parents, D	-0.095	-0.191***	0.003	-0.030	0.010	0.021	
	(0.05)	(0.05)	(0.06)	(0.06)	(0.03)	(0.05)	
Subsidiary, D	-0.051	0.030	-0.030	-0.026	-0.005	-0.013	
	(0.07)	(0.11)	(0.04)	(0.05)	(0.04)	(0.04)	
Demand	-0.028	0.003	-0.020	-0.036*	-0.017	-0.024*	
	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)	(0.01)	
No access to credit, D	0.051	0.005	0.040	0.006	0.056*	0.018	
	(0.04)	(0.05)	(0.02)	(0.03)	(0.02)	(0.03)	
Observations	50	2	4	82	2	448	

Note: ln - logarithm, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Size	Manufacturing	Construction	Trade	Business	Financial	Total				
				services	intermediation					
		wl – weighted to represent employees in the population								
10–19	27.8	39.6	35.5	40.1	87.8	37.6				
20–49	31.6	27.5	30.7	34.4	56.0	32.4				
50–199	27.8	33.4	31.6	37.2	38.5	33.5				
200–	24.5	9.0	50.0	37.8	54.3	38.9				
Total	27.2	32.7	37.4	37.6	53.6	36.1				
		wb – weighted to represent firm population								
10–19	28.3	39.0	35.4	41.8	88.5	38.5				
20–49	30.4	27.6	30.9	34.5	56.5	32.0				
50–199	25.3	33.3	31.7	37.6	39.4	33.0				
200–	29.2	10.6	50.0	48.8	53.4	44.1				
Total	28.7	33.6	34.4	39.2	64.2	35.9				

Table A44Share of labour costs in firm's total costs in 2013 by firm's size and sector (%)

Table A45

Percentage of total wage bill related to individual or company-related bonuses and benefits in 2013 by firm size and sector (%)

Size	Manufacturing	Construction	Trade	Business	Financial	Total					
				services	intermediation						
		wl – weighted to represent employees in the population									
10–19	3.4	7.1	4.9	7.0	10.5	5.9					
20–49	4.3	4.6	5.5	7.0	7.9	5.6					
50-199	4.7	7.3	11.8	7.0	13.8	8.0					
200–	10.7	30.0	5.7	15.1	17.2	12.9					
Total	7.0	7.2	7.7	10.0	16.1	9.1					
		wb -	- weighted to rep	resent firm popula	ation						
10–19	3.8	7.3	4.8	6.8	10.4	5.9					
20–49	4.6	4.3	5.5	6.8	7.9	5.6					
50-199	4.3	6.9	12.1	6.4	14.8	7.9					
200–	12.6	30.0	6.0	13.6	14.0	11.8					
Total	4.8	6.1	6.1	7.0	11.5	6.4					

Table A46 Percentage of total wage bill related to individual or company-related bonuses and benefits in 2013 (by employee skills; %)

	Bonus share of	Non-man	ual	Manual		
	total wage	Higher skilled	Lower skilled	Higher skilled	Lower skilled	
		wl-weighted to	represent employees	in the population		
Manufacturing	7.0	6.0	5.8	7.2	5.1	
Construction	7.2	9.3	5.6	3.6	3.7	
Trade	7.7	4.5	4.3	5.5	2.7	
Business services	10.0	9.7	11.4	13.4	12.2	
Financial intermediation	16.1	4.8	2.9		0.6	
Total	9.1	7.5	7.5	8.9	6.8	
Size						
10–19	5.9	4.1	3.6	3.2	3.0	
20–49	5.6	5.5	5.1	6.0	4.4	
50-199	8.0	5.8	5.2	6.6	2.6	
200–	12.9	11.1	11.3	14.2	12.3	
Total	9.1	7.5	7.5	8.9	6.8	
		wb-weigh	ted to represent firm	population		
Manufacturing	4.8	3.1	4.4	4.9	4.0	
Construction	6.1	5.8	3.7	4.1	3.9	
Trade	6.1	4.1	4.0	3.6	2.3	
Business services	7.0	6.5	5.2	6.9	4.5	
Financial intermediation	11.5	7.8	2.2		0.4	
Total	6.4	5.1	4.4	5.1	3.7	
Size						
10–19	5.9	4.1	3.5	3.1	2.9	
20–49	5.6	5.5	4.7	5.9	4.2	
50-199	7.9	5.5	5.0	6.6	2.5	
200–	11.8	9.6	8.3	10.6	10.4	
Total	6.4	5.1	4.4	5.1	3.7	

Note: Bonus share by skills wasn't reported for all firms, therefore the average bonus share and the bonus share by skills may differ.

Change in total wage bill related to individual or company-related bonuses and benefits (by skills) in 2008–2009 (wl – weighted to represent employees in the population; %)

Size	Manufacturing	Construction	Trade	Business	Financial	Total	Number of
				services	intermediation		observations
			Higher	skilled non-ma	nual		
Decrease	32.6	43.3	17.5	44.2	67.5	37.6	123
Unchanged	54.4	44.3	69.8	34.9	14.3	45.9	269
Increase	13	12.4	12.7	20.9	18.2	16.4	62
Total	100	100	100	100	100	100	454
			Lower	skilled non-ma	nual		
Decrease	34.2	39.4	15.2	41.3	69.2	36	101
Unchanged	50.3	47.4	72.1	35	12.2	45.7	272
Increase	15.5	13.2	12.7	23.7	18.6	18.2	63
Total	100	100	100	100	100	100	436
			High	er skilled manu	ıal		
Decrease	32.3	26	12.3	35.2	75.8	31.4	78
Unchanged	49.6	57.4	77.3	45.6	14.1	52.5	271
Increase	18.1	16.5	10.4	19.1	10.1	16.1	59
Total	100	100	100	100	100	100	408
			Low	er skilled manu	al		
Decrease	30.7	20.7	10.9	30.8	51.5	26.4	54
Unchanged	52.9	68.4	83.1	45.8	19.2	56.7	286
Increase	16.3	10.9	6	23.3	29.3	16.9	41
Total	100	100	100	100	100	100	381

Change in total wage bill related to individual or company-related bonuses and benefits (by skills) in 2010–2013 (wl – weighted to represent employees in the population; %)

Size	Manufacturing	Construction	Trade	Business services	Financial intermediation	Total	Number of observations
			Higher	skilled non-ma	inual		
Decrease	24.6	24.4	12.8	19.5	31.7	20.5	64
Unchanged	50.2	44.8	63.9	39.3	18.6	45.9	256
Increase	25.2	30.9	23.3	41.3	49.7	33.6	147
Total	100	100	100	100	100	100	467
			Lower	skilled non-ma	nual		
Decrease	23.4	29.5	11.4	18.4	32.4	20	58
Unchanged	49	44.2	63.9	38.9	16.8	45.3	247
Increase	27.6	26.4	24.7	42.8	50.7	34.7	138
Total	100	100	100	100	100	100	443
			High	er skilled manu	ıal		
Decrease	25	14.8	5.8	9.2	38	14.4	37
Unchanged	43.4	47.9	77.4	45.3	14.1	49.9	249
Increase	31.6	37.3	16.8	45.5	47.9	35.7	133
Total	100	100	100	100	100	100	419
			Low	er skilled manu	al		
Decrease	25.9	10.8	7.1	6.2	51.5	13.8	30
Unchanged	48.8	60.9	85.7	52.6	19.2	58.2	284
Increase	25.3	28.4	7.3	41.2	29.3	28	75
Total	100	100	100	100	100	100	389

Factors explaining probability of a firm to experience a decrease, increase or no change in individual or company-related bonuses for non-manual employees during 2008–2009 and 2010–2013 compared to the situation before 2008 and 2010 correspondingly (marginal effect of generalised ordered logit)

	Highe	r skilled non-	manual (LV4	46ba)	Lower skilled non-manual (LV46bb)				
	2008-	2009	2010-	-2013	2008-	-2009	2010-2	2013	
	wb	wl	wb	wl	wb	wl	wb	wl	
Decrease									
Employment, ln	0.080**	0.203***	0.038**	0.052	0.069**	0.187***	0.036*	0.040	
	(0.03)	(0.05)	(0.01)	(0.03)	(0.02)	(0.04)	(0.02)	(0.03)	
Manufacturing, D	-0.054	0.001	-0.001	0.093	-0.094*	-0.011	-0.097**	0.053	
	(0.05)	(0.12)	(0.03)	(0.09)	(0.04)	(0.11)	(0.03)	(0.08)	
Construction, D	0.105	0.173	-0.034	0.024	0.054	0.167	0.002	0.088	
	(0.08)	(0.11)	(0.03)	(0.08)	(0.07)	(0.12)	(0.04)	(0.11)	
Financial									
intermediation, D	-0.095	0.050	0.027	0.294	0.039	0.319*	0.005	0.240	
	(0.07)	(0.14)	(0.07)	(0.25)	(0.11)	(0.15)	(0.07)	(0.23)	
Export share	0.031	-0.003	-0.018	-0.066	0.030	0.053	-0.007	-0.024	
	(0.06)	(0.13)	(0.04)	(0.09)	(0.06)	(0.12)	(0.04)	(0.09)	
Mainly foreign, D	0.002	-0.190	-0.016	-0.076	0.067	-0.015	-0.034	-0.165**	
	(0.06)	(0.11)	(0.03)	(0.05)	(0.07)	(0.09)	(0.03)	(0.05)	
Demand	-0.095***	-0.100**	-0.043***	-0.011	-0.074***	-0.066	-0.037**	0.006	
	(0.02)	(0.04)	(0.01)	(0.03)	(0.01)	(0.04)	(0.01)	(0.03)	
No access to credit, D	0.004	-0.104	0.008	-0.026	-0.009	-0.058	-0.017	-0.038	
	(0.04)	(0.09)	(0.02)	(0.06)	(0.04)	(0.09)	(0.02)	(0.06)	
Share of									
corresponding type									
of employees	0.004***	0.005**	0.001	-0.001	-0.001	-0.001	-0.001*	-0.001	
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	
Unchanged									
Employment, In	-0.094***	-0.253***	-0.060***	-0.090*	-0.094***	-0.248***	-0.064**	-0.091*	
	(0.03)	(0.05)	(0.01)	(0.04)	(0.02)	(0.05)	(0.02)	(0.04)	
Manufacturing, D	0.019	-0.000	-0.001	0.021	0.009	0.004	0.112	0.020	
•	(0.01)	(0.05)	(0.03)	(0.02)	(0.02)	(0.04)	(0.07)	(0.02)	
Construction, D	-0.171*	-0.088	-0.042	0.008	-0.168*	-0.088	0.002	0.020	
	(0.08)	(0.07)	(0.05)	(0.02)	(0.09)	(0.08)	(0.04)	(0.02)	
Financial									
intermediation, D	0.013	-0.275	0.019	-0.362*	-0.017	-0.409*	0.004	-0.405*	
	(0.02)	(0.15)	(0.03)	(0.15)	(0.06)	(0.17)	(0.06)	(0.16)	
Export share	-0.013	0.001	-0.017	-0.028	-0.010	-0.021	-0.008	-0.012	
-	(0.03)	(0.05)	(0.04)	(0.04)	(0.02)	(0.05)	(0.04)	(0.04)	
Mainly foreign, D	-0.001	0.281**	-0.018	-0.056	-0.031	0.006	-0.046	0.080	
	(0.03)	(0.10)	(0.04)	(0.04)	(0.04)	(0.03)	(0.05)	(0.10)	
Demand	0.041***	0.038**	-0.040***	-0.005	0.026*	-0.048	-0.037**	0.003	
	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.03)	(0.01)	(0.02)	
No access to credit, D	-0.002	0.041	0.008	-0.011	0.003	0.023	-0.017	-0.019	
	(0.02)	(0.04)	(0.02)	(0.02)	(0.01)	(0.04)	(0.02)	(0.03)	
Share of									
corresponding type									
of employees	-0.003***	-0.008***	-0.003***	-0.000	-0.001	0.000	-0.001	-0.000	
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	
Increase (next page)									
Observations		452	2	464		434	4	41	

Note: ln - logarithm, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Table A49 (cont.)

	Higher	skilled non-	manual (LV4	16ba)	Lower skilled non-manual (LV46bb)				
	2008-2	2009	2010-	-2013	2008-	2009	2010-2	2013	
	wb	wl	wb	wl	wb	wl	wb	wl	
Increase									
Employment, In	0.014	0.049	0.022	0.037	0.025	0.061	0.028	0.052	
	(0.02)	(0.04)	(0.02)	(0.03)	(0.02)	(0.04)	(0.02)	(0.03)	
Manufacturing, D	0.036	-0.000	0.002	-0.114	0.084	0.007	-0.015	-0.073	
	(0.03)	(0.07)	(0.05)	(0.09)	(0.05)	(0.07)	(0.07)	(0.10)	
Construction, D	0.066	-0.085	0.076	-0.033	0.114	-0.079	-0.003	-0.108	
	(0.06)	(0.05)	(0.08)	(0.10)	(0.07)	(0.05)	(0.08)	(0.11)	
Financial									
intermediation, D	0.082	0.225	-0.046	0.067	-0.022	0.090	-0.009	0.165	
	(0.08)	(0.19)	(0.11)	(0.19)	(0.05)	(0.18)	(0.13)	(0.22)	
Export share	-0.017	0.002	0.034	0.094	-0.020	-0.032	0.015	0.036	
	(0.04)	(0.08)	(0.08)	(0.12)	(0.04)	(0.08)	(0.08)	(0.13)	
Mainly foreign, D	-0.001	-0.091	0.034	0.131	-0.036	0.009	0.080	0.086	
	(0.04)	(0.07)	(0.07)	(0.09)	(0.03)	(0.06)	(0.07)	(0.11)	
Demand	0.054***	0.061*	0.083***	0.015	0.048***	0.114***	0.074***	-0.009	
	(0.01)	(0.03)	(0.02)	(0.05)	(0.01)	(0.03)	(0.02)	(0.05)	
No access to credit, D	-0.002	0.063	-0.016	0.037	0.006	0.035	0.034	0.057	
	(0.02)	(0.05)	(0.04)	(0.08)	(0.02)	(0.05)	(0.04)	(0.08)	
Share of									
corresponding type of									
employees	-0.000	0.003*	0.003**	0.002	0.002**	0.001	0.002*	0.001	
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	
Observations	4	52	4	164	2	434	4	41	

Note: ln - logarithm, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Factors explaining probability of a firm to experience a decrease, increase or no change in individual or company-related bonuses for manual employees during 2008–2009 and 2010–2013 compared to the situation before 2008 and 2010 correspondingly (marginal effect of generalised ordered logit)

	Hig	her skilled m	anual (LV46ł	oc)	Lower skilled manual (LV46bd)				
	2008-	2009	2010-	-2013	2008-	-2009	2010-	2013	
	wb	wl	wb	wl	wb	wl	wb	wl	
Decrease									
Employment, ln	0.047*	0.135***	0.029*	-0.010	0.053**	0.161***	0.032**	0.032	
	(0.02)	(0.04)	(0.01)	(0.01)	(0.02)	(0.05)	(0.01)	(0.02)	
Manufacturing, D	-0.071*	-0.033	0.007	0.072	-0.042	0.032	-0.018	0.165	
~	(0.03)	(0.09)	(0.03)	(0.08)	(0.03)	(0.10)	(0.01)	(0.10)	
Construction, D	0.051	0.060	0.101	0.017	0.027	0.115	-0.023	-0.011	
	(0.07)	(0.09)	(0.06)	(0.05)	(0.05)	(0.10)	(0.01)	(0.04)	
Financial	0.100	0.0(0)	0.000	0.070	0.001	0.400*	0.004	0.440	
intermediation, D	0.182	0.360	0.008	0.279	-0.031	0.433*	-0.004	0.440	
T 1	(0.18)	(0.25)	(0.08)	(0.30)	(0.07)	(0.19)	(0.06)	(0.24)	
Export share	0.045	0.082	0.004	0.027	0.008	0.078	-0.009	0.019	
	(0.06)	(0.12)	(0.03)	(0.08)	(0.05)	(0.11)	(0.02)	(0.05)	
Mainly foreign, D	-0.006	-0.082	-0.015	-0.033	0.008	-0.083	0.036	-0.075*	
	(0.05)	(0.08)	(0.02)	(0.06)	(0.04)	(0.07)	(0.04)	(0.03)	
Demand	-0.060***	-0.036	-0.027**	0.002	-0.053***	-0.067*	-0.033***	-0.010	
	(0.01)	(0.04)	(0.01)	(0.03)	(0.01)	(0.03)	(0.01)	(0.02)	
No access to credit, D	0.040	-0.034	-0.017	0.001	-0.002	-0.050	-0.013	0.011	
	(0.04)	(0.08)	(0.02)	(0.05)	(0.03)	(0.08)	(0.01)	(0.03)	
Share of									
corresponding type									
of employees	0.001	0.001	-0.001**	-0.000	-0.001	0.001	0.000	-0.002**	
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	
Unchanged									
Employment, ln	-0.058*	-0.146***	-0.055*	-0.009	-0.090***	-0.242***	-0.076***	-0.116**	
	(0.02)	(0.04)	(0.02)	(0.02)	(0.02)	(0.05)	(0.02)	(0.04)	
Manufacturing, D	-0.003	0.012	0.015	0.046	0.001	-0.006	-0.055	-0.205	
	(0.02)	(0.03)	(0.05)	(0.03)	(0.01)	(0.03)	(0.05)	(0.11)	
Construction, D	-0.147*	-0.029	-0.189*	0.014	-0.009	-0.043	-0.078	-0.018	
	(0.07)	(0.05)	(0.08)	(0.04)	(0.03)	(0.05)	(0.07)	(0.07)	
Financial			0.017		0.004	0 = 64 44			
intermediation, D	-0.110	-0.243	0.016	-0.392**	-0.001	-0.761**	-0.011	-0.62/**	
T 1	(0.15)	(0.21)	(0.14)	(0.13)	(0.03)	(0.25)	(0.15)	(0.22)	
Export share	-0.010	-0.034	0.010	0.026	-0.002	-0.011	-0.021	0.028	
	(0.02)	(0.05)	(0.06)	(0.07)	(0.01)	(0.02)	(0.05)	(0.08)	
Mainly foreign, D	0.001	0.023	-0.040	-0.039	-0.002	-0.013	0.041*	0.223*	
	(0.01)	(0.02)	(0.06)	(0.06)	(0.01)	(0.04)	(0.02)	(0.09)	
Demand	0.013	-0.041	-0.059***	0.002	0.013	0.010	-0.004	-0.015	
	(0.01)	(0.04)	(0.02)	(0.03)	(0.01)	(0.02)	(0.02)	(0.03)	
No access to credit, D	-0.100*	0.014	-0.036	0.001	0.000	0.008	-0.027	0.016	
	(0.04)	(0.04)	(0.03)	(0.04)	(0.01)	(0.02)	(0.03)	(0.04)	
Share of									
corresponding type	0.000	0.000	0.000	0.000	0.000	0.001	0.000++++	0.000+	
or employees	-0.002***	-0.000	-0.002*	-0.000	0.000	-0.004*	-0.002***	-0.003*	
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	
Increase (next page)			[1	• • • •			
Observations		407	2	117		380		388	

Note: ln - logarithm, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Table A50 (cont.)

	High	er skilled ma	anual (LV46b	c)	Lower skilled manual (LV46bd)				
	2008-2	2009	2010-2	2013	2008-2	2009	2010-2	013	
	wb	wl	wb	wl	wb	wl	wb	wl	
Increase									
Employment, In	0.011	0.010	0.026	0.019	0.037***	0.080	0.044*	0.083*	
	(0.02)	(0.03)	(0.02)	(0.03)	(0.01)	(0.04)	(0.02)	(0.03)	
Manufacturing, D	0.074	0.021	-0.023	-0.118	0.041	-0.026	0.073	0.040	
	(0.05)	(0.06)	(0.07)	(0.10)	(0.04)	(0.07)	(0.06)	(0.10)	
Construction, D	0.096	-0.032	0.087	-0.031	-0.017	-0.072	0.101	0.028	
	(0.07)	(0.04)	(0.09)	(0.09)	(0.03)	(0.06)	(0.08)	(0.11)	
Financial									
intermediation, D	-0.072	-0.118**	-0.024	0.113	0.032	0.328	0.015	0.187	
	(0.04)	(0.05)	(0.22)	(0.29)	(0.10)	(0.23)	(0.21)	(0.21)	
Export share	-0.035	-0.049	-0.014	-0.053	-0.006	-0.067	0.030	-0.048	
	(0.05)	(0.07)	(0.09)	(0.15)	(0.04)	(0.10)	(0.08)	(0.13)	
Mainly foreign, D	0.005	0.059	0.055	0.071	-0.006	0.096	-0.077	-0.148	
	(0.04)	(0.07)	(0.08)	(0.12)	(0.03)	(0.09)	(0.05)	(0.09)	
Demand	0.047***	0.077**	0.085***	-0.004	0.040***	0.057	0.037	0.025	
	(0.01)	(0.03)	(0.02)	(0.06)	(0.01)	(0.03)	(0.02)	(0.04)	
No access to credit, D	0.060	0.020	0.053	-0.001	0.001	0.042	0.040	-0.027	
	(0.03)	(0.05)	(0.05)	(0.09)	(0.02)	(0.06)	(0.04)	(0.07)	
Share of corresponding type									
of employees	0.001*	-0.000	0.003**	0.000	0.001	0.002	0.002**	0.005**	
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	
Observations	4	407	4	17	3	80	3	88	

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * <math>p<0.1, ** p<0.05, *** p<0.01.

	Before	2008	2008-	-2009	2010-2013		
	wb	wl	wb	wl	wb	wl	
Yes	34.8	43.1	32.1	31.6	26.8	23.6	
No	24.2	18.3	22.1	16.7	19.0	16.4	
No, inflation was too low	6.9	3.7	7.7	6.8	7.3	8.3	
There were no indexation rules	34.1	35.0	38.1	44.9	46.9	51.7	
Total	100	100	100	100	100	100	
Observations	525			543	552		

Table A51 Share of firms adapting changes in the base wage to inflation (%)

Note: wb – weighted to represent firm population, wl – weighted to represent employees in the population.

Table A52 **Frequency of a typical base wage change (employee belonging to the main occupational group; %)**

	Before 200)8	2008-20)09	2010-2013		
	wb	wl	wb	wl	wb	wl	
More than once a year	9.0	6.7	6.3	5.9	4.3	5.3	
Once a year	35.5	42.5	32.2	32.3	32.2	31.2	
Between one and two years	18.7	18.2	18.4	17.1	19.7	12.8	
Every two years	6.2	4.5	6.4	4.2	8.1	6.1	
Less frequently than once every							
two years	22.3	23.6	22.0	21.7	22.6	34.4	
Never/Not applicable	8.4	4.4	14.8	18.7	13.0	10.2	
Total	100	100	100	100	100	100	
Observations	440		47	5	491		

Note: wb - weighted to represent firm population, wl - weighted to represent employees in the population.

Table A53Share of firms having frozen or cut base wages in a given year (%)

	200	8	200	2009		2010		2011		2012		2013	
	wb	wl											
Frozen	8.3	14.1	11.4	15.5	14.6	27.0	13.4	25.6	10.4	20.1	10.1	19.4	
Reduced	15.4	15.4	21.8	29.4	11.5	10.7	6.4	6.2	5.6	2.6	4.7	4.1	
Other	76.3	70.6	66.8	55.1	73.9	62.3	80.1	68.2	84.0	77.3	85.2	76.5	
Total	100	100	100	100	100	100	100	100	100	100	100	100	
Observations	5	39	5	49	5	47	5	42	5	542	5	37	

Fable A54
Factors explaining probability of a firm adapting changes in base wages to inflation (marginal effects
of logit model)

		Exportir	ıg firm		Non-exporting firm				
-	2008-2	009	2010-	2013	2008-	2009	2010-2	2013	
	wb	wl	wb	wl	wb	wl	wb	wl	
Manufacturing, D	0.104	0.033	0.124	-0.022	0.114	0.092	-0.044	0.001	
	(0.09)	(0.15)	(0.08)	(0.13)	(0.14)	(0.14)	(0.13)	(0.13)	
Trade, D	0.204*	0.357*	0.105	0.033	-0.013	0.025	-0.041	-0.068	
	(0.08)	(0.15)	(0.07)	(0.13)	(0.07)	(0.08)	(0.07)	(0.06)	
Domestic competition	0.062	0.025	0.041	-0.019	0.072	0.035	-0.016	-0.037	
	(0.04)	(0.06)	(0.03)	(0.05)	(0.04)	(0.05)	(0.04)	(0.04)	
Foreign competition	-0.068	-0.025	-0.029	-0.040					
	(0.04)	(0.05)	(0.03)	(0.05)					
State-dependent									
pricing, D	0.038	0.104	0.003	0.053	0.197**	0.323***	0.149*	0.196**	
	(0.09)	(0.13)	(0.08)	(0.11)	(0.08)	(0.06)	(0.07)	(0.07)	
Observations	24	42	2	42	2	248	248		

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Comment: Groups are combined into Adapt base wage change to inflation and Not: 0 - Not, 1 - Adapt base wage change to inflation.

Table A55

Share of employees with frozen wages if the firm performed wage freeze during the specified year (%)

	2008	2009	2010	2011	2012	2013	2008	2009	2010	2011	2012	2013
		wb –	firm num	ber weig	ts			wl – e	employm	ent weig	hts	
Manufacturing	92.4	83.2	88.7	86.8	86.0	88.9	88.9	90.7	92.7	89.1	93.0	93.2
Construction	99.0	99.2	98.9	98.0	97.4	97.4	96.8	98.0	97.7	96.3	96.0	96.0
Trade	98.5	87.0	95.2	97.3	96.6	92.5	96.6	85.5	96.5	91.4	97.8	86.3
Business services	88.0	91.9	99.8	81.3	81.9	96.2	95.0	94.6	99.9	73.0	55.9	99.3
Financial intermediation			25.0	25.0	25.0	100.0			25.0	25.0	25.0	100.0
Total	93.8	90.8	96.2	90.2	89.3	94.0	94.6	92.7	96.9	82.5	79.8	95.1
Size												
10–19	99.6	92.5	94.8	96.9	91.3	92.7	99.6	93.6	95.5	97.7	92.6	94.2
20–49	90.6	91.7	100.0	90.3	96.1	100.0	90.4	91.7	100.0	90.2	97.3	100.0
50-199	81.1	85.1	93.2	80.3	86.5	88.1	80.7	84.7	92.4	75.7	86.4	86.7
200–	100.0	100.0	98.5	80.3	67.7	96.8	100.0	100.0	98.1	82.0	74.9	97.0
Total	93.8	90.8	96.2	90.2	89.3	94.0	94.6	92.7	96.9	82.5	79.8	95.1

	2008	2009	2010	2011	2012	2013	2008	2009	2010	2011	2012	2013
		wb –	firm num	ber weig	ghts			wl – e	employm	ent weig	hts	
Manufacturing	99.2	81.5	73.2	20.0	59.0	50.0	98.9	88.4	48.6	20.0	43.5	50.0
Construction	75.1	89.2	80.9	79.3	100.0	100.0	74.9	67.1	65.1	76.8	100.0	100.0
Trade	91.0	73.7	76.2	48.9	67.3	74.9	95.3	74.7	80.8	49.3	50.6	74.2
Business services	86.5	77.7	68.4	45.2	78.5		79.8	67.0	54.5	30.1	78.7	
Financial intermediation		100.0	80.0			16.0		100.0	80.0			16.0
Total	87.6	79.2	73.7	53.9	75.5	70.2	87.1	71.7	62.6	38.6	62.6	29.4
Size												
10–19	86.9	83.6	83.9	72.7	81.1	83.7	86.6	84.5	85.2	77.9	81.9	85.8
20–49	92.0	77.0	77.5	54.7	87.2	100.0	93.2	76.0	74.8	51.6	86.0	100.0
50-199	83.0	80.2	59.8	14.0	30.0	50.0	82.6	79.5	60.1	13.5	30.0	50.0
200–	99.0	51.5	35.0			16.0	98.2	60.6	35.0			16.0
Total	87.6	79.2	73.7	53.9	75.5	70.2	87.1	71.7	62.6	38.6	62.6	29.4

 Table A56

 Share of employees with decreased wages if the firm decreased wages during the specified year (%)

Note: wb - weighted to represent firm population, wl - weighted to represent employees in the population.

Table A57 Average decrease of wages if the firm decreased wages during the specified year (%)

	2008	2009	2010	2011	2012	2013	2008	2009	2010	2011	2012	2013
		wb –	firm nun	ber weig	ts			wl – e	employm	ent weig	hts	
Manufacturing	25.7	23.9	18.4		30.0		25.3	13.7	18.2		30.0	
Construction	24.0	14.4	21.1	18.8	16.9	16.9	21.3	15.7	15.6	18.6	16.2	16.2
Trade	24.3	24.4	26.0	29.3	47.7	35.0	25.6	19.5	20.6	21.7	46.5	35.0
Business services	37.6	26.7	26.1	26.3	16.5		31.3	20.3	32.1	24.8	17.3	
Financial intermediation		30.0				15.0		30.0				15.0
Total	28.3	24.2	24.6	25.5	26.2	22.5	26.2	17.9	22.7	22.3	24.5	16.0
Size												
10–19	33.7	28.2	25.7	24.8	26.1	25.8	32.7	27.1	24.5	23.3	23.8	23.6
20–49	20.8	20.6	24.7	27.7	26.4	20.0	20.7	20.7	23.9	26.0	27.0	20.0
50-199	24.3	28.0	24.4	10.0			24.2	29.1	25.8	10.0		
200–	24.1	11.8	10.0			15.0	27.3	11.8	10.0			15.0
Total	28.3	24.2	24.6	25.5	26.2	22.5	26.2	17.9	22.7	22.3	24.5	16.0

Factors explaining probability of adjusting labour costs by reducing or freezing the base wage during the corresponding year (marginal effect of generalised ordered logit)

	2008		200	9	201	0
-	wb	wl	wb	wl	wb	wl
Other						
Employment, In	-0.028	-0.027	-0.097***	-0.089**	-0.068***	-0.053
1 5 9	(0.02)	(0.03)	(0.03)	(0.03)	(0.02)	(0.03)
Manufacturing, D	0.029	0.038	0.058	0.075	0.133**	0.186*
2,	(0.05)	(0.09)	(0.06)	(0.11)	(0.05)	(0.09)
Construction, D	-0.080	-0.126	-0.036	-0.154	-0.086	-0.188
,	(0.06)	(0.09)	(0.07)	(0.11)	(0.06)	(0.11)
Financial	(0000)	(****)	(000)	(****)	(0.00)	(0000)
intermediation D	0 172***	0 202**	0 234*	0 388***	0 178**	0 306***
, -	(0.04)	(0.07)	(0.10)	(0.07)	(0.06)	(0.07)
Export share	-0.002	-0.213	0 141	-0.024	0.092	0.159
Export shure	(0.06)	(0.12)	(0.08)	(0.15)	(0.08)	(0.15)
Mainly foreign D	0.038	0.053	0.081	0.060	0.061	0.088
Manny Ioreign, D	(0.06)	(0.055)	(0.09)	(0.10)	(0.06)	(0.11)
Parents D	0.00)	0.052	(0.07)	(0.10)	0.00)	0.013
ratents, D	-0.200°	-0.032	-0.233°	-0.030	-0.089	-0.013
Subsidiary D	(0.10)	(0.10)	(0.11)	(0.13)	(0.08)	(0.14)
Subsidiary, D	(0.031)	-0.080	(0.044)	(0.018)	-0.003	-0.193
Domond	(0.07)	(0.11)	(0.09)	(0.11)	(0.09)	(0.13)
Demand	0.090^{***}	0.119^{***}	0.104***	0.156***	-0.000	-0.023
D 1 (* *)	(0.02)	(0.02)	(0.02)	(0.03)	(0.02)	(0.04)
Productivity	0.022	0.039	0.05/*	0.027	0.040	-0.018
	(0.02)	(0.03)	(0.03)	(0.04)	(0.03)	(0.05)
No access to credit, D	-0.044	-0.142**	-0.086	-0.186*	-0.08/*	-0.180*
	(0.04)	(0.05)	(0.05)	(0.09)	(0.04)	(0.07)
Frozen						
Employment, ln	0.013	0.027	0.051***	0.023**	0.035**	0.072*
	(0.01)	(0.03)	(0.01)	(0.01)	(0.01)	(0.03)
Manufacturing, D	-0.014	-0.038	-0.099***	-0.021	-0.072*	-0.135
	(0.03)	(0.09)	(0.02)	(0.03)	(0.03)	(0.07)
Construction, D	0.037	0.126	0.008	0.030	0.042	0.118
	(0.03)	(0.09)	(0.02)	(0.02)	(0.03)	(0.06)
Financial						
intermediation, D	-0.044	-0.080	-0.141*	-0.142***	-0.154***	-0.920**
	(0.04)	(0.06)	(0.06)	(0.04)	(0.02)	(0.32)
Export share	0.001	0.213	-0.034	0.006	-0.048	-0.111
	(0.03)	(0.12)	(0.02)	(0.04)	(0.04)	(0.10)
Mainly foreign, D	-0.019	-0.053	-0.021	-0.017	-0.033	0.039
	(0.03)	(0.07)	(0.03)	(0.03)	(0.03)	(0.12)
Parents, D	0.082*	0.052	0.036**	0.012	0.043	0.009
,	(0.03)	(0.10)	(0.01)	(0.03)	(0.04)	(0.10)
Subsidiary, D	-0.015	0.086	-0.011	-0.005	0.031	0.124
~ ~ ~ ~ , _	(0.03)	(0.11)	(0.02)	(0, 03)	(0.04)	(0.07)
Demand	-0.043***	_0 119***	-0.054***	-0 117***	0.022	0.016
2 vinunu	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)	(0.03)
Productivity	-0.011	-0.039	-0.014	-0.007	-0.021	0.012
1 roductivity	(0.01)	(0.03)	(0.014)	(0.01)	(0.021)	(0.012)
No access to credit D	0.01	0 1/2**	0.01)	0.01)	0.01)	0.03)
The access to creat, D	(0.021)	(0.05)	(0.021)	$(0.04)^{-1}$	$(0.0+3)^{-1}$	(0.124)
Doduced (next nece)	(0.02)	(0.03)	(0.01)	(0.02)	(0.02)	(0.03)
Observations	10	22	1	Q7	5	02
A DISCLARATION IS	47	17.	4.	11/	1	

Note: In - logarithm, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01. Explained variable: 1 – Other, 2 – Frozen wage, 3 – Reduced wage. Explanatory variables are described in Table A2.

Table A58 (cont.)

	200	8	20	09	20	10
	wb	wl	wb	wl	wb	wl
Reduced						
Employment, In	0.014	0.000	0.046*	0.066*	0.033***	-0.019*
	(0.01)	(0.00)	(0.02)	(0.03)	(0.01)	(0.01)
Manufacturing, D	-0.015	-0.000	0.041	-0.054	-0.060**	-0.052*
	(0.03)	(0.00)	(0.06)	(0.08)	(0.02)	(0.02)
Construction, D	0.043	0.000	0.028	0.124	0.044	0.070
	(0.04)	(0.00)	(0.06)	(0.10)	(0.03)	(0.05)
Financial						
intermediation, D	-0.128***	-0.122***	-0.093	-0.247***	-0.025	0.614
	(0.02)	(0.03)	(0.15)	(0.05)	(0.06)	(0.31)
Export share	0.001	0.000	-0.107	0.018	-0.045	-0.049
	(0.03)	(0.00)	(0.06)	(0.11)	(0.04)	(0.05)
Mainly foreign, D	-0.020	-0.000	-0.060	-0.043	-0.029	-0.128***
	(0.03)	(0.00)	(0.06)	(0.07)	(0.03)	(0.03)
Parents, D	0.118	0.000	0.197	0.038	0.046	0.004
	(0.06)	(0.00)	(0.10)	(0.12)	(0.04)	(0.04)
Subsidiary, D	-0.016	0.000	-0.033	-0.013	0.032	0.071
	(0.03)	(0.00)	(0.07)	(0.08)	(0.05)	(0.06)
Demand	-0.046***	-0.000***	-0.051**	-0.039	-0.022*	0.007
	(0.01)	(0.00)	(0.02)	(0.03)	(0.01)	(0.01)
Productivity	-0.012	-0.000	-0.043*	-0.020	-0.019	0.005
	(0.01)	(0.00)	(0.02)	(0.03)	(0.01)	(0.02)
No access to credit, D	0.023	0.000*	0.065	0.137*	0.042*	0.056*
	(0.02)	(0.00)	(0.04)	(0.07)	(0.02)	(0.03)
Observations	4	82		487		503

Note: ln - logarithm, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Explained variable: 1 – Other, 2 – Frozen wage, 3 – Reduced wage. Explanatory variables are described in Table A2.

Factors explaining probability of adjusting labour costs by reducing or freezing the base wage during the corresponding year (marginal effect of generalised ordered logit)

	2011		2012		201	3
-	wb	wl	wb	wl	wb	wl
Other						
Employment, In	-0.047*	-0.079	-0.012	-0.044	-0.010	-0.048
1 5 7	(0.02)	(0.05)	(0.02)	(0.03)	(0.02)	(0.03)
Manufacturing, D	0.099*	0.132	0.082*	0.100	0.046	0.098
	(0.04)	(0.09)	(0.04)	(0.07)	(0.04)	(0.06)
Construction. D	-0.038	0.028	-0.009	-0.020	-0.064	-0.062
, -	(0.06)	(0.07)	(0.04)	(0.06)	(0.05)	(0.07)
Financial	(0.00)	(0107)	(000-0)	(0000)	(****)	(0007)
intermediation. D	0.157***	0.259***	0.099**	0.099	0.084	0.047
, –	(0.03)	(0.06)	(0.04)	(0.07)	(0.05)	(0.09)
Export share	0.047	0.067	0.043	-0.029	0.053	-0.054
Export bluit	(0.07)	(0.14)	(0.06)	(0.12)	(0.06)	(0.12)
Mainly foreign D	0.041	0 154*	0.054	0.093	0.061	0 109*
Mulliny Torongin, D	(0.06)	(0.08)	(0.05)	(0.073)	(0.05)	(0.05)
Parents D	-0.086	-0.115	-0.086	0.087	-0.073	0.109
r urento, D	(0.08)	(0.14)	(0.08)	(0.08)	(0.09)	(0.07)
Subsidiary D	_0.028	(0.14)	_0.044	_0 259	-0.067	_0.265
Subsidiary, D	(0.020)	(0.13)	(0.08)	(0.16)	(0.08)	(0.16)
Demand	0.010	0.040	0.025	0.023	0.037*	0.038
Demana	(0.010)	-0.040	(0.023)	(0.023)	(0.037)	(0.038)
Productivity	(0.02)	(0.03)	(0.02)	0.086**	(0.01)	(0.02)
rioductivity	(0.003^{10})	(0.088)	(0.071)	(0.030^{-1})	(0.030^{11})	(0.040)
No occase to predit D	(0.02)	(0.03)	(0.02)	(0.05)	(0.02)	(0.03)
No access to credit, D	-0.032	(0.003)	-0.03/	-0.118	-0.033	-0.097
E	(0.04)	(0.08)	(0.03)	(0.07)	(0.03)	(0.07)
Frozen Employment la	0.020*	0.076	0.012	0.044	0.010	0.049
Employment, in	(0.039^{+})	(0.070)	0.012	(0.044)	(0.010)	(0.048)
Manufastarina D	(0.02)	(0.05)	(0.02)	(0.03)	(0.02)	(0.03)
Manufacturing, D	-0.083*	-0.127	-0.082*	-0.100	-0.046	-0.098
	(0.04)	(0.08)	(0.04)	(0.07)	(0.04)	(0.06)
Construction, D	0.031	-0.02/	0.009	0.020	0.064	0.062
D ¹ 1	(0.05)	(0.07)	(0.04)	(0.06)	(0.05)	(0.07)
Financial	0 117***	0.01(**	0.000*	0.000	1 00 4	0.047
intermediation, D	-0.11/***	-0.216**	-0.098*	-0.099	-1.084	-0.047
F (1	(0.03)	(0.07)	(0.04)	(0.07)	(.)	(0.09)
Export share	-0.038	-0.064	-0.043	0.029	-0.053	0.054
	(0.06)	(0.14)	(0.06)	(0.12)	(0.06)	(0.12)
Mainly foreign, D	-0.034	-0.149*	-0.050	-0.093	-0.061	-0.109*
	(0.05)	(0.07)	(0.05)	(0.07)	(0.05)	(0.05)
Parents, D	0.110	0.110	0.088	-0.087	0.073	-0.109
~ –	(0.08)	(0.14)	(0.08)	(0.08)	(0.09)	(0.07)
Subsidiary, D	0.023	0.175	0.044	0.259	0.068	0.265
	(0.07)	(0.12)	(0.07)	(0.16)	(0.08)	(0.16)
Demand	0.003	0.044	-0.025	-0.023	-0.037*	-0.038
	(0.01)	(0.03)	(0.02)	(0.03)	(0.01)	(0.02)
Productivity	-0.053**	-0.085	-0.070***	-0.086**	-0.050**	-0.040
	(0.02)	(0.05)	(0.02)	(0.03)	(0.02)	(0.03)
No access to credit, D	0.043	-0.004	0.056	0.118	0.053	0.097
	(0.03)	(0.08)	(0.03)	(0.07)	(0.03)	(0.07)
Reduced (next page)						
Observations	40	0	50	1	1	04

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, <math>wl - weighted to represent employees in the population. Standard errors in parentheses. * <math>p<0.1, ** p<0.05, *** p<0.01.

Explained variable: 1 – Other, 2 – Frozen wage, 3 – Reduced wage. Explanatory variables are described in Table A2.

Table A59 (cont.)

	201	1	20	12	20	13
	wb	wl	wb	wl	wb	wl
Reduced						
Employment, ln	0.008*	0.003	0.000	0.000	0.000	0.000
	(0.00)	(0.00)	(0.00)	(.)	(0.00)	(.)
Manufacturing, D	-0.017	-0.005	-0.000*	-0.000	-0.000	-0.000
	(0.01)	(0.00)	(0.00)	(.)	(0.00)	(.)
Construction, D	0.007	-0.001	0.000	0.000	0.000	0.000
	(0.01)	(0.00)	(0.00)	(.)	(0.00)	(.)
Financial						
intermediation, D	-0.041***	-0.043*	-0.001**	-0.000	1.000	0.000
	(0.01)	(0.02)	(0.00)	(.)	(.)	(.)
Export share	-0.008	-0.003	-0.000	0.000	-0.000	0.000
	(0.01)	(0.01)	(0.00)	(.)	(0.00)	(.)
Mainly foreign, D	-0.007	-0.005	-0.004**	-0.000	-0.000**	-0.000
	(0.01)	(0.00)	(0.00)	(.)	(0.00)	(.)
Parents, D	-0.024*	0.005	-0.002**	-0.000*	-0.000**	-0.000
	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
Subsidiary, D	0.005	0.009	0.000	0.000	-0.002**	-0.000
	(0.02)	(0.01)	(0.00)	(.)	(0.00)	(.)
Demand	-0.013***	-0.003*	-0.000	0.000	-0.000	0.000
	(0.00)	(0.00)	(0.00)	(.)	(0.00)	(.)
Productivity	-0.011*	-0.003	-0.001***	0.000	-0.000***	0.000
-	(0.00)	(0.00)	(0.00)	(.)	(0.00)	(.)
No access to credit, D	0.009	-0.000	0.000	0.000	0.000	0.000
	(0.01)	(0.00)	(0.00)	(.)	(0.00)	(.)
Observations	4	99		501		494

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Explained variable: 1 – Other, 2 – Frozen wage, 3 – Reduced wage. Explanatory variables are described in Table A2.

Table A60

How did the labour cost of a newly hired worker compared with that of similar (in terms of experience and task assignment) workers before 2008 and during 2008–2009 and 2010–2013 (%)?

	Before 2008	3	2008-2009		2010–2013		
	wb	wl	wb	wl	wb	wl	
Much lower	2.6	3.2	2.2	2.4	1.8	2.2	
Lower	18.7	24.3	21.2	26.2	20.2	18.3	
Similar	74.8	70.4	73.0	68.6	67.6	64.3	
Higher	3.2	1.6	2.8	2.1	9.8	12.0	
Much higher	0.7	0.5	0.7	0.7	0.6	3.2	
Total	100	100	100	100	100	100	
Observations	474		497		503		

How did the labour cost of a newly hired worker compare with that of similar (in terms of experience and task assignment) workers by employee skill level (%)?

	Non	-manual h	igher skilled		Non-manual lower skilled			
	2008–20	09	2010-2	2010-2013)09	2010-2013	
	wb	wl	wb	wl	wb	wl	wb	wl
Much lower	1.6	1.6	0.8	0.6	2.0	2.3	1.1	1.6
Lower	19.1	21.4	14.1	9.8	19.2	21.1	14.9	9.9
Similar	75.5	70.1	75.7	78.1	75.6	69.7	75.8	74.3
Higher	2.9	6.2	8.5	8.2	2.5	6.2	7.6	10.9
Much higher	0.9	0.7	0.9	3.4	0.8	0.7	0.6	3.3
Total	100	100	100	100	100	100	100	100
Observations	45		45	58	44	8	453	

	М	Manual higher skilled					Manual lower skilled			
	2008-200)9	2010-	2010-2013		2009	2010-2013			
	wb	wl	wb	wl	wb	wl	wb	wl		
Much lower	2.1	2.2	1.1	1.6	2.3	2.4	0.9	1.1		
Lower	17.1	17.8	16.3	9.7	14.9	20.5	15.0	14.3		
Similar	77.6	77.8	76.7	81.1	80.1	75.1	79.0	80.5		
Higher	2.6	1.5	5.8	7.6	1.5	0.5	4.4	3.1		
Much higher	0.6	0.6	0.05	0.1	1.1	1.5	0.7	1.0		
Total	100	100	100	100	100	100	100	100		
Observations	414	Ļ	2	420		388		393		
Change in the base wage gap between the wages of a newly hired worker and similar workers (in terms of experience and task assignment) during 2008–2009 and 2010–2013 compared to the situation before 2008 and 2010 correspondingly, by employee skill level (%)

	No	Non-manual higher skilled				Non-manual lower skilled			
	2008-20)09	2010-	-2013	2008-	-2009	2010-	2013	
	wb	wl	wb	wl	wb	wl	wb	wl	
Strong decrease	2.9	2.7	1.6	1.3	2.4	2.6	0.9	0.8	
Moderate decrease	8.3	12.4	4.7	2.5	7.0	12.2	5.3	3.8	
Unchanged	82.1	79.8	73.5	76.1	84.5	79.8	73.7	75.0	
Moderate increase	6.5	5.0	20.1	20.0	5.6	5.1	19.7	20.2	
Strong increase	0.2	0.1	0.1	0.1	0.1	0.3	0.3	0.2	
Total	100	100	100	100	100	100	100	100	
Observations	45	0	2	458		440		446	
	Ν	Manual hig	her skilled		Manual lower skilled				
Strong decrease	1.9	2.4	1.1	1.0	2.0	2.7	1.0	1.0	
Moderate decrease	8.2	12.1	5.4	3.1	6.5	9.6	4.4	2.6	
Unchanged	82.8	79.6	73.6	73.6	85.6	82.5	80.0	81.1	
Moderate increase	6.5	5.3	19.7	22.2	4.8	3.6	14.0	14.5	
Strong increase	0.6	0.6	0.2	0.1	1.0	1.5	0.7	0.9	
Total	100	100	100	100	100	100	100	100	
Observations	41	2	2	419		383	387		

Note: wb - weighted to represent firm population, wl - weighted to represent employees in the population.

Average percentage of minimum wage receivers in the company before and after the increase in the minimum wage on 1 January 2014 (%)

	wb – firm numb	er weights	wl – employn	nent weights
	Before 01.01.2014	After 01.01.2014	Before 01.01.2014	After 01.01.2014
Size				
10–19	24.6	24.1	24.7	24.4
20–49	21.7	20.1	23.1	21.5
50–199	12.3	12.6	13.2	13.9
200–	10.8	10.3	9.7	9.6
Total	21.3	20.6	15.5	15.3
Sector				
Manufacturing	26.6	26.1	16.0	16.3
Construction	15.7	13.4	10.6	8.6
Trade	17.2	17.5	14.6	14.5
Business services	25.3	24.3	18.8	18.8
Financial intermediation	9.2	9.0	5.8	5.7
Total	21.3	20.6	15.5	15.3

Note: wb - weighted to represent firm population, wl - weighted to represent employees in the population.

Table A64

Did the increase in the minimum wage on 1 January 2014 bring about a need to raise wages or other type of compensation for those employees in the company who earned more than the minimum wage (NC410) (%)?

	wł	wb – firm number weights				wl – employment weights			
	Yes	No	Don't	Total	Yes	No	Don't	Total	
			know				know		
Size									
10–19	21.5	59.9	18.6	100.0	21.0	59.4	19.6	100.0	
20–49	31.0	55.4	13.6	100.0	31.7	55.5	12.8	100.0	
50-199	23.5	64.7	11.7	100.0	24.8	62.0	13.2	100.0	
200–	18.4	69.9	11.7	100.0	19.1	64.0	16.8	100.0	
Total	24.5	59.7	15.8	100.0	23.0	61.3	15.7	100.0	
Sector									
Manufacturing	33.4	53.0	13.7	100.0	27.4	45.5	27.1	100.0	
Construction	26.3	48.4	25.3	100.0	22.3	54.3	23.3	100.0	
Trade	22.9	63.3	13.8	100.0	16.9	75.8	7.4	100.0	
Business services	19.3	65.3	15.3	100.0	25.1	65.3	9.6	100.0	
Financial									
intermediation	48.8	43.6	7.6	100.0	16.5	56.6	26.9	100.0	
Total	24.5	59.7	15.8	100.0	23.0	61.3	15.7	100.0	

Note: wb - weighted to represent firm population, wl - weighted to represent employees in the population.

Percentage of employees whose wages or other type of compensation increased in response to the rise in the minimum wage (including those who earned minimum wages and who earned higher wages before 1 January 2014) (%) (if the firm answered "Yes" in NC410)

		wl – weighted to represent employees in the population											
	0%-20%	20%-40%	40%-60%	60%-80%	80%-100%	Don't know	Total						
Size													
10–19	26.2	6.0	6.7	10.1	49.5	1.4	100.0						
20–49	18.8	19.3	0.0	5.4	45.8	10.7	100.0						
50-199	33.7	14.4	18.8	11.9	16.2	4.9	100.0						
200–	45.9	0.0	49.2	0.0	4.9	0.0	100.0						
Total	33.3	9.5	22.5	6.7	24.1	3.9	100.0						
Sector													
Manufacturing	30.9	13.6	6.8	8.7	31.2	8.7	100.0						
Construction	49.1	3.2	19.5	10.6	17.6	0.0	100.0						
Trade	29.6	8.7	1.5	20.9	37.7	1.6	100.0						
Business services	36.7	9.9	33.6	0.6	15.9	3.3	100.0						
Financial intermediation	0.0	0.0	70.0	0.0	30.0	0.0	100.0						
Total	33.3	9.5	22.5	6.7	24.1	3.9	100.0						

Table A66

Increase in total labour costs (wages and other compensation) in response to the rise in the minimum wage (%) (if the firm answered "Yes" in NC410)

		wl-weighte	d to represent	employees in the po	opulation	
	smaller than 3%	3%-5%	5%-11%	more than 11%	Don't know	Total
Size						
10–19	17.0	17.1	30.1	19.6	16.1	100.0
20–49	18.2	30.6	13.3	18.4	19.5	100.0
50-199	28.0	18.6	37.8	13.2	2.4	100.0
200–	30.8	4.9	12.7	5.8	45.9	100.0
Total	25.1	16.4	24.1	13.0	21.4	100.0
Sector						
Manufacturing	24.1	26.8	14.3	24.2	10.6	100.0
Construction	22.1	20.3	41.7	5.4	10.6	100.0
Trade	15.5	27.6	32.7	14.6	9.7	100.0
Business services	32.9	5.3	17.1	9.2	35.5	100.0
Financial						
intermediation	0.0	18.5	70.0	0.0	11.5	100.0
Total	25.1	16.4	24.1	13.0	21.4	100.0

Table A67Relevance of labour cost adjustment measures taken after the minimum wage rise on 1 January 2014(%)

	We had to lay off (LV4 13a)	We had to lay off people (LV4 13a)		ss people	We had to increase (LV4 13	We had to increase product prices (LV4 13c)		
	wb	wl	wb	wl	wb	wl		
Not relevant	77.8	83.7	72.4	78.7	57.6	65.8		
Of little relevance	8.2	6.7	11.0	10.5	14.7	12.7		
Relevant	3.2	3.4	6.1	4.5	15.6	12.7		
Very relevant	2.3	1.0	2.5	1.4	4.3	4.3		
Don't know	8.4	5.2	8.0	4.9	7.7	4.5		
Total	100.0	100.0	100.0	100.0	100.0	100.0		
Observations	557		557		55'	7		
	We had to reduce n costs (LV4 1	on-labour 3c)	We had to increase the employees earning minimum wage level	the wages of g above the el (LV4 13d)	We increased pr (LV4 13	roductivity 3f)		
Not relevant	55.4	63.6	56.9	65.4	55.2	60.7		
Of little relevance	14.2	14.2	15.4	13.0	13.9	15.2		
Relevant	19.0	13.2	16.6	13.4	13.8	12.7		
Very relevant	5.2	5.0	4.0	3.4	4.0	4.4		
Don't know	6.3	4.0	7.2	4.7	13.2	7.1		
Total	100.0	100.0	100.0	100.0	100.0	100.0		
Observations	557		557		557			

Note: wb - weighted to represent firm population, wl - weighted to represent employees in the population.

Table A68

Share of employees the firm could hire if the minimum wage had remained at the level of January 2014 (EUR 285 instead of EUR 320) (%) (The question was asked if the answer to LV413 a & b was Relevant or Very relevant.)

Size	10–19	20–49	50-199	200–	Total
wb	4.8	9.8	2.9		4.9
wl	5.0	9.9	3.2		4.3
Sector	Manufacturing	Construction	Trade	Business	
wb	5.6	5.4	7.7	1.8	4.9
wl	4.3	5.0	7.7	1.1	4.3
Percentage of minimum w	age receivers	0	1%-49%	50%-100%	
wb		1.3	4.5	7.1	4.9
wl		1.5	3.8	5.7	4.3
Number of observations			28		

Note: wb - weighted to represent firm population, wl - weighted to represent employees in the population.

Factors explaining probability of a firm applying a corresponding measure to deal with the minimum wage increase (marginal effects of logit model)

	We had to lay	off people	We could hire	less people	We had to increase product		
	(LV4 1	3a)	(LV4 1	3b)	prices (L	V4 13c)	
	wb	wl	wb	wl	wb	wl	
Employment, In	0.038*	-0.009	0.012	-0.002	0.033	-0.020	
	(0.02)	(0.01)	(0.02)	(0.01)	(0.03)	(0.03)	
Share of min wage							
employees	0.002***	0.001**	0.002***	0.002***	0.006***	0.008***	
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	
Manufacturing, D	-0.045	0.104	0.047	0.148*	0.131	0.273**	
	(0.04)	(0.06)	(0.06)	(0.06)	(0.08)	(0.09)	
Construction, D	0.022	0.023	-0.001	0.008	0.092	0.066	
	(0.05)	(0.05)	(0.06)	(0.04)	(0.08)	(0.08)	
Export share	-0.005	0.000	-0.091	-0.065	-0.142	-0.188	
	(0.06)	(0.05)	(0.07)	(0.05)	(0.09)	(0.10)	
Mainly foreign, D	-0.018	-0.025	-0.032	-0.035	-0.054	-0.151	
	(0.06)	(0.04)	(0.07)	(0.04)	(0.10)	(0.08)	
Parents, D	-0.022	-0.089**	-0.061	-0.125***	-0.112	-0.179*	
	(0.07)	(0.03)	(0.07)	(0.03)	(0.10)	(0.08)	
Subsidiary, D	-0.032	0.047	-0.054	0.144	-0.105	0.326*	
	(0.05)	(0.07)	(0.06)	(0.10)	(0.09)	(0.16)	
Demand	-0.034**	-0.037***	-0.033*	-0.031*	-0.037	-0.060*	
	(0.01)	(0.01)	(0.02)	(0.01)	(0.02)	(0.03)	
No access to credit, D	0.033	-0.017	0.111**	0.064*	0.200***	0.060	
	(0.03)	(0.03)	(0.04)	(0.03)	(0.05)	(0.06)	
Financial							
intermediation, D			0.199	-0.071	-0.068	-0.037	
			(0.29)	(0.05)	(0.22)	(0.20)	
Observations	50	01	51	16	520		
	We had to reduce	e non-labour	We had to increas	e the wages of	We increased productivity		
	costs (LV4	4 13d)	employees earni	ng above the	(LV4	13f)	
			minimum wage le	evel (LV4 13e)			
Employment, ln	0.005	-0.049	-0.010	-0.001	0.044	0.017	
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)	
Share of min wage							
employees	0.005***	0.009***	0.003**	0.005***	0.003***	0.004***	
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	
Manufacturing, D	0.098	0.274**	0.166*	0.265**	0.252***	0.394***	
	(0.08)	(0.10)	(0.07)	(0.08)	(0.07)	(0.08)	
Construction, D	-0.054	0.009	0.107	0.166	0.020	0.091	
	(0.07)	(0.08)	(0.08)	(0.10)	(0.08)	(0.10)	
Financial							
intermediation, D	0.394**	0.466**	0.317*	0.382*	-0.114	0.273	
	(0.13)	(0.17)	(0.16)	(0.18)	(0.15)	(0.22)	
Export share	-0.053	-0.161	-0.188*	-0.322**	-0.127	-0.322**	
	(0.09)	(0.11)	(0.08)	(0.11)	(0.09)	(0.12)	
Mainly foreign, D	-0.122	-0.162*	-0.075	-0.008	-0.093	-0.061	
	(0.09)	(0.07)	(0.09)	(0.09)	(0.08)	(0.11)	
Parents, D	-0.128	-0.221**	-0.038	-0.141	-0.044	-0.173	
	(0.11)	(0.07)	(0.10)	(0.08)	(0.10)	(0.09)	

Table A69 (cont.)

	We had to lay off people (LV4 13a)		We could hire 1 (LV4 13	ess people 3b)	We had to increase product prices (LV4 13c)		
	wb	wl	wb	wl	wb	wl	
Subsidiary, D	-0.085	0.121	-0.163*	-0.037	-0.084	0.214	
	(0.10)	(0.13)	(0.08)	(0.11)	(0.08)	(0.16)	
Demand	-0.050*	-0.042	-0.028	-0.059*	-0.012	-0.046	
	(0.02)	(0.03)	(0.02)	(0.03)	(0.02)	(0.03)	
No access to credit, D	0.212***	0.183**	0.155**	0.105	0.118*	0.094	
	(0.05)	(0.06)	(0.05)	(0.06)	(0.05)	(0.07)	
Observations	521	-	51	9	489		

Note: ln - logarithm, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Comment: Groups are combined into Relevant and Not relevant due to a small number of observations in some groups. 0 –Not relevant, 1 – Relevant. Explanatory variables are described in Table A2.

Table A70 Price setting mechanism for the main product, activity or service domestically (if applicable) in 2013 (%)

	There is no a policy	There is no autonomous price setting policy because the price is		The p	The price is set		Other	Don't know	Total
	regulated	set by a parent	set by the main	following the main	fully according to costs and	with individual			
		group	customer(s)	petitors	a completely self- determined profit margin	customers			
			wb-we	ighted to rep	resent firm popu	lation			
Manufacturing	6.1	1.9	5.4	29.0	21.5	35.5	0.0	0.6	100.0
Construction	12.0	0.0	4.8	28.9	13.4	39.3	1.6	0.0	100.0
Trade	17.5	4.3	5.5	33.6	28.5	8.7	1.8	0.0	100.0
Business services	21.5	2.7	6.2	29.8	11.1	24.8	2.7	1.2	100.0
Financial intermediation	42.6	0.0	7.1	20.8	21.5	0.0	0.0	8.0	100.0
Total	17.1	2.6	5.7	30.4	18.5	23.1	1.7	0.8	100.0
Observations	94	16	29	164	108	120	9	4	544
		W	l-weighted	to represent	employees in the	e population			
Manufacturing	25.1	4.0	3.6	18.8	19.1	28.6	0.0	0.8	100.0
Construction	14.6	0.0	12.4	30.4	11.1	28.9	2.6	0.0	100.0
Trade	23.8	4.1	5.2	42.9	17.0	6.2	0.9	0.0	100.0
Business services	32.7	2.9	2.7	24.4	12.2	14.8	8.3	2.0	100.0
Financial									
intermediation	5.1	0.0	11.6	17.4	57.8	0.0	0.0	8.2	100.0
Total	25.2	2.9	5.1	27.1	18.1	16.2	3.8	1.6	100.0
Observations	94	16	29	164	108	120	9	4	544

Table A71 Price setting mechanism for the main product, activity or service abroad (if applicable) in 2013 (%)

	There is no a policy b	utonomous p because the p	rice setting rice is	The p	rice is set	Negotiated	Other	Don't know	Total
	regulated	set by a	set by the	following	fully	with			
		parent	main	the main	according to	individual			
		group	customer (s)	netitors	a completely	customers			
		group	(3)	pentors	self-determined				
					profit margin				
			wb-we	ighted to rep	resent firm popu	lation			
Manufacturing	7.9	7.1	6.3	26.8	11.0	35.6	5.2	0.0	100.0
Construction	7.9	18.4	0.0	21.4	8.2	41.9	2.3	0.0	100.0
Trade	21.1	10.2	6.1	22.4	18.3	17.9	2.8	1.2	100.0
Business services	16.0	4.6	6.3	31.4	10.3	28.3	0.8	2.3	100.0
Financial									
intermediation	21.0	18.6	0.0	42.7	0.0	0.0	0.0	17.7	100.0
Total	14.9	8.2	5.6	27.0	12.5	27.4	2.7	1.5	100.0
Observations	38	26	16	77	41	84	6	4	292
		W	l-weighted	to represent	employees in the	e population			
Manufacturing	27.9	6.4	4.4	19.2	12.6	27.5	2.0	0.0	100.0
Construction	4.5	16.1	0.0	16.7	4.6	51.1	7.0	0.0	100.0
Trade	42.8	10.9	4.0	17.5	9.9	9.9	4.5	0.5	100.0
Business services	23.2	6.2	4.0	19.9	16.2	29.6	0.3	0.7	100.0
Financial									
intermediation	2.3	14.1	0.0	51.1	0.0	0.0	0.0	32.5	100.0
Total	25.5	8.4	3.5	22.3	11.7	23.0	1.9	3.7	100.0
Observations	38	26	16	77	41	84	6	4	292

Table A72 Change in price setting frequency during 2010–2013 compared to the period before 2008 (%)

	Yes, prices ha	ve changed	No	Don't know	Total				
	more frequently	less frequently							
		Share of revenue from foreign market is 0							
wb	29.2	7.0	41.6	22.2	100.0				
wl	28.4	6.6	41.0	23.9	100.0				
Observations	167	37	228	112	544				
		Share of revenue	from foreign market	ts is greater than 0					
wb	25.4	8.2	45.1	21.3	100.0				
wl	24.5	5.5	45.9	24.1	100.0				
Observations	79	22	135	56	292				

Note: wb - weighted to represent firm population, wl - weighted to represent employees in the population.

Table A73 **Median ranking of factors behind MORE frequent price setting during 2010–2013 compared to the period before 2008 (%)**

	More volatile demand o	More frequent changes in labour costs	More frequent changes in other input costs	Stronger competition in the main product market	More frequent price changes by main competitors				
		wb-weigh	ted to represent firm	population					
Manufacturing	3	4	4	2	3				
Construction	2	3	4	3	3				
Trade	3	4	3	2	3				
Business services	2	4	3	2	2				
Financial intermediation	3	2	3	1	4				
Total	2	4	3	2	3				
	wl – weighted to represent employees in the population								
Manufacturing	3	5	3	2	3				
Construction	3	4	4	1	2				
Trade	2	5	4	1	3				
Business services	1	4	4	3	3				
Financial intermediation	5	2	3	1	4				
Total	2	4	4	2	3				

Note: ranking from 1 (less important) to 5 (most important), 0 - not marked.

Table A74

NC53b – Median ranking of factors behind LESS frequent price setting during 2010–2013 compared to the period before 2008 (%)

	Less volatile demand	Less frequent changes in labour costs	Less frequent changes in other input costs	Weaker competition in the main product market	Less frequent price changes by main competitors				
		wb-weigh	ted to represent firm	population					
Manufacturing	3	3	3	3	2				
Construction	2	2	5	3	4				
Trade	3	2	3	5	4				
Business services	3	2	4	4	2				
Financial intermediation									
Total	3	3	3	4	2				
	wl – weighted to represent employees in the population								
Manufacturing	2	4	4	3	1				
Construction	2	3	5	1	4				
Trade	3	2	3	5	4				
Business services	2	1	3	4	5				
Financial intermediation									
Total	2	3	3	4	2				

Note: ranking from 1 (less important) to 5 (most important), 0 - not marked.

Table A75		
NC54a – 1	egree of competition in domestic market for your main product in 2013 (if applicable; %)

	Weak	Moderate	Severe	Very severe Not	applicable	Total				
		wb – weigl	nted to represe	ent firm population						
Manufacturing	2.2	40.1	34.0	18.1	5.5	100.0				
Construction	7.1	22.4	33.5	35.5	1.5	100.0				
Trade	3.7	22.8	30.0	43.5	0.0	100.0				
Business services	5.5	18.5	36.7	33.4	5.8	100.0				
Financial intermediation	0.0	18.2	22.0	59.8	0.0	100.0				
Total	4.5	23.9	33.4	34.9	3.2	100.0				
	wl – weighted to represent employees in the population									
Manufacturing	2.4	48.6	26.4	16.5	6.1	100.0				
Construction	9.2	13.9	25.7	47.7	3.4	100.0				
Trade	1.7	17.1	25.7	55.5	0.0	100.0				
Business services	7.0	21.9	29.3	29.2	12.6	100.0				
Financial										
intermediation	0.0	35.9	43.1	21.0	0.0	100.0				
Total	4.6	26.8	28.7	33.3	6.6	100.0				
Observations	26	120	167	185	17	515				

Degree of competition in foreign market for the firm's main product in 2013 (if applicable; %)

	Weak	Moderate	Severe	Very severe	Not applicable	Total
		wb-we	eighted to repres	ent firm populati	on	
Manufacturing	0.9	29.6	47.5	21.2	0.8	100.0
Construction	0.0	27.0	45.6	27.4	0.0	100.0
Trade	5.2	26.1	27.9	35.8	5.0	100.0
Business services	1.3	24.0	35.9	38.5	0.2	100.0
Financial						
intermediation	17.7	0.0	54.8	27.5	0.0	100.0
Total	2.7	25.7	37.8	32.0	1.8	100.0
		wl-weighted	l to represent em	ployees in the po	pulation	
Manufacturing	1.1	16.7	55.9	25.4	0.9	100.0
Construction	0.0	29.5	35.6	34.9	0.0	100.0
Trade	2.2	21.7	19.0	55.0	2.1	100.0
Business services	0.5	11.8	41.2	40.0	6.5	100.0
Financial						
intermediation	32.5	0.0	56.5	11.0	0.0	100.0
Total	4.9	14.5	43.5	34.3	2.8	100.0
Observations	8	57	97	80	6	248

Table A77 Change in the competitive pressure on the main product in domestic and foreign markets during 2008–2009 and 2010–2013 compared to the situation before 2008 (if applicable; %)

	Domestic market				Foreign market			
	2008-20)09	2010-	2010-2013		2008-2009		2013
	wb	wl	wb	wl	wb	wl	wb	wl
Strong decrease	2.9	2.4	2.2	2.2	0.9	1.0	1.0	1.0
Moderate decrease	11.8	11.0	3.8	2.4	7.6	5.9	2.8	1.3
Unchanged	33.8	39.3	24.7	24.2	45.7	51.5	32.5	35.8
Moderate increase	30.0	20.1	28.1	26.4	25.2	19.7	27.4	23.1
Strong increase	18.7	18.4	38.5	36.3	11.2	8.8	27.3	26.4
Does not apply	2.8	8.7	2.8	8.5	9.4	13.1	9.1	12.5
Total	100	100	100	100	100	100	100	100
Observations		493		504		306		316

Note: wb - weighted to represent firm population, wl - weighted to represent employees in the population.

Factors explaining probability of a firm to experience a decrease, increase or no change in the competitive pressure on the main product in domestic and foreign markets during 2008–2009 and 2010–2013 compared to the situation before 2008 (if applicable; marginal effect of generalised ordered logit)

	Domestic market				Foreign market			
	2008-	2009	2010-	-2013	2008-	-2009	2010-2	2013
	wb	wl	wb	wl	wb	wl	wb	wl
Decrease								
Employment, In	-0.003	0.012	-0.001	-0.000	-0.000	0.003*	-0.001	0.000
	(0.01)	(0.01)	(0.00)	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)
Manufacturing, D	0.014	-0.049	-0.004	0.000	-0.021	-0.009*	-0.008	-0.003
-	(0.04)	(0.03)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)
Financial								
intermediation, D	-0.009	0.122	-0.053***	-0.050***	-0.065***	-0.047*	-0.031**	-0.020
	(0.08)	(0.16)	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)
Construction, D	0.063	-0.023	0.039	0.000	0.019	0.032	-0.006	-0.002
	(0.06)	(0.04)	(0.03)	(0.00)	(0.05)	(0.04)	(0.01)	(0.00)
Export share	0.035	0.097	-0.009	-0.000	0.114**	0.023**	-0.011	-0.002
	(0.04)	(0.06)	(0.01)	(0.00)	(0.04)	(0.01)	(0.01)	(0.00)
Mainly foreign, D	0.048	-0.023	0.010	-0.000 **	0.040	0.004	0.018	0.002
	(0.03)	(0.04)	(0.01)	(0.00)	(0.02)	(0.00)	(0.01)	(0.00)
Demand	-0.048***	-0.043*	0.007	0.000	-0.012	-0.002	0.003	0.000
	(0.01)	(0.02)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)
No access to credit, D	0.000	0.041	0.015	0.000	0.014	0.005	0.006	0.006*
	(0.02)	(0.04)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)
Domestic competition	-0.034	-0.019	-0.000	0.000				
	(0.02)	(0.03)	(0.01)	(0.00)				
Foreign competition					-0.037***	-0.007*	-0.020**	-0.001
					(0.01)	(0.00)	(0.01)	(0.00)
Unchanged								
Employment, ln	-0.003	0.015	-0.003	-0.007	-0.000	0.115***	-0.013	0.010
	(0.01)	(0.01)	(0.02)	(0.03)	(0.03)	(0.03)	(0.05)	(0.04)
Manufacturing, D	0.016	-0.078	-0.021	0.065	-0.115	-0.446***	-0.075	-0.174
	(0.04)	(0.06)	(0.05)	(0.08)	(0.07)	(0.09)	(0.07)	(0.11)
Financial								
intermediation, D	-0.011	0.068**	-0.091	-0.138	-0.003	-0.094	-0.051	-0.014
	(0.10)	(0.03)	(0.12)	(0.15)	(0.23)	(0.23)	(0.23)	(0.28)
Construction, D	-0.124*	-0.032	-0.078	0.016	0.070	-0.175	-0.059	-0.146
F 1	(0.06)	(0.07)	(0.05)	(0.09)	(0.13)	(0.19)	(0.15)	(0.13)
Export share	0.041	0.121	-0.042	-0.074	-0.041	0.042	-0.102	-0.147
	(0.05)	(0.08)	(0.06)	(0.12)	(0.11)	(0.14)	(0.10)	(0.16)
Mainly foreign, D	0.045	-0.033	0.043	0.055	0.127*	0.110	0.131	0.111
	(0.03)	(0.06)	(0.06)	(0.09)	(0.05)	(0.08)	(0.08)	(0.10)
Demand	0.039*	0.0/6**	0.033	0.055	-0.056*	-0.062	0.030	0.005
	(0.02)	(0.03)	(0.02)	(0.05)	(0.02)	(0.04)	(0.03)	(0.05)
No access to credit, D	0.000	0.053	0.072	0.014	0.066	0.195*	0.058	0.330**
	(0.03)	(0.05)	(0.04)	(0.08)	(0.06)	(0.08)	(0.06)	(0.10)
Domestic competition	-0.152***	-0.204***	-0.1/5***	-0.1//***				
Equation operativity	(0.03)	(0.06)	(0.03)	(0.04)	0 1 (0 * * *	0 7(0***	0 177***	0.000
roreign competition					-0.109****	-0.200^{+++}	-0.1//***	-0.088
Inanaga (nart na)					(0.04)	(0.00)	(0.04)	(0.03)
Observations		4(2		472		225		145
Observations	4	402		4/3		233	2	.40

Note: $\ln - \log \operatorname{arithm}, D - \operatorname{dummy}$ variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Comment: Groups are combined into Decrease, Unchanged and Increase due to a small number of observations in some groups. Explanatory variables are described in Table A2.

Table A78 (cont.)

	Domestic market				Foreign market			
	2008-2	2009	2010-	2013	2008-	-2009	2010-2	2013
	wb	wl	wb	wl	wb	wl	wb	wl
Increase								
Employment, In	0.006	-0.028	0.004	0.007	0.000	-0.118***	0.015	-0.010
	(0.03)	(0.02)	(0.03)	(0.03)	(0.04)	(0.03)	(0.05)	(0.04)
Manufacturing, D	-0.030	0.127	0.025	-0.065	0.137	0.454***	0.083	0.176
	(0.08)	(0.09)	(0.06)	(0.08)	(0.08)	(0.09)	(0.08)	(0.11)
Financial								
intermediation, D	0.020	-0.190	0.145	0.188	0.068	0.141	0.082	0.034
	(0.19)	(0.17)	(0.12)	(0.15)	(0.23)	(0.22)	(0.23)	(0.28)
Construction, D	0.061	0.055	0.039	-0.016	-0.089	0.143	0.065	0.148
	(0.09)	(0.10)	(0.07)	(0.09)	(0.18)	(0.20)	(0.16)	(0.13)
Export share	-0.076	-0.218	0.051	0.074	-0.073	-0.064	0.114	0.150
	(0.08)	(0.13)	(0.08)	(0.12)	(0.12)	(0.14)	(0.11)	(0.16)
Mainly foreign, D	-0.093	0.056	-0.052	-0.054	-0.168*	-0.113	-0.149	-0.113
	(0.06)	(0.09)	(0.07)	(0.09)	(0.07)	(0.08)	(0.09)	(0.11)
Demand	0.009	-0.033	-0.040	-0.055	0.069*	0.063	-0.034	-0.005
	(0.02)	(0.03)	(0.02)	(0.05)	(0.03)	(0.04)	(0.03)	(0.05)
No access to credit, D	-0.001	-0.094	-0.087	-0.014	-0.080	-0.200*	-0.065	-0.336**
	(0.05)	(0.08)	(0.05)	(0.08)	(0.07)	(0.08)	(0.07)	(0.10)
Domestic competition	0.185***	0.223***	0.175***	0.177***				
-	(0.03)	(0.05)	(0.03)	(0.04)				
Foreign competition					0.205***	0.267***	0.197***	0.089
					(0.04)	(0.06)	(0.05)	(0.05)
Observations	4	62	4	73		235	2	245

Note: $\ln - \log arithm$, D - dummy variable, wb - weighted to represent firm population, wl - weighted to represent employees in the population. Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Comment: Groups are combined into Decrease, Unchanged and Increase due to a small number of observations in some groups. Explanatory variables are described in Table A2.

Table A79Price setting mechanism in 2013 (%)

	On a regular time pattern	Whenever costs and/or demand conditions changed	Don't know	Total
		wb-weighted to represe	sent firm population	
Manufacturing	7.5	92.5	0.0	100.0
Construction	7.3	90.6	2.2	100.0
Trade	20.2	78.6	1.1	100.0
Business services	15.5	81.6	2.8	100.0
Financial intermediation	8.0	92.0	0.0	100.0
Total	14.2	84.1	1.7	100.0
	wl – v	weighted to represent en	nployees in the popula	tion
Manufacturing	5.1	94.9	0.0	100.0
Construction	4.2	94.6	1.2	100.0
Trade	28.5	70.9	0.6	100.0
Business services	21.7	75.9	2.4	100.0
Financial intermediation	8.2	91.8	0.0	100.0
Total	16.7	82.1	1.2	100.0
Observations	82	469	6	557

Table A80Frequency of price change in 2013 (%)

	On a regular time pattern		Whenever costs and/or deman changed	nd conditions
	wb	wl	wb	wl
More often than once a year				
(unspecified)	11.5	6.2	11.2	10.6
Daily	2.5	0.7	1.7	2.6
Weekly	3.6	1.0	2.9	6.1
Monthly	9.1	4.9	6.6	4.7
Quarterly	10.2	22.6	6.9	7.6
Half-yearly	8.1	4.3	8.0	5.5
Once a year	22.2	25.6	23.0	17.9
Once in two years	9.0	5.7	14.6	14.7
Less frequently than once				
every two years	4.6	3.3	12.4	11.7
Never	7.2	20.0	2.1	2.8
Don't know	11.9	5.5	10.6	15.7
Total	100	100	100	100
Observations	82		469	

Note: wb - weighted to represent firm population, wl - weighted to represent employees in the population.

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Figure A1 **Change in firms' activity during 2008–2009 and 2010–2013; wl – employment weights (C21)**

Change in firms' activity; wl - employment weights (C21)

(a) Sector



(b) Size



2010-2013



(c) Exports





2010-2013



Change in firms' activity; wl - employment weights (C21)

(d) Autonomy



(e) Structure



2010-2013 Demand Volatility of demand 9 14 12 6 15 Multi-establishment firm 4 13 17 40 Multi-establishment firm 4 11 34 External financing Customers' ability to pay Single-establishment firm 7 22 42 establishment firm 34 37 Multi-establishment firm 3 7 55 11 11 Multi-establishment firm Access to suppliers Single-establishment firm 34 69 13 3 8 Multi-establishment firm 26 49

(f) Ownership







+

++

Don't know



Duration of shocks to demand, access to external financing, customers' ability to pay and availability of supplies; wl – employment weights (C22)

(a) Sector





Figure A5 **Financial condition of firms during 2008–2009 and 2010–2013; wl – employment weights (C23)**

Financial condition of firms; wl - employment weights (C23)

(a) Sector



(b) Size



2010-2013





2010-2013



Financial condition of firms; wl - employment weights (C23)

(d) Autonomy



(e) Structure



2010–2013 No working capital credit



(f) Ownership



2010-2013



Financial condition of firms vs change in firms' activity (C23 vs C21); wl - employment weights

(a) Financial condition of firms vs change in demand



(b) Financial condition of firms vs access to external financing



2010-2013



(c) Financial condition of firms vs customers' ability to pay 2008–2009

21 6 2

0

4

Onerous conditions for new investment credit Onerous conditions for debt refinancing credit

Of little relevance

6

Don't know

15 4 5

14

Not relevant

Very relevant

7 4 8

No new investment credit

rous conditions for working capital credit

Relevan

No working capital credit

No debt refinancing credit



2010-2013

131



Figure A9 **Change in total cost components during 2008–2009 and 2010–2013; wl – employment weights (C24)**

Change in total cost components; wl - employment weights (C24)

(a) Sector





(b) Size



10-19 6 9

Total

2010-2013

Labour



(c) Exports



2010-2013



Change in total cost components; wl - employment weights (C24)

(d) Autonomy



(e) Structure









Change in total cost components vs change in firms' activity (C24 vs C21); wl - employment weights

(a) Change in total cost components vs change in demand



(b) Change in total cost components vs access to external financing

2008–2009													2010–2013												
	Total			1	Labour							Total							Labour						
	34	23 6	33	32			44	15	14	16 1	11	-		B 11 6	33		36	6		9	13 17		27	32	2
-	37	42	6	14 1	-	3	8		43	10	8 1		- 2	35	1	38		24	-	2	39	10	3	4 15	
+	17 22	30	24	6 1	+	10	31	2	8	25	4 2		+ 5	9 16		48		22	+	4 4	28		47	17	
+	17 21	19	43		+	18	23	16		43	1		+	12 2	31		45	8 1	+	12	23		47	15	1
+ +	19 8 11		62		++	29	1	17	44		10	+	+ +	48		25		27	+ +			70		30	
	Financing				1	Supplies							Financing						Supplies						
	17 16	39	11	13 5		16	17	12	40	13	3 2	-	e	4 18		43	22	8		4 5		59		23	8
-	1 68		10 1	4 24	-		43	17		38	1		- 1	11 26		36		22 <mark>3</mark>	-	14	5			43	
+	4 13	49	20	1 12	+	4 24		24	37	5	6		+ 3	15	48		26	3 6	+	2 7	17		53	15	6
+	32	15	45	2 5	+	14	24	12	35	12	3		+	15	42		35	3 4	+	21		5	5	21	2
+ +	39	13	41	8	+ +	20	:	36		44		+	· + e	18	25		51		+ +	9		55		34	2
		-	0			+		++		Don't kno	ow		1			-	C			+		++		Don't knov	N

(c) Change in total cost components vs customers' ability to pay





Figure A13 **Change in labour cost components during 2008–2009 and 2010–2013; wl – employment weights (C25)**

Change in labour cost components; wl - employment weights (C25)

(a) Sector



(b) Size

2008-2009



2010-2013



(c) Exports

2008-2009



2010-2013



Change in labour cost components; wl - employment weights (C25)

(d) Autonomy



(e) Structure



(f) Ownership







138

Change in labour cost components vs change in firms' activity; wl – employment weights (C25 vs C21) (a) Demand



(b) Change in labour cost components vs access to external financing 2008–2009





(c) Change in labour cost components vs customers' ability to pay



Change in demand and price of the firm's main product during 2008–2009 and 2010–2013; wl – employment weights (C26)



Change in demand and price of the firm's main product; wl - employment weights (C26)

(a) Sector



(b) Size



2010-2013



(c) Exports







Change in demand and price of the firm's main product; wl - employment weights (C26)

(d) Autonomy 2008-2009 2010-2013 Internal demand Internal demand Parent company Subsidiary Other Don't know Parent company Subsidiar Othe Don't know External demand External demand Parent company Subsidiary Othe Don't know Parent company Subsidiary Other Don't know 46 Internal market price Internal market price Parent company Subsidiary Other Don't know Parent company Subsidiary Subsidiary Other Don't know External market price External market price Parent company Subsidiary nt compar Subsidia Othe Othe Don't know Don't know Don't knov (e) Structure 2008-2009 2010-2013 Internal demand Internal demand Single-establishment firm Single-establishment firm Multi-establishment firm Multi-establishment firm External demand External demand Single-establishment firm 43 Single-establishment firm 3 Multi-establishment firm Multi-establishment fir Internal market price Internal market price Single-establishment firm Single-establishment firm Multi-establishment firm Multi-establishment firm External market price External market price Single-establishment fin Single-establishment firr Multi-establishment firm Multi-establishment fi Don't know

(f) Ownership

2008-2009



2010-2013





Don't know

Change in labour productivity, prices and non-labour costs during 2008–2009 and 2010–2013; wl – employment weights (C27)



Change in labour productivity, prices and non-labour costs; wl - employment weights (C27)





(b) Size



2010-2013



(c) Exports



2010-2013


Change in labour productivity, prices and non-labour costs; wl – employment weights (C27)



Figure A23 Change in labour productivity, prices and non-labour costs vs change in firms' activity; wl – employment weights (C27 vs C21)

(a) Change in labour productivity, prices and non-labour costs vs demand



(b) Change in labour productivity, prices and non-labour costs vs access to external financing



(c) Change in labour productivity, prices and non-labour costs vs customers' ability to pay



Need to reduce labour input; wl – employment weights (C33a)

(a) Sector





(b) Size





2010-2013



(c) Exports





Exporting



Need to reduce labour input; wl - employment weights (C33a)

(d) Autonomy





(e) Structure

2008-2009



Single-establishment firm 71 29 Multi-establishment firm 80 20

2010-2013

(f) Ownership

2008-2009





Need to reduce labour input vs change in firms' activity; wl - employment weights (C33a vs C21)

(a) Need to reduce labour input vs demand 2008–2009



2010-2013

(b) Need to reduce labour input vs access to external financing

2008–2009



2010-2013



(c) Need to reduce labour input vs customers' ability to pay 2008–2009





Figure A27 **Measures to reduce labour; wl – employment weights (C33b)**



Measures to reduce labour; wl - employment weights (C33b)

(a) Sector



(b) Size

2008-2009



2010-2013







Marginally

Don't know

Moderately

Not at all

Strongly



Measures to reduce labour vs change in firms' activity; wl – employment weights (C33b)

(a) Measures to reduce labour vs demand

al of contracts

25 8 <mark>3</mark>4

25 54

11

19 3

Not at all

Strongly

152

Collective layoffs



(b) Measures to reduce labour vs access to external financing 2008–2009







(c) Measures to reduce labour vs customers' ability to pay 2008–2009





_



Don't know

Strongly

Figure A30

Whether it is easier to reduce labour compared to the previous period; wl - employment weights (C34)



Figure A31 **Obstacles to hire new employees in 2013; wl – employment weights (C35)**



Figure A.32 **Obstacles to hire new employees in 2013; wl – employment weights (C35)**



-

Figure A33 **Obstacles to hire new employees in 2013; wl – employment weights (C35)**



Access to external financing



Customers' ability to pay



Collective bargaining coverage in 2013; wl - employment weights (C43)





Sector





Exports





Figure A35 Wage inflation indexation; wl – employment weights (C45)

Overall





Exports



Autonomy





Ownership



Wage inflation indexation; wl - employment weights (C45)

Demand





Customers' ability to pay







Frequency of wage change; wl - employment weights (C46)

Overall Size



159

Frequency of wage change; wl - employment weights (C46)

Demand





Customers' ability to pay



Structure



Wage freeze and cut strategies; wl - employment weights (C47)

Overall





Size







Ownership



Wage freeze and cut strategies; wl - employment weights (C47)



Customers' ability to pay





Wages of newly hired employees; wl - employment weights (C48)



Sector

Size





Before 2008

Autonomy



Ownership



163

Wages of newly hired employees; wl - employment weights (C48)

Demand



Customers' ability to pay





Structure



Autonomy level of the price setting policy of firms in 2013; wb – firm number weights (C51)

Overall **Exports** Domestic 2013 Domestic 2013 **Domestic 2013** Exporting Non-exporting Foreign 2013 Foreign 2013 Foreign 2013 Exporting Regulated Parent company Customer Regulated Parent company Customer Competition Costs and margins Individually Competition Costs and margins Individually Other Don't know Other Don't know

Size



Structure





Ownership

165

Autonomy

Figure A44

Autonomy level of the price setting policy of firms in 2013; wb – firm number weights (C51)

Demand





Customers' ability to pay



Domestic 2013 Parent company Subsidiary Othe Don't know Foreign 2013 Parent company Subsidiary Othe Don't know Parent company Regulated Customer Costs and margins Competition Individually Other Don't know

166

Change in the price adjustment frequency in 2010–2013 compared to the period before 2008; wb – firm number weights (C53)





Sector





ore often

No

Yes, less often

Don't know

Ownership



Change in the price adjustment frequency in 2010–2013 compared to the period before 2008; wb – firm number weights (C53)





Access to external financing



Customers' ability to pay





If the price changed more/less frequently in 2010–2013 compared to the period before 2008, what were the reasons (first choice – the most relevant); wb – firm number weights (C53a)



Figure A48 Degree of competition at the end of 2013; wb – firm number weights (C54)



Size



Sector



Ownership



170

Figure A49 **Degree of competition at the end of 2013; wb – firm number weights (C54)**



Change in the degree of competition compared to the situation before the corresponding period; wb – firm number weights (C55)

Domestic market (overall)

Foreign market (overall)



Does not apply

Don't know





Sector (domestic market)



Size (foreign market)



Sector (foreign market)



Change in the degree of competition compared to the situation before the corresponding period; wb – firm number weights (C55)

Demand (domestic market)

Price (domestic market)



Price (foreign market)

Demand (foreign market)



Domestic

Foreign

Does not apply

0

Don't know

Price change pattern in 2013; wb – firm number weights (C56)

Overall

Exports

Sector



On a regular time pattern

Don't know

Whenever costs and/or demand conditions changed



Size 10–19 13 84 2 20–49 12 87 1 50–199 17 82 2 200–.. 27 73 On a regular time pattern Whenever costs and/or demand conditions changed Don't know

Financial 8 92 Manufacturing 8 92 Manufacturing 8 92 Construction 7 91 2 Trade 20 79 1 Business services 16 82 3 On a regular time pattern Whenever costs and/or demand conditions changed Dont know

Structure



Ownership



Price change pattern in 2013; wb - firm number weights (C56)

Demand



Access to external financing

Autonomy



Customers' ability to pay



Don't know



Price change frequency in 2013; wb – firm number weights (C56)

Overall





Size



Structure



Sector



Ownership



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