Results of the third wave of the survey on wage-setting in Belgium

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Introduction

During the course of 2014 and 2015, twenty-five countries of the European Union took part in a harmonised survey of European firms' wage- (and price-) setting practices, within the framework of the Wage Dynamics Network (WDN), a European System of Central Banks (ESCB) research network that studies the characteristics of wage dynamics.

The survey focuses on the period 2010-2013 and includes questions on firms' perception of the nature of the changes in the economic environment that have resulted from the sovereign debt crisis, their reactions to these changes and the role of financial constraints. Two surveys had alrerady been carried out previously, respectively in 2007 and 2009. The first one, back in 2007, covered 17 countries and sought to gain a better understanding of how firms adjust wages and the volume of labour, and also of the interactions with price-setting. In 2009, a sub-group of ten countries carried out a more concise supplementary survey to get a better idea of companies' reactions in terms of wages and employment in the context of the great recession.

The survey that this article concentrates on seeks to update the analysis of firms' behaviour by assessing the impact of the latest economic and financial crisis, and in particular the influence of the reforms implemented. Even though that was not so much the case in Belgium, the period 2010-2013 was marked in many countries by reforms that deeply affected the functioning of the labour market. The comparative analysis of the survey results in the different countries is currently underway: it should shortly be available in the form of an ECB Occasional Paper. In the meantime, various national reports are expected to be published. This article contributes to this process. It presents the main results for Belgium of the 2014 survey [1].

Various more specific research projects using the survey data are underway in different countries. Their findings will be released in separate publications.

As had already been the case for previous editions, one of the survey's plus points is the harmonisation of the questionnaire compiled jointly through consultations between the 25 countries involved in the WDN. The network has nevertheless allowed for the inclusion or exclusion of some of the optional questions or, if necessary, certain specific questions, as the case may be. All but four of the optional questions have been incorporated into the Belgian questionnaire, with a view to reducing the length of the survey and, therefore, the risk of non-response which is usually commensurate with this kind of questionnaire. One of the difficulties encountered when the survey was being compiled was to select a common reference period for all countries. In fact, the periods of economic tension did not necessarily coincide from one country to another. It was therefore decided not to make any explicit link between the period selected, i.e. 2010-2013, and the term 'crisis'. For this reason, some countries extended the questionnaire by splitting up certain questions for different periods. This enabled those who did not take part in

(*) The author would like to thank the 1 000 or so Belgian firms that took part in the survey as well as the Business and Consumer Surveys Division of the Bank's General Statistics Department for conducting the survey itself.

(1) A preliminary draft version of this article was compiled with a view to publication of the results per country on the ECB's website. For an analysis of the findings of previous surveys, see Druant, Du Caju and Delhez (2008) or de Walque, Druant, Du Caju and Fuss (2010). For more information, see. http://www.nbb.be/wdn.

previous editions of the survey to supplement the results for earlier periods.

The questionnaire for Belgium, which can be consulted on the Bank's website (1), is split into four parts, as well as the general information describing the branch of activity and type of company. The first part broaches the changes that occurred in the economic environment during the course of the 2010-2013 period, by identifying the type and intensity of the shocks that might have affected companies. The second part deals with the structure and adaptation of labour forces in the companies questioned, while the third is devoted to wage adjustment. And finally, the fourth part, which participating countries could choose whether or not to add to the survey questionnaire, takes a look at price-setting and price adjustments.

The questionnaire comprises 35 questions of three different types. First of all, in just a few cases, companies had to fill in some figures. Then, certain questions required one or more options to be selected. Lastly, participants were asked to specify the intensity, degree of relevance or difficulty, or the relative importance of a particular statement. In the last two cases, the breakdown of the replies given below does even not take into consideration either the non-responses or any of the "Don't know" options.

The presentation of the survey findings comprises five parts. The first part deals with the production of the survey. The second gives an outline, from a macroeconomic point of view, of the general context of the labour market in Belgium during the survey reference period. The third part analyses in more detail how companies reacted and adjusted wages. The fourth section examines the question of price changes, while the fifth and final one summarises the main results.

1. The survey

The Belgian survey covers firms employing at least five workers in the manufacturing and building industries, trade, business services and the financial sector. The sectors covered by the survey together account for 52 % of employment in Belgian firms (excluding self-employed). The survey was conducted by the National Bank of Belgium in June and September 2014 after a trial phase with ten or so firms that helped to make the presentation of the questionnaire clearer. The questionnaire was sent out by surface mail, with the option of using an electronic format version.

The final questionnaire was sent out to a total of 4 641 companies. The sample was partly based on the group of companies that responded to the previous WDN survey in 2007, which are to a large extent also companies included in the sample used for the Bank's monthly business survey of manufacturing industry, construction, trade and business services. The sample was then extended to include the energy sector and financial institutions in a bid to widen representativeness for the other sectors. Firms with fewer than five employees were omitted from the sample.

In total, 991 firms participated in the survey, giving a response rate of 21 %. Given the length of the questionnaire, this can be considered as satisfactory, even though it is lower than in the previous waves (which had a shorter questionnaire). Each firm taking part in the survey will be sent a summary of the results based on the responses for its sector. The sample was composed in such a way that large firms are over-represented. While the participating firms make up 1.7 % of the total number of firms, they account for 5.4 % of total employment. Unfortunately, the response rate for the energy sector was zero, while it was relatively high for the financial sector. However, interpretations of the results for the financial sector have to take into account the low number of participating firms. A detailed table describing the sample is provided below.

In terms of response behaviour by questions, the response rate is on average higher than 95 % and varies between 100 % and 83 % for the question on the coverage of collective pay agreements.

The answers are in general consistent with information from other sources. But there is one exception for the questions on the collective wage bargaining process – which are also among the questions with the lowest response rates. For example, only about 50 % of the firms indicated that a collective agreement signed outside the firm was in effect, whereas the expected figure should be above 90 % given the centralised component of the wage bargaining system in Belgium. One explanation for this inconsistency could be that in the periods 2011-2012 and 2013-2014 (as well as 2015-2016) the draft interprofessional agreements, which have not been approved by all social partners, have been enforced by the federal government. Companies surveyed may have considered this as a sign that there was no formal "agreement" even though a wage policy with all the features of an agreement was in force.

The survey results have had to be weighted in order to make them representative enough of the whole population of firms. To this end, the population has been sub-divided into strata according to sector of activity and number of

(1) See www.nbb.be/en/wage-dynamics-network-wdn-3.

TABLE 1 SAMPLE

(4 641 firms contacted, 991 participated (1) : response rate 21 %)

	Population (more than 5 employees)		Participants (more than 5 employees		Representativeness (percentages)		Sample	
	Number of firms (2)	Employ-ment (3)	Number of firms	Employ-ment	Number of firms	Employ-ment	Number of firms	Response Rate (%)
Total	**58 448**	**1 977 590**	**991**	**106 920**	**1.7**	**5.4**	**4 641**	**21.4**
Manufacturing industry	9 159	472 626	416	47 318	4.5	10.0	1 929	21.6
Energy	47	17 798	0	0	0.0	0.0	25	0.0
Construction	8 556	171 905	206	11 853	2.4	6.9	765	26.9
Trade	16 344	422 127	113	9 831	0.7	2.3	668	16.9
Business services	22 777	784 198	243	36 121	1.1	4.6	1 210	20.1
Financial institutions	1 565	108 936	13	1 797	0.8	1.6	44	29.5
From 5 to 19 employees	42 630	360 787	250	2 724	0.6	0.8		
From 20 to 49 employees	10 322	298 098	243	7 941	2.4	2.7		
From 50 to 199 employees	4 262	361 610	407	38 517	9.5	10.7		
200 employees or more	1 234	957 095	91	57 738	7.4	6.0		

Sources: DGS, NBB.
(1) Excluding firms with less than 5 employees, and firms with no NACE code.
(2) Firms active in Belgium in 2012, source: DGS.
(3) Firms submitting declarations to the NSSO and belonging to the sectors covered by the survey (in 2013Q1).

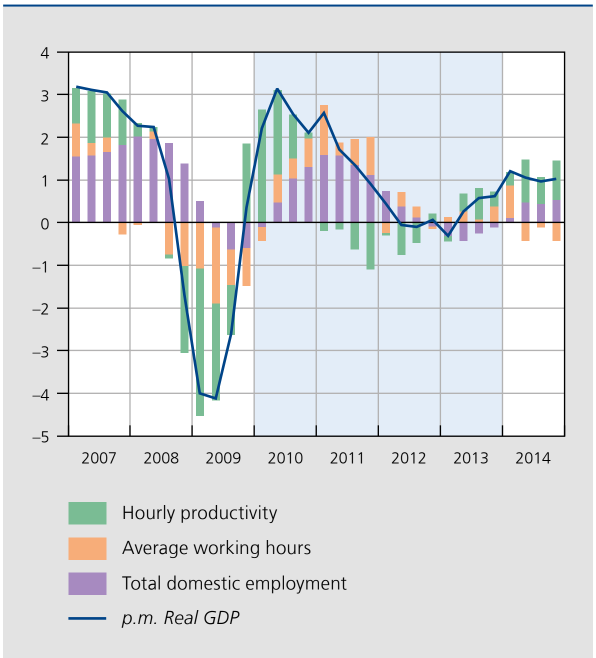
workers. The weighting coefficients have been calculated as the ratio of the population of firms within each stratum and the number of firms that replied to the survey questionnaire in each stratum. Unless otherwise mentioned, the results given in this article are weighted in this way, and missing replies are left out. This is the option initially selected by the WDN for publication of the national reports.

2. Economic context

The economic environment and labour market developments over the period 2010-2013 were still partly characterised by the repercussions of the financial and economic crisis that erupted in 2008. In Belgium, it resulted in a drop in domestic employment – and an increase in unemployment – which was initially of relatively limited scope compared with neighbouring countries such as France, the Netherlands and also with the EU average. This small drop in employment was combined with a sharp decline in hourly productivity and average working hours. The preservation of Belgian employment can be explained by various flexibility mechanisms. The system of temporary lay-offs played an important role, especially since it was extended at the beginning of the crisis to allow employers to adapt their workforces more easily to the drop in

CHART 1 EMPLOYMENT, WORKING TIME AND PRODUCTIVITY

(contribution to annual growth of GDP, percentage points, data adjusted for calendar effects)

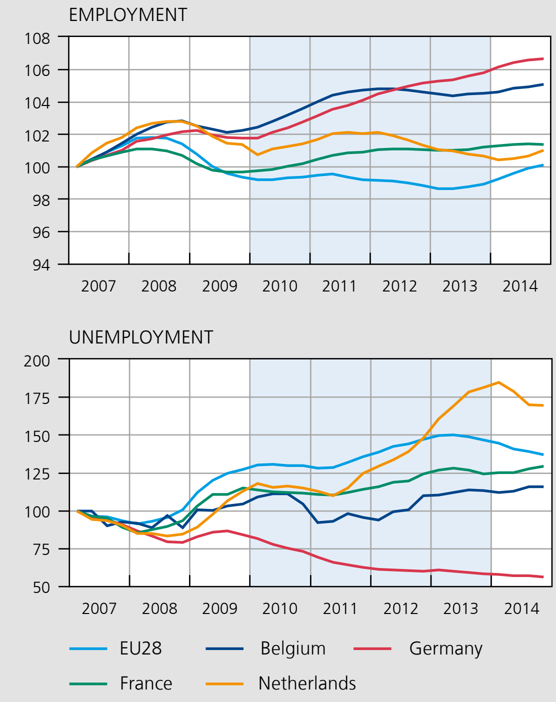


Source: NAI.

their activity, and thus avoid lay-offs. This option has been widely used, especially in the manufacturing industry, partly because at that time the crisis was seen as temporary and the financial situation of Belgian firms was quite sound. At the same time, domestic employment was also supported by intensive creation of subsidised jobs (notably under the service voucher system). The persistence of the crisis in 2012 and 2013 nevertheless led to a sharp decline in employment in 2013, except in the business services sector. The decline was largest in industry, even though in that sector the effect was smaller than in 2009. The deterioration in employment can broadly be explained by different factors. First, after having intensively used temporary lay-offs during the initial phase of the crisis, companies, facing deteriorating prospects and financial positions due to persistently stagnating economic activity, eventually had to reduce their workforces. Furthermore, the temporary lay-off system was adjusted to prevent misuse. Finally, subsidised job creation was more moderate than in 2008. In 2014, the labour market benefited from the fragile recovery that had started in 2013. Heightened economic activity led first to improved productivity, as is often the case in such a situation. The state of the labour market, in turn, picked up quickly and this was reflected in a rise in domestic employment in 2014.

CHART 2 EMPLOYMENT AND UNEMPLOYMENT

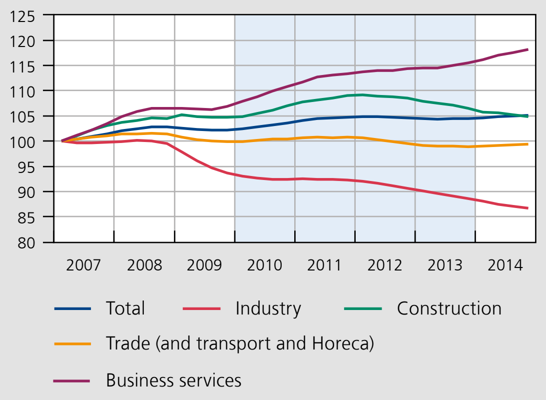
(data adjusted for seasonal effects, indices 2007 Q1 = 100)



Source: EC.

CHART 3 EMPLOYMENT ACCORDING TO THE SECTOR OF ACTIVITY

(data adjusted for seasonal effects, indices 2007 Q1 = 100)



Source: EC.

The wage moderation policy – involving constraints on conventional wage increases – that began in 2009 also contributed to enhancing the resilience of the economy. It helped firms to preserve their competitiveness by limiting cost increases, and ultimately contributed to the subsequent recovery. At the national level, the wage bargaining system in Belgium has wide coverage, but has recently been undermined by the difficulty in reaching agreements (see Box on wage formation). Its hierarchical structure also limits the adjustment capacity of firms in terms of wage policy, a feature that is well mirrored in the answers to the survey.

Otherwise, there has not been any radical reform of the labour market during the period under review. A good many of the measures taken were only of a temporary nature. However, changes has been recorded in many areas, such as more degressivity of unemployment benefits, the limitation of early exit from the labour market, increase in the retirement age and, albeit implemented in 2014, the harmonisation of blue- and white-collar status.

The macroeconomic environment over the period 2010-2013 is largely reflected in the answers given to the WDN survey. All in all, compared with other countries, Belgium has been characterised by relative stability, even though firms have been affected by the crisis to different extents depending on their characteristics. The WDN survey constitutes a unique opportunity to gain a better understanding of how firms were affected and how they reacted.

Box 1 – Wage formation in the private sector in Belgium

Private sector wage rises result from negotiations held successively at three levels: national, sector and firm level. These negotiations take place every two years within a characteristic institutional framework with an overall guaranteed minimum wage, with automatic indexation of employees' gross wages to a so-called "health index" (1) of consumer prices, as well as a wage norm (indicative or maximum, depending on the period) set at national level, according to the Law of July 1996 on the Promotion of Employment and the Preventive Safeguarding of Competitiveness.

At the national level, the wage norm constitutes a margin for the growth of nominal hourly labour costs in Belgian enterprises, taking into account expected nominal labour cost trends in the three main neighbouring countries (Germany, France and the Netherlands). In the absence of any agreement between social partners, the government can set the wage norm unilaterally, as has been the case since 2011.

In response to the crisis, no nominal wage norm was agreed for the two-year period 2009-2010. Pay increases, other than indexation and wage-scale adjustments, were set as one-off fixed amounts, which could not exceed € 125 in 2009 and € 250 in 2010. For 2011-2012, the wage agreement (which was enforced by the government) again allowed for a percentage hourly wage increase (0.3 % in 2012) on top of indexation and pay-scale adjustments, but the term "wage norm" was no longer used (2). For 2013-2014 and more recently for 2015-2016, the wage bargaining agreement was again enforced by the government. For 2013-2014, it did not allow for any increase in hourly employee compensation except for indexation and pay-scale agreements in order to help close Belgium's wage handicap with respect to the three main neighbouring countries.

At the individual sector level, real wage increases are negotiated in the joint committees (3) organised per sector of economic activity (the number of joint committees exceeding 100), at the beginning of odd years, and with an agreement concluded in principle in the first half of the year. The outcome of these sector-specific negotiations cannot undershoot the legally determined guaranteed minimum wage. However, it can possibly be supplemented within agreements concluded at the firm level. Although such firm-level agreements have gained in importance, Belgium is traditionally regarded as a country where wages are predominantly determined at the intermediate (sector) level, as opposed to countries with more centralised or decentralised wage formation.

(1) National consumer price index, excluding products considered to be a health hazard (hence the name): alcohol, tobacco, petrol and diesel.
(2) This implies that the all-in clauses became irrelevant because they are based on the surpassing of the nominal wage norm.
(3) They are called joint committees ('comités paritaires'), because employers and employees share an equal representation in them.

3. Firms' reactions and wage adjustments

Different types of shocks

This section sets out how firms qualify the sources and size of shocks that affected them during the period 2010-2013. That period has been chosen so as to include the sovereign debt crisis, even though it is not explicitly mentioned in the survey. In Belgium, this period was not marked by very large employment effects, except in the manufacturing sector.

When asked how five different factors linked to prevailing economic conditions affected their business activity, firms indicated that "customers' ability to pay" and "level of demand" had the strongest negative effect on their activity in the period 2010-2013. This was particularly the case for firms from the manufacturing sector. "Volatility/uncertainty of demand" was also mentioned as a negative factor, but a larger share of firms indicated no effects or positive effects. This was also the case for "access to external financing" and "availability of supplies", even though the share of firms experiencing a positive impact was much lower, with the vast majority reporting no effects at all. Interestingly, the larger the company's size (in terms of number of employees), the smaller the perceived negative effect of "access to external financing", confirming the assumption that smaller firms are more sensitive to credit constraints.

TABLE 2 ECONOMIC CONDITIONS AND EFFECTS ON FIRM ACTIVITY IN THE PERIOD 2010-2013
(in %)

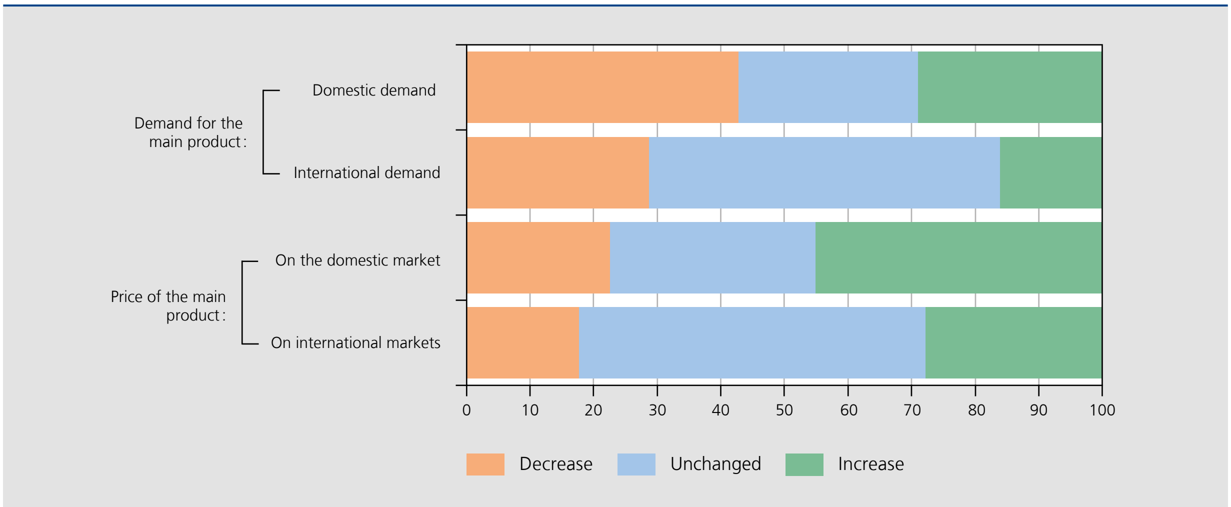
	Type of effects (1), share of firms reporting			Degree of persistence, share of firms reporting		
	Negative effects	No effects	Positive effects	Transitory effects	Only partly persistent effects	Long-lasting effects
Level of demand	51	20	28	19	39	41
Volatility / Uncertainty of demand	35	42	23	22	42	35
Access to external financing	24	67	10	36	38	27
Customers' ability to pay	51	41	8	23	41	36
Availability of supplies	22	74	4	36	37	27

Source: NBB.
(1) Negative effects are defined as the sum of strong decrease and moderate decrease. Positive effects are defined as the sum of moderate increase and strong increase.

As for the temporary or persistent character of the shocks affecting the five different factors linked to prevailing economic conditions, most answers tended to suggest transitory or only partially persistent shocks. However, the factors generating the most negative effects were also those where the impact seemed the most long-lasting, namely "customers' ability to pay" and "level of demand", and again this was more marked in the manufacturing industry. A further, complementary analysis shows that negative effects are considered as less transitory and more persistent, and that this is even more so in the manufacturing sector.

Firms were also asked to assess price and demand trends for their main product in the period 2010-2013, and that assessment tended to differ according to the market considered. On the domestic market, a large share of firms suffered a fall in demand, but a large proportion also recorded price increases. On their foreign markets, however, demand and prices remained more often unchanged (for 6 out of 10 firms). When considering only firms that needed to adapt their labour costs during the crisis, a majority experienced a drop in demand, irrespective of the market, and more price changes (more price cuts on both markets, but also more price rises on foreign markets).

CHART 4 PRICE AND DEMAND TRENDS IN THE PERIOD 2010-2013
(in %)



Source: NBB.

TABLE 3 TREND IN TOTAL COSTS AND THEIR COMPONENTS IN THE PERIOD 2010-2013

(in %)

	Share of firms reporting		
	Decreasing	Unchanged	Increasing
Total costs	**11**	**14**	**75**
Labour costs	8	14	78
Financing costs	21	50	30
Cost of supplies	6	53	41
Other costs	5	52	43

Source: NBB.

How did firms react?

Over the period from 2010 to 2013, most companies recorded rising costs, which is generally explained by an increase in labour costs. This is the case regardless of the firms' size, although the proportion of firms mentioning a rise in their labour costs increases with size. In order of importance, other costs and supply costs also played a role. A rise in borrowing costs was also reported by 30 % of firms, but it is interesting to note that more than 20 % said their funding costs had come down. There is not much variation in replies to this question from one sector to another, except in industry, which more often mentions a rise in the cost of supplies and other costs.

By combining the replies received about movements in costs with those concerning shocks that firms have been affected by, it is possible to make assumptions about the strategies that they have used to cope with these times of crisis.

Based on this indirect approach, it transpires that, between 2010 and 2013, there were more firms whose business activity had been negatively influenced by one of the factors suggested in the questionnaire that recorded changes in their total costs. This is particularly the case for those that were hit badly by the level of demand for their product or by their customers' inability to meet contractual terms. Compared with firms that were less affected, this was generally reflected in less upward pressure on total costs, except in cases where the problem was the customer's inability to pay. In other terms, companies hit by the crisis more often than not had to resort to a

TABLE 4 ADJUSTMENT OF TOTAL COSTS AND LABOUR COSTS, ACCORDING TO THE TYPE OF SHOCK CONFRONTING FIRMS

(in %)

	According to the main types of shock: Firms affected negatively by the following factors:							
	Level of demand		Customers' ability to pay		Volatility / uncertainty of demand		Access to external financing	
	Yes (1)	No (1)	Yes (1)	No (1)	Yes (1)	No (1)	Yes (1)	No (1)
All firms	51	49	51	49	35	65	24	76
Changes in costs (2010-2013)								
Total costs								
Unchanged	9	19	10	18	12	15	15	14
Balance of replies up (2)	55	72	64	62	53	69	60	64
Labour costs								
Unchanged	11	17	13	15	12	15	13	14
Balance of replies up (2)	64	76	69	71	67	72	67	71
Financing costs								
Unchanged	48	51	42	58	47	51	35	54
Balance of replies up (2)	15	3	19	−1	20	3	32	2

Source: NBB.

(1) The Yes column gives the results for firms whose business activity has been negatively affected by the corresponding factor and the No column gives the results for those that have not been adversely affected.

(2) The balance of replies up is calculated as being the difference between the share of firms for which an increase (moderate or sharp) has been recorded and the share of firms for which a decrease (moderate or sharp) has been registered.

cost-cutting policy. This downward pressure on costs mainly concerned labour costs. But in all cases, firms that were badly affected by the crisis, for whatever factor mentioned, generally tended to record more increases than decreases in their financing costs. This is all the more true for firms confronted with a problem of access to external financing. Analysis of data taken from the Central Balance Sheet Office confirms that small firms whose risk profile deteriorated during the recession – those that are the most sensitive to the crisis – registered unfavourable developments in terms of loans granted.

The survey also helps to gain a better understanding of the components behind labour cost trends and, consequently, to decipher companies' responses in this area more accurately. These costs depend both on the volume of labour used as an input (number of employees, number of hours worked, etc.) and on the remuneration of the factor labour by the company. It turns out that (almost) no Belgian firms at all reported wage cuts during the period 2010-2013, a rather peculiar situation from an international perspective since wage reductions of varying degrees were recorded in all the other countries that took part in the survey. Although about 22 % of firms answered that they had kept base wages broadly unchanged in the period 2010-2013, the share of firms that explicitly mentioned having frozen wages in one of those four years is lower, at around 10 %. It was 5 % in 2010 and 2011, and rose to 9 % in 2013, essentially the same as during the 2009 crisis. The construction sector was slightly less likely to freeze or cut wages, whereas the opposite is true for trade. This was also the case in the first WDN survey in 2007, when 5 % of the firms questioned indicated that they had resorted to a wage freeze at least once during the 5 previous years (1 % did actually cut wages). Most firms do tend to avoid base wage cuts because of the belief that this would result in a reduction in morale or effort and the danger that the most productive workers would leave as a consequence. Another important factor, particularly relevant for Belgium, is the role of labour regulations and of collective bargaining agreements that limit the use of this option.

TABLE 5 FIRMS REPORTING WAGE CUTS OR WAGE FREEZES
(in %)

	Wage freezes	Wage cuts
At least once in the period 2010-2013	10.3	0.3
of which:		
in 2010	5.4	0.2
in 2011	4.8	0.0
in 2012	6.6	0.0
in 2013	9.1	0.3
p.m. During the period 2004-2008 (1)	*5.1*	*1.0*
During the 2009 crisis (2)	*8.7*	*0.5*

Source: NBB.
(1) 2008 WDN1 survey.
(2) 2009 WDN2 survey.

Apart from base wages, firms can adapt the variable wage component. Only half of the firms questioned in the survey said they had not changed this component of remuneration. If a distinction is made between firms that were hit badly by the crisis and those that were not, we note paradoxically that base pay rises are more common in firms negatively affected by the crisis (with the exception of cases where that results from access to external finance), while, as far as the variable wage component is concerned, this is, on the contrary, not usually the case. More firms actually keep these benefits unchanged and, when they do adjust them, relatively fewer companies tend to increase them.

A majority of firms hit by a negative shock that are seeking to cut their costs, and more specifically their labour costs, are managing to do so for the variable wage component – an element over which they have more control – but not for base wages, which are more heavily dependent on institutional wage formation in Belgium. So, one may wonder whether the wage-setting is appropriate in these firms that are confronted with a greater need for adjustment. One hypothetical explanation for this kind of situation could be that, the worst affected firms would be more likely to reduce the less-skilled portion of the staff and only keep on the highly-skilled employees, who would then rise more quickly in the pay and promotion scales. The argument that firms are more likely to keep on senior employees who have been there much longer (and who are therefore relatively more costly, and more expensive to lay off) also tends to go against economic logic generally associated with firms undergoing restructuring. However, to assess the assumption of inadequate wage formation regulations for the firms in question, more extensive research will need to be done.

Inevitably, cutting wage costs in a situation where base wages are generally on an upward trend implies a reduction in the volume of labour, via cuts in permanent jobs, forms of temporary work, or in the number of hours worked. At an aggregate level, the proportion of companies recording respectively increases and decreases

TABLE 6 ADJUSTMENT OF LABOUR COSTS, ACCORDING TO THE TYPE OF SHOCK CONFRONTING FIRMS

(in %)

	According to the main types of shock: Firms affected negatively by the following factors:							
	Level of demand		Customers' ability to pay		Volatility / uncertainty of demand		Access to external financing	
	Yes (1)	No (1)	Yes (1)	No (1)	Yes (1)	No (1)	Yes (1)	No (1)
Changes in labour costs by component								
Base wages								
Unchanged	19	24	17	26	20	23	27	20
Balance of replies up (2)	79	75	81	73	78	77	70	79
Variable wage component (bonus, etc.)								
Unchanged	54	46	47	52	55	47	62	46
Balance of replies up (2)	42	53	49	45	40	51	34	51
Number of permanent employees								
Unchanged	42	43	44	40	49	39	46	41
Balance of replies up (2)	–32	32	–9	8	–26	13	–17	4
Number of temp agency workers								
Unchanged	72	80	74	78	77	75	70	78
Balance of replies up (2)	–3	10	1	6	–5	8	–9	7
Number of hours worked per person								
Unchanged	61	81	65	77	62	76	70	71
Balance of replies up (2)	–16	6	–10	0	–11	–2	–12	–3

Source: NBB.

(1) The Yes column gives the results for firms whose business activity has been negatively affected by the corresponding factor and the No column gives the results for those that have not been adversely affected.

(2) The balance of replies up is calculated as being the difference between the share of firms for which an increase (moderate or sharp) has been recorded and the share of firms for which a decrease (moderate or sharp) has been registered.

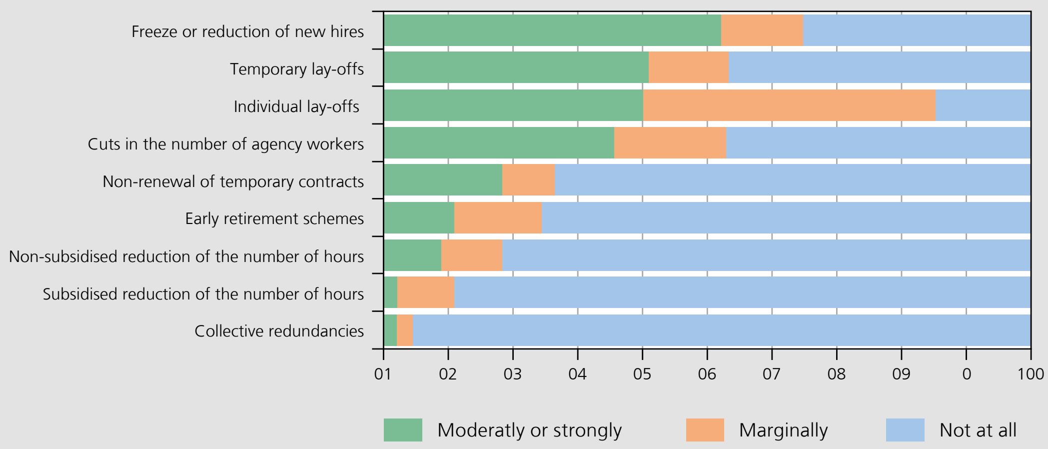
in permanent employment is identical, that is, roughly a quarter of all firms questioned in each case, with the others – more than 40 % – not reporting any change in their staff. This is quite consistent with the absence of any massive impact on employment at the macro-economic level (see above). However, firms that were badly affected by the crisis on average tend to show almost systematically more decreases than increases for the different components of the volume of labour, while this is hardly ever the case for the others. The relative decline in the number of permanent employees is significant, especially in the case of firms affected by a demand-level shock. This downward pressure is also exerted on the more flexible inputs (in terms of hours worked and temporary jobs), albeit to a lesser extent.

This indirect approximation of firms' reactions is confirmed by an analysis of more direct questions about their strategies, for example when they were asked whether they had to cut their wage costs over the period 2010-2013. Cross-matching their replies with answers to the questions about the shocks they have had to absorb reveals that those companies that needed to cut wage costs the most, i.e. almost one-third of the total, were more likely to have endured more substantial negative shocks in terms of level of demand, volatility of demand and access to financing. This also suggests that more attention should be paid to relationships between the various different types of shock in future research work, notably as far as external financing constraints are concerned. The degree of shock persistence is also higher for firms that have had to adapt their wage costs the most, with the notable exception of shocks with access to external financing, which generally seemed to be more short-lived.

To a large extent, these observations corroborate the conclusions drawn from the first wave of the survey in 2007, when firms had been questioned directly about their reactions to different hypothetical shocks. Here too, it was implied that cost-cutting efforts were mainly channelled through employment, especially in large

CHART 5 MEASURES TO REDUCE LABOUR INPUT USED BY FIRMS ANSWERING THAT THEY NEEDED TO SIGNIFICANTLY REDUCE OR ALTER THE COMPOSITION OF THEIR LABOUR INPUT DURING THE PERIOD 2010-2013 (i.e. 32 % OF THE TOTAL NUMBER OF FIRMS)

(in %)



Source : NBB.

enterprises, that is, by focusing on the number of permanent workers and, to a lesser extent, on temporary jobs.

Broken down by branch of activity, the findings confirm the "sector effect" observed at the macroeconomic level. In industry and, construction, just as in the trade sector, the results effectively show a large proportion of replies indicating a bigger drop in the number of permanent jobs, number of hours worked and, albeit to a smaller extent, the number of temporary and agency jobs.

For firms that declared having to reduce their labour input in volume terms, the most widely used measures to do so were the freezing or reduction of new hires, followed by the use of temporary lay-offs, notably in the manufacturing and the construction sectors. This last measure is generally regarded as a key feature of the relative resilience of employment in Belgium during the first phase of the crisis. Individual lay-offs and cuts in agency workers were also important tools for firms that needed to adapt their labour input. Non-renewal of temporary contracts upon expiry, reduction of working hours[1] and early retirement schemes were also used, although to a lesser extent. Collective redundancies were used only marginally in our sample.

(1) In Belgium, reductions in working hours generally refer to so-called time-credit schemes (that can be subsidised or not) or voluntary part-time work. They are not related to temporary lay-off measures. However, a specific "crisis time-credit" scheme (working time reduction of 1/2 or 1/5th) was temporarily introduced during the period 2009-2010 but concerned only 3 000 people.

By combining answers on whether firms had cut or frozen wages and answers on their need to reduce their labour input or alter its composition, it is possible to illustrate which combination was used the most often to reduce labour costs. About 40 % of firms used one of the two strategies, or the two together. The most widely used option was the reduction in labour input (31 %), while only 11 % applied a wage freeze for at least one year within the 2010-2013 period. The centralised nature of the wage-setting system in Belgium is probably a factor explaining the relatively infrequent use of wages as adjustment variables. Only a very small proportion of firms used the two strategies together (3 %).

TABLE 7 REDUCTION OF LABOUR COSTS: RELATIVE IMPORTANCE OF WAGES AND LABOUR INPUT

(in %)

	Reduction of labour input	No reduction of labour input	Total
Wages were frozen or cut	3	8	**11**
Wages were neither frozen nor cut	31	58	**89**
Total	**34**	**66**	**100**

Source: NBB.

TABLE 8 CHANGES IN COLLECTIVE WAGE AGREEMENTS

(in %, excluding never/not applicable)

	Total	Industry	Construction	Trade	Business services	Financial institutions
More than once a year	**9**	2	33	4	6	0
Once a year	**31**	34	18	36	33	13
Between one and two years	**15**	9	7	9	25	25
Every two year	**28**	39	24	23	25	50
Less frequently than once every two years	**18**	15	18	27	12	13

Source: NBB.
p.m. Never / Not applicable represents 51% of total answers.

Wage formation

Concerning the way collective wage bargaining agreements influence wages, a majority of firms answered "Never/Not applicable", and excluding these, 18% of firms indicated that wage agreements change less frequently than once every two years. However, as mentioned in section 2, this finding seems to be in contradiction with the institutional framework, which implies a very large coverage (about 90%) of workers by the national agreements which are revised every two years. Moreover, in the first WDN survey in 2007, 98% of firms mentioned that they were covered by a joint committee (in which wage agreements are generally concluded on the same two-year basis), and more than a quarter had a collective agreement at the level of the company. One explanation for this inconsistency could be that in the periods 2011-2012 and 2013-2014 the national draft agreements, which had not been approved by all social partners, were nevertheless enforced by the federal government. Respondents might have considered this as a sign that there was no formal "agreement" even though a wage policy with all the features of an agreement was actually in force. Finally, some of the firms surveyed might have used the option "Never/Not applicable" to indicate "Don't know".

Among the firms that mentioned a high frequency for collective wage agreement changes, there seems to be some variation depending on the sector: industrial firms tend to adapt collective agreements more on a yearly basis as is the case for companies in trade and business services, while those from the construction sector change more often than once a year. Financial institutions tend to change less often, generally once every two years.

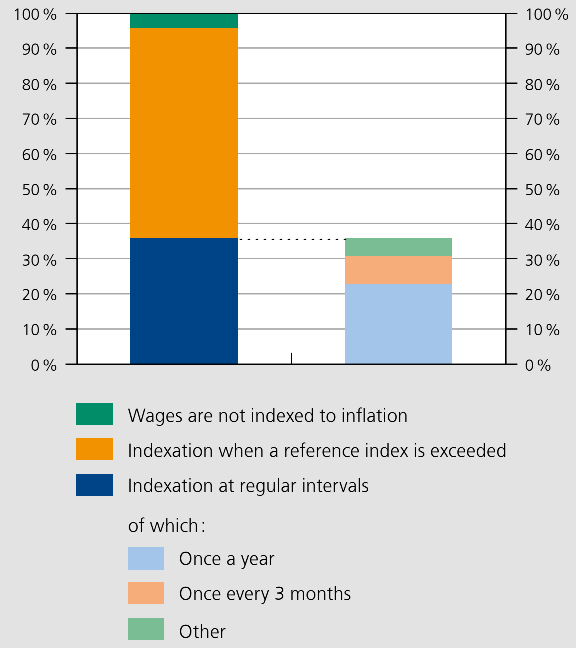
One specific feature of wage-setting in Belgium is the automatic index-linking of wages to a so-called 'health index' of consumer prices. How the indexation is actually applied depends on the mechanism chosen by the relevant joint committee for each firm/worker.

There are two large groups of systems: in the first one, wages are index-linked at the moment the health index four-month moving average exceeds a reference index. This system is used in the civil service based on increments of 2%, granted with a two-month time lag from the reference index overshoot. In the private sector, many variants coexist in terms of increments and reference index, so wage indexations are not necessarily synchronised. Systems of this type are more popular in industry.

In the other type of system, index-linking takes place at fixed intervals, either monthly, every two months, quarterly, every four months, half-yearly or, the most common frequency, on an annual basis.

The first system (indexation when a reference index is exceeded) is applied in about two-thirds of the firms in our sample, compared to one-third for the second system (indexation at regular intervals), a finding that is totally in line with results from the first WDN survey in 2007. However, data from administrative sources indicate the opposite proportion. This is not necessarily incompatible with the surveys as administrative sources refer to the private sector as a whole (also including sectors not covered by the survey) and are expressed in terms of employee numbers rather than number of firms (when weighted in terms of employees, the survey results tend to show similar proportions to the administrative data). The most common form of indexation at regular intervals is once a year, which is also what other sources reveal. This is particularly so in business services. It is

CHART 6 WAGE INDEXATION SYSTEMS
(in %)



Source: NBB.

also relatively widespread in the construction sector, albeit with a preference for index-linking every three months.

As expected given the presence of indexation mechanisms, base wage changes are more frequent than collective wage agreement changes. All the same, about 20 % of firms still say that base wages are changed every two years or even less frequently, which seems very infrequent. Moreover, that proportion increased somewhat (excluding the answers "Never/Not applicable") in 2010-2013 compared with the period before, even though at the same time the share of firms indicating high-frequency wage change (more than once a year) also increased. A similar question was included in the first WDN survey in 2007, which indicated a significantly higher frequency of base wage changes. The question formulation was quite different and stressed factors like indexation or seniority, which were not explicitly mentioned in the new survey. It is for instance not clear whether, in the new survey, firms interpreted changes resulting from the implementation of the indexation mechanism as a change in the base wage. If this is not the case, it would explain why the results are biased towards less frequent wage changes.

As for sector specificities, the replies concerning the frequency of base wage changes in business services is concentrated on the answer "once a year", and this is also partly the case in the construction sector for which "more than once a year" is even more common. These results correlate partly with the indexation frequency for these sectors. Nevertheless, it is hard to understand why the industrial sector is characterised by a higher share of firms responding "Never/Not applicable".

Intriguingly, when asked whether some measures, out of ten different suggested human resources policies, had become more or less difficult to apply than back in 2010, a sizeable share of firms (between 20 and 50 %) mentioned that these measures had become more difficult to implement. However, there are no obvious direct explanatory factors for this increased difficulty either in terms of institutional or labour market reform in Belgium. One possible reason might be that the wage moderation policy has left less room for flexibility at the firm level, especially to differentiate wages between workers. This probably explains in part why adjusting wages of incumbent employees is the policy that a larger proportion of firms considered more difficult to put into practice than before, especially in business services and trade. Other factors might relate to the reforms of early exit from the labour market schemes or the unification of blue- and white-collar status (although implemented in 2014), measures that could be perceived by firms as indirectly affecting their flexibility.

It is worth noting that, across sectors, a large consensus is emerging as to the policies that did not become more difficult to implement: temporary lay-offs for economic reasons, moving employees across different job positions, or moving employees to positions in other locations. At the other end of the spectrum, there is not a lot of divergence either, even though in industry and construction,

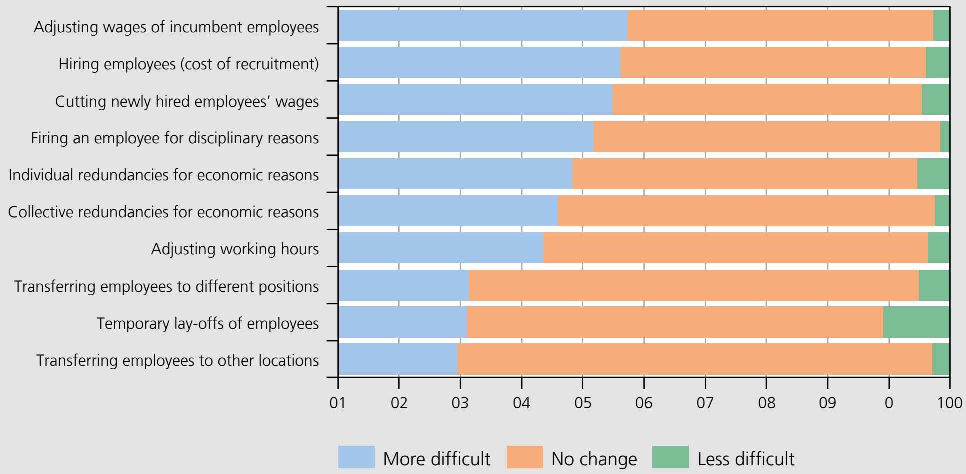
TABLE 9 FREQUENCY OF BASE WAGE CHANGES
(in %)

	Before 2010	During 2010-2013
More than once a year	13	16
Once a year	35	33
Between one and two years	15	13
Every two year	5	7
Less frequently than once every two years	15	15
Never / Not applicable	17	16

Source: NBB.

CHART 7 HAVE SOME HR POLICIES BECOME MORE OR LESS DIFFICULT TO APPLY THAN IN 2010?

(in %)



Source: NBB.

dismissals and lay-offs were also among the human resources policies that were considered more difficult to implement, as well as lowering the wages for new hires.

Obstacles to hiring new staff

Recruiting and setting lower wages for newly hired employees feature among the policies that many firms claim have become more difficult to pursue than in 2010, although a small majority of companies said they had not seen any significant change. For firms needing to expand their workforce or alter the composition of their existing workforce, this can be an important impediment to the development of their business activity. The main obstacles to hiring new workers on permanent contracts are in fact high payroll taxes and high wage levels, as well as firing costs. For these three aspects, Belgium ranks among the most expensive countries: in 2013, it had one of the highest wage levels, and a heavy tax burden on labour. According to a survey[1] conducted by a private consulting firm, Laga, Belgium is amongst those countries with the highest firing costs. Moreover, when comparing the situation in 2010-2013 with that before 2010, the cost of newly hired workers is more often cited as being higher than the cost of incumbents, and is also more rarely cited than before as being lower, indicating that the relative average cost of new hires compared to incumbents is rising[2]. This is a common feature observed in the different sectors,

(1) See http://www.laga.be/newsroom/whats-new-about-laga/International-Dismissal-Survey-2015.

(2) The harmonisation of the legislation between blue-collar and white-collar workers might also raise the perceived cost of new hires (abolition of the trial period for open-ended contracts, etc.), but it was only brought into force in January 2014, despite having been negotiated in 2013.

TABLE 10 OBSTACLES IN HIRING WORKERS WITH A PERMANENT, OPEN-ENDED CONTRACT IN THE PERIOD 2010-2013

(in %)

	Not relevant	Of little relevance	Relevant or very relevant
High payroll taxes	5	11	84
Uncertainty about economic conditions	7	13	80
High wages	6	15	79
Insufficient availability of labour with the required skills	8	18	74
Firing costs	12	16	72
Risks that labour laws are changed	11	30	60
Costs of other inputs complementary to labour	21	34	45
Hiring costs	16	40	44
Other	54	15	31
Access to finance	35	39	27

Source: NBB.

but is particularly evident in the construction sector. Putting these findings into perspective with the large proportion of firms considering insufficient availability of labour with the required skills as a relevant or very relevant obstacle to hiring might indicate a growing degree of labour mismatch. As a result, one of the alternative policies favoured by firms to reduce labour costs, according to the first WDN survey, namely the policy of replacing incumbent employees who had left voluntarily with newly hired employees, has probably become less effective.

The other most relevant obstacles to hiring mentioned by the companies surveyed are uncertainty about economic conditions – the first factor mentioned by firms in industry as well as by those that needed to adjust their labour costs – and risks of labour laws changing. It is interesting to note that access to finance is one of the less relevant factors for many firms, even though more than a quarter still single it out as a relevant or very relevant obstacle.

TABLE 11 PRICE-SETTING POLICY
(in %)

	Domestic market	Foreign markets
The price is set entirely on the basis of costs and a pre-determined profit margin . . .	37	37
The price is negotiated with each customer	25	29
The price is set in accordance with the main competitors' prices	22	20
There is no autonomous price-setting policy	13	12
Other	2	2

Source: NBB.

4. Price adjustments

This part of the article comments on the survey results concerning the questions on setting and adjusting prices. This is an optional section of the harmonised questionnaire, in that each participating country could choose whether or not to include it in the national questionnaire. The objective here is to assess how price adjustment has been affected by the new economic environment.

When asked how they set the prices of their flagship products, more than a third of the companies surveyed replied that they could fix prices entirely on the basis of costs and a pre-determined profit margin, which tends to suggest a relatively dominant position on their market. For between one-quarter and one-third of all firms questioned, prices were negotiated with each customer. And one-fifth of the respondents declared that prices were fixed depending on their principal competitors, a particularly important strategy in the trade and business services sectors, and even more so in the financial intermediation sector, where this is by far the main price-setting policy. Overall, the vast majority of firms reported some degree of autonomy when it comes to price-setting. Only slightly over 10 % of them had not been able to follow an independent policy, mainly because the price is regulated (notably in the case of the business services sector or for non-exporting companies) or because it is set by the principal clients, and less often because it is fixed by a parent company. There are no major differences in importance between the domestic market and foreign markets, except for construction and business services sectors, which rely more on negotiating prices with each customer on foreign markets.

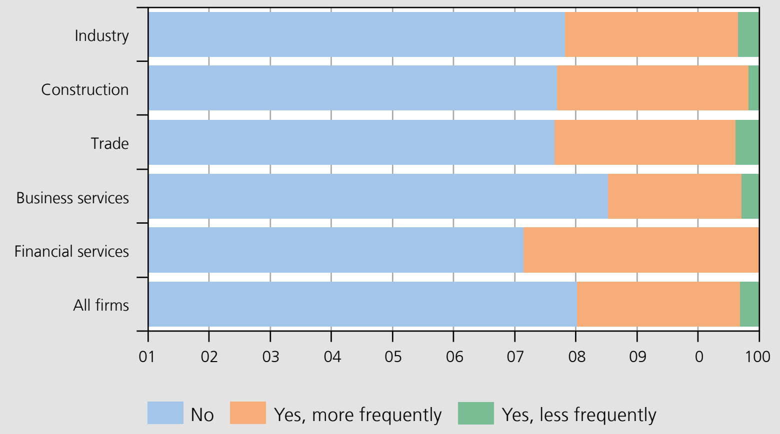
With regard to the frequency of price changes, most firms from the business services sector tend to change their prices once a year or less than once a year, while in the manufacturing, construction and trade sectors, most of them adjust their prices more than once a year. For all companies taken together, the most common frequency of price changes is once a year, followed by more than once a year. This observation confirms the findings of the first WDN survey carried out in 2007, taking account of the fact that the question formulation was not the same: this survey did not offer the "Don't know" option, which probably explains the higher proportion of firms recorded as replying "Never" at the time.

Compared with the pre-2008 period, more than a quarter of the firms surveyed tended to change their prices more often over the 2010-2013 period. But this was not so much the case for the business services sector as for the other sectors. This suggests that the price-setting mechanism in the business services sector may have specific features, for instance in terms of competition or market organisation, that differ from the average.

The firms surveyed were also asked to select and rank in order of importance the reasons behind changes in the frequency of price adjustments. The key motives cited to explain more frequent price adjustments are related to competition, either because it had got much tougher, or because the main competitors had changed their prices more often. Three-quarters of the firms surveyed reported that competitive pressure on the market for their main product was stronger than before 2008, and that goes for both domestic and foreign markets. Changes in costs and volatility of demand are also regarded as important explanatory factors for the higher

CHART 8 CHANGES IN THE FREQUENCY OF PRICE ADJUSTMENTS

(proportion of firms indicating a change during the period 2010-2013 from the pre-2008 period, in %)



Source: NBB.

frequency of price changes, but not so important as competition. As for the elements cited as justifying a drop in the frequency of price changes, a much less common situation according to the survey, more subdued competition is the key factor mentioned by companies, while fewer changes in costs and less volatile demand play a more minor role.

One general observation is that firms facing heavier competitive pressure also mentioned that their business activity had been very adversely affected (for at least one of the five factors proposed by the questionnaire). Those whose business suffered in this way are also much likely to have changed the frequency of price adjustments compared with the pre-2008 period. 40 % of them reported this, compared with 25 % for those whose business activity was less badly affected. This suggests that, besides wage policies and strategies for adapting labour input, price adjustment policy also played a role in companies' own adjustment process over the period 2010-2013.

Conclusion

The article describes the main results of the survey conducted in 2014 on wage formation and on price adjustments within companies over the period from 2010 to 2013. This is a survey carried out within the framework of the Wage Dynamics Network (WDN), an ESCB research project network.

TABLE 12 REASONS FOR CHANGES IN THE FREQUENCY OF PRICE ADJUSTMENTS

(proportion of firms regarding this factor as important or very important)

Higher frequency of price adjustments		Lower frequency of price adjustments	
More frequent price changes by the main competitors	77	Less frequent price changes by the main competitors	61
Fiercer competition on the market for main product	79	Less competition on the market for main product	49
More frequent changes in costs of other inputs	58	Less frequent changes in costs of other inputs	44
More volatile demand	52	Less volatile demand	37
More frequent changes in labour costs	46	Less frequent changes in labour costs	31

Source: NBB.

Generally speaking, the lessons drawn from this analysis tend to confirm the already known features of the Belgian labour market and its institutional set-up. They also provide unique insight into the way in which firms perceive the labour market and how they react to the crisis. For instance, they reveal that the most negative impact on their business activity over the period from 2010 to 2013 came from the level of demand and customers' inability to pay and meet contractual terms. Although companies point out that there has not been any widespread rationing of credit (borrowing constraints were not cited as a major source of adverse impact), this is still a significant factor, especially for some small firms.

Companies are adapting via different channels. As far as the price channel is concerned, business strategies show quite a high degree of autonomy, which is nevertheless limited in practice by ever-increasing competitive pressure. This probably goes some way towards explaining the accelerating frequency of price adjustments, although this is only observed among a minority of companies. Costing policies are another channel that firms can use. They say they generally tend to be confronted with rising costs, in particular wage costs. The two main components of these costs are the volume and remuneration of labour.

When it comes to adjusting the volume of labour, the proportion of companies recording respectively increases and decreases in permanent employment is the same at aggregate level. This is in line with the absence of any massive impact on employment at the macroeconomic level. However, firms whose business activity has been adversely affected on average tend to show almost systematically more decreases than increases for the various components of the volume of labour, while this is almost never the case for the others. The survey also confirms that the use of temporary lay-offs was also an important factor in explaining the resilience of employment in Belgium.

As for the remuneration of labour, the survey confirms that, in the context of wage moderation, there have been almost no wage cuts at all. This is a feature, linked to the wage-setting process in Belgium, that is not seen nearly so much in the other European countries. Companies also emphasise the fact that tax and wage levels are major obstacles to hiring new staff, just like the uncertainty that is tainting the economic situation. Measures designed to reduce these barriers, such as the labour-cost-cutting measures taken by the federal government as part of the tax shift, would therefore help to alleviate this constraint. Strategies seeking to reduce uncertainty would also appear to be adequate, especially since a large proportion of firms share the perception that the labour market may have become less flexible, a sentiment that nevertheless does not seem to be explained by regulatory changes or reforms to the institutional framework in Belgium.

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