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EDITORIAL

The price stability achieved by central banks in the last twenty years has fostered a growing debate about the costs associated with low inflation. If wage cuts are rare in the economy and inflation is low, unemployment is higher, as the price level does not facilitate relative wage adjustment. Wage and price determination practices are also important for the transmission of monetary policy as well as external shocks into the economy.

This edition of the Research Bulletin is devoted to the issue of wage adjustment in Europe, based on three articles produced within the European Central Bank Wage Dynamics Network working group. The articles summarise results from a harmonised firm-level survey on wage and price setting conducted in 15 countries of the European Union.

The first article describes the results of the survey in the Czech Republic. It shows that wage changes are more likely to reflect past than expected inflation and are concentrated mainly in first months of the year. The other articles deliver evidence on wage-setting practices across Europe. While the second paper focuses on reasons for downward nominal and real wage rigidities, the third paper investigates wage-setting practices of newly hired employees. The results in both articles are consistent with theoretical models of wage determination. The extent of wage rigidity in the case of existing and new employees depends *inter alia* on institutional factors.

Kamil Galuščák

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Based on a survey at the firm level, we investigate the determinants of wage and price-setting practices in Czech firms, the presence and sources of wage rigidity, and reactions of firms to hypothetical shocks. Although the evidence of downward wage rigidity is not widespread, we find that efficiency wage models are of particular relevance for wage rigidity, while implicit contract theory is relevant in firms employing mainly high-skilled labour. The survey further suggests that prices are less rigid than wages, while the link between wage and price changes is weak.

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It has been well established that the wages of individual workers react little, especially downwards, to shocks that hit their employer. This paper presents new evidence from a unique survey of firms across Europe on the prevalence of downward wage rigidity in both real and nominal terms. We analyse which firm-level and institutional factors are associated with wage rigidity. Our results indicate that wage rigidity is related to workforce composition at the establishment level in a manner that is consistent with related theoretical models (e.g. efficiency wage theory, insider-outsider theory). We also find that wage rigidity depends on the labour market institutional environment.

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Using a firm-level survey on wage and price-setting procedures from 15 EU countries, we find that external labour market conditions are less important than internal (within-firm) factors in the setting of wages of newly hired workers. When explaining their choice firms allude to fairness considerations and the need to prevent a potential negative impact on effort. Despite the lower importance of external factors, cross-country differences depend on institutional factors, while within-country differences are found to depend on firm and workforce characteristics.

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Survey on Wage and Price Formation of Czech Firms

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Labour markets are characterised by different types of frictions stemming from various sources, such as a high degree of regulation, specific institutions and skill mismatch. As a result, the real-life operation of the labour market seems to be far from the textbook models of a competitive labour market. In particular, the price of labour does not adjust immediately in response to changing labour market conditions. For example, wages often fall too little even when unemployment is high. As a result, even in a recession, workers' displacement and a reduction in the number of hours worked tend to be more prevalent than wage cuts. Various frameworks have been proposed to explain the rationale behind labour market frictions. For instance, Campbell and Kamlani (1997) stress the role of alternative factors such as morale, fairness in pay and adverse selection in quits as being crucial when analysing labour market development.

In practice, testing the empirical relevance of labour market theories and models which incorporate these factors is rather problematic, since commonly accessible statistics on wages and employment do not reveal the motives of employers and employees behind their decisions. Thus, several economists, such as Bewley (1995), Campbell and Kamlani (1997) and Franz and Pfeiffer (2006) interview company decision makers directly, in a quest to better understand labour market specifics. In general, different authors find support for different labour market theories depending on the types of economic activity and on the countries' particularities, such as national institutions and legislation. For example, Bewley (1995) and Campbell and Kamlani (1997), when analysing US firms, find strong support for the efficiency wage theory (the adverse selection and morale arguments), suggesting that employers are aware that a potential pay cut would adversely affect employees' effort and that the best employees would quit the firm. In addition, Campbell and Kamlani (1997) suggest that there is a stronger effect of wages on effort for less skilled and blue-collar workers. In Sweden, Agell and Lundborg (1995) find that wages do not fall even during a recession, because workers are concerned about fairness and relative wages ("fair wage-effort hypothesis").

Using a firm-level survey, we study in depth the features and sources of wage and price dynamics in the Czech Republic. The harmonised survey questionnaire is an outcome of a coordinated effort within the ECB Wage Dynamics Network working group. The questionnaire was developed by economists from national central banks, statisticians and external advisers to the ECB, and has been used in all euro area and other European countries. The Czech survey was conducted through regional branches of the CNB in autumn 2007.

The survey contains 41 questions, which are divided into four main parts. The first part focuses on wage-setting practices and on the frequency and timing of wage changes. It also collects information on how the wages of new workers are set relative to those of existing workers. The second part of the questionnaire addresses the issue of the presence of potential obstacles to downward wage adjustments and the reaction of firms to different unanticipated shocks. The third part of the questionnaire collects information on price-setting practices and the frequency of price changes. The aim of the last part of the questionnaire is to collect firm-specific characteristics, since different wage and price-setting practices are expected to be specific for diverse categories of firms. This part also asks questions on the structure of employees in terms of the type of work contract, firm age and worker tenure in the firm.

We find that 60% of firms adapt base wage changes to inflation, more so if there is a collective agreement, but less so in business services and in firms which use flexible wage components to a greater extent. This suggests that

1 This article is based on Babecký, Dybczak and Galuščák (2008).

firms with a higher share of bonuses in worker remuneration are less likely to adjust base wages to inflation. Next, individual wages are more likely to reflect past than expected inflation. In particular, among the firms adapting base wage changes to inflation, 56% of firms link wages to past inflation, while 44% of firms link wages to expected inflation. Firms applying a collective agreement and with a higher share of labour costs put more emphasis on expected inflation, while firms in construction, trade and services and firms with a higher worker turnover account for past inflation when changing base wages. Regarding the frequency of wage changes, a half of firms change wages due to inflation once a year, while only 6% of firms change base wages according to inflation more often than yearly. The frequency of base wage changes due to inflation is significantly higher for medium-sized and large firms, for firms in construction and for firms with a dominant high-skilled occupational group. On the other hand, the frequency of wage changes due to inflation is lower the more the firm uses bonuses in worker remuneration and in firms with a higher worker turnover. While 56% of firms change base wages in a typical month or months, large firms and firms applying a collective wage agreement are more likely to do so. Out of this 56% of firms, more than half change wages in January, while 20% change base wages in April.

Wages of newly hired employees mostly do not deviate from wages of similarly skilled workers in the firm. In particular, 67% of firms refer to wages of similar workers in the firm and 18% to collective agreements as the most important factor in determining wages of newly hired employees. On the other hand, external labour market conditions play only a minor role in determining entry wages. The presence of rigidity in setting wages of newly hired employees is also indicated in asymmetry of the responses on the determinants of entry wages when facing opposite labour market conditions. While 16% of firms would offer a higher wage when facing difficulties in hiring workers due to a shortage on the labour market, 10% of firms only would offer a lower wage when facing a labour market abundance. Fairness considerations and a negative effect on workers' effort are frequently cited reasons for not deviating entry wages from wages of existing employees, while collective agreements prevent firms from offering a lower wage in a labour abundance.

Next we examine firms' practices with price setting, price changes and the relationship between price and wage changes. Prices are in most cases determined competitively. While 38% of firms set prices following their main competitors, more probably in firms facing severe or strong competition and in firms employing mainly high-skilled labour, 77% of firms would decrease prices if their main competitor decreased its prices. This is more likely in trade, in firms with a lower share of labour costs, a higher share of bonuses in the total wage bill as well as higher gross flows, and, importantly, in firms facing a higher degree of competition. We further find that a third of firms claim there is no defined pattern for price changes. On the contrary, a regular scheme for changing prices is associated with the presence of collective agreements. The probability of adjusting prices regularly also increases when a firm generates a higher proportion of its revenues from sales in foreign markets.

We conclude from the survey evidence that prices are less sticky than wages, as base wages are typically changed in 6% of firms more often than yearly, while prices are changed in 23% of firms with the same frequency. Firms in construction and trade adjust prices more often. Furthermore, more than half of Czech firms state that base wage changes are concentrated in a particular month. Wage changes are most common in January. As in the case of wage adjustments, firms often revise prices in January. At the same time, more than 50% of firms declare that there is no link between price and wage changes, while about 25% admit that there is a link but no particular pattern. Our finding of January

changes in wages and prices contributes to the discussion of the role of monetary policy and its effects. As argued by Olivei and Tenreyro (2007), during the periods of wage setting (e.g. a month or so before the actual wage changes) monetary policy has, inter alia, a smaller impact on the real economy compared to the alternative periods of more rigid wages. In what follows, Czech monetary policy might be less effective at the end of the calendar year, when wages are largely negotiated, as compared to other months of the year.

We investigate the presence and sources of wage rigidity by examining firms' responses regarding the extent of wage rigidity and the reasons for cutting or freezing wages. In particular, while 8% of firms have some experience with wage cuts, base wages in 27% of firms have been frozen in the last five years, mostly due to a drop in profitability or sales, or unsatisfactory worker performance. The most common reasons preventing base wage cuts are increased worker quits and difficulties in hiring new workers and a negative impact on employees' effort and morale, while a collective agreement or implicit understanding that wages neither fall in recessions nor rise in expansions receives relatively less attention. The survey evidence thus indicates a widespread relevance of efficiency wage theory in explaining wage rigidity by a negative impact on productivity through reduced effort or morale. This is more relevant in firms with a higher share of bonuses in the total wage bill and in firms with a higher worker turnover. Another theoretical model for wage rigidity is the implicit contract theory, explaining that firms keep wages stable to avoid fluctuations in wages in the course of the business cycle. While this is relevant for half of firms, it is significantly more relevant in firms employing mainly high-skilled workers. Comparing our results with those reported for the United States (Campbell and Kamlani, 1997) and Germany (Franz and Pfeiffer, 2006), efficiency wage explanations for wage rigidity are more relevant in the Czech Republic, while implicit contract theory receives less attention than in Germany and the United States.

Finally, we explore the survey evidence on firms' reactions to hypothetical unanticipated shocks such as a slowdown in demand, an increase in the cost of an intermediate input (e.g. an oil price increase) and a permanent increase in wages affecting all firms in the market.[2] In all cases, firms mainly reduce other costs, while they are less likely to react by adjusting margins, output or prices. Other costs are reduced mainly through cutting non-labour costs and the number of temporary workers, while firms are less likely to react by reducing the number of permanent workers and eliminating bonuses. On the other hand, few firms would adjust the number of hours worked per employee when facing any of the three types of shocks, while no firm would reduce base wages when facing a slowdown in demand or an increase in the cost of an intermediate input.

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2 Note that these are firms' expected reactions to the hypothetical shocks firms were asked during the time of the survey, i.e. in September-October 2007. Firms' actual reactions to the actual shocks, in particular to the economic and financial crisis of 2008/2009, could be different.

Downward Nominal and Real Wage Rigidities

Jan Babecký, Philip Du Caju, Theodora Kosma, Martina Lawless, Julián Messina and Tairi Rõõm[1]

The success of central banks in achieving price stability during the last two decades has renewed the academic interest in the cost of low inflation. Following Tobin (1972), if workers resist nominal wage cuts a rate of inflation that is too low might result in higher unemployment, since increases in the price level facilitate relative wage adjustments. A sizeable literature identifies substantial resistance to nominal wage cuts in the US. The European evidence, led by the International Wage Flexibility Project (Dickens et al., 2007), suggests lower levels of downward nominal wage rigidity (DNWR) than those observed in the US, but higher resistance to real wage cuts, a feature labelled downward real wage rigidity (DRWR). While the behavioural determinants of DNWR have been extensively studied in the literature little is known about DRWR. Similarly, there is little evidence regarding the characteristics of firms that are typically associated with each type of rigidity.

Based on a unique firm-level survey carried out between late 2007 and early 2008 within the framework of the Wage Dynamics Network, we analyse the flexibility of wages across 15 countries of the European Union (EU). Our objective is to examine the extent and determinants of downward nominal and real wage rigidity.

Downward nominal wage rigidity (DNWR) is defined on the basis of the frequency of nominal wage freezes. Firms freezing nominal base wages at any point during the five-year period prior to the survey are considered to be subject to nominal wage rigidity. Downward real wage rigidity (DRWR) is defined on the basis of wage indexation. Firms that have an automatic link between nominal base wages and past or expected inflation are regarded as subject to downward real wage rigidity. Our survey-based measures of downward nominal and real wage rigidity are closely related to the alternative measures derived by earlier studies on the basis of the wage change distributions.

The survey used in the current article allows us to examine the extent of wage freezes in 15 European Union member states. The data on wage indexation is available for 14 countries.[2] Table 1 shows that indexation is much more prevalent in our data (17% of firms are affected) than wage freezes (only 10% of firms are affected), which is consistent with other evidence on wage rigidity in most continental European countries, as opposed to the US and the UK (see e.g. Dickens et al., 2007).

There are sizeable differences between the EU countries as regards the occurrence of wage freezes and the application of automatic indexation mechanisms. Wage freezes appear more common than average in the Czech Republic, Estonia and the Netherlands. They are considerably less common than average in Spain, Italy and Slovenia. Next, indexation mechanisms are especially prevalent in Belgium and Spain, whereas less than 5% of firms use indexation in Italy and Estonia. Overall, we find that the non-euro member states of the EU are more likely to experience wage freezes compared to the euro area member states, but that the reverse is true for indexation mechanisms. Note that almost all firms in Belgium apply automatic indexation mechanisms. This is caused by an institutionalised wage indexation process which covers all firms falling under the jurisdiction of a so-called "joint committee", i.e. a sector-level bargaining unit where wage negotiations take place. In our sample, 98% of Belgian firms belong to one of the more than 100 joint committees.

1 The article is based on Babecký et al. (2009, 2010).
2 The national questionnaire for the Netherlands did not include the section related to wage indexation.

TABLE. 1

Incidence of wage freezes and indexation mechanisms

Country	Wage freezes	Indexation	Country	Wage freezes	Indexation
Austria	0.13	0.10	Lithuania	0.20	0.11
Belgium	0.12	0.98	Netherlands	0.23	N/A
Czech Republic	0.27	0.12	Poland	0.10	0.07
Estonia	0.22	0.04	Portugal	0.15	0.09
France	0.07	0.10	Slovenia	0.03	0.24
Greece	0.13	0.20	Spain	0.02	0.55
Hungary	0.06	0.11	**Total**	**0.10**	**0.17**
Ireland	0.09	0.10	Euro area	0.09	0.20
Italy	0.04	0.02	Non-euro area	0.13	0.09

Source: Table 1 in Babecký et al. (2010).
Notes: The table presents the proportion of firms having frozen wages over the past five years and applying an automatic indexation mechanism. Figures are employment-weighted and rescaled to exclude non-responses.

We find that the incidence of both types of wage rigidity is quite substantial in Europe. Overall, the non-euro area member states of the EU are more likely to experience wage freezes compared to the euro area member states, whereas indexation mechanisms are more widely used in the euro area countries included in our sample.

Next, we analyse how DNWR and DRWR are related to a number of firm-level and institutional characteristics of labour markets in the countries covered by our sample. We employ the multinomial logit estimation method, which makes it possible to assess these relationships simultaneously for both types of rigidities. Our estimations indicate that country-specific factors appear to be significant determinants of downward wage rigidities and that institutional differences between countries are an important factor behind this finding. For example, high collective bargaining coverage is positively related with real wage rigidity, while the estimated relationship with nominal wage rigidity is insignificant. A possible interpretation of this finding is that unions have the capacity to provide their members with information about inflation expectations and explain the importance of maintaining the real income level to workers. Thus, union coverage reduces the prevalence of money illusion.

Analysis of the union contracts negotiated at different levels (firm-level versus higher-level bargaining contracts) implies that firm-level contracts are a more likely source of real wage rigidity in centralised wage-setting environments. However, there is a substantial degree of heterogeneity across countries regarding the impact of different types of union contracts. Another institutional aspect that influences wage rigidity is related to how difficult it is for employers to lay off workers. We find that nominal wage rigidity is positively associated with the extent of permanent contracts. In addition, permanent contracts have a stronger effect on wage rigidity in countries with stricter labour regulations.

Workforce composition also appears to play a significant role in the determination of wage rigidities. Both types of rigidity are positively correlated with the share of high-skilled white collars; downward nominal wage rigidity is positively related with employees' tenure in the firms under study. Both of these significant relationships are consistent with the implications of related theoretical models. In addition, we find that firms employing labour-intensive technologies are more likely to have rigid wages.

Finally, there seems to be a positive relationship between product market competition and downward nominal wage rigidity, although the results are dependent on the way competition is measured. A possible cause of this empirical result is that in highly competitive industries rents should be low, and therefore so should wages. This leaves smaller margins to reduce wages, because firms paying low wages that are closer to a collectively agreed or legislative minimum level have less flexibility than firms having a so-called wage cushion between the minimum and the actual wage bill.

Our findings of the patterns and determinants of wage rigidities in 15 European Union countries contribute to the discussion of the role of monetary policy and its effects. The analysis of the monetary policy implications of wage rigidities was motivated by the conclusions of the Eurosystem Inflation Persistence Network (IPN). One of the key results reported by the IPN was that there is a substantial degree of persistence in inflation, which needs to be taken into account when implementing common monetary policy. It was further suggested that in the current monetary policy regime inflation persistence may originate from wage rigidities. Similarly to the IPN's finding of heterogeneity in inflation persistence across European countries, our results indicate the presence of country-specific patterns of downward nominal and real wage rigidities. To the extent that rigidities and their variation across regions of a monetary union complicate the design of optimal monetary policy, policies that facilitate adjustment in the monetary union in the presence of imbalances may need to be considered.

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The Determination of Wages of Newly Hired Employees: Survey Evidence on Internal versus External Factors

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Micro studies of wage rigidity usually focus on wages of employees in ongoing employment relationships. On the other hand, the rigidity of wages of newly hired workers, defined as the absence of a deviation between the wage paid to new and the wage paid to existing employees, has been investigated less. This is so despite the importance of the matter for job creation and for the implications for employment and wage cyclicality (see *inter alia* Haefke et al., 2008; Gertler and Trigari, 2009; Pissarides, 2009). For example, de Walque et al. (2008) show that higher stickiness of wages of new hires leads firms to respond to shocks by adjusting employment more than in the case of more flexible wages of newly hired employees.

We add to the empirical literature on the wages of newly hired workers by using a rich firm-level survey on wage and price-setting practices in 15 EU countries.[2] The survey was developed within the Wage Dynamics Network (WDN), a European System of Central Banks research network studying wage and labour cost dynamics in the EU and their implications for monetary policy. The survey was conducted in each country once at some point between summer 2007 and spring 2008.

Our analysis of wages of new hires is based on interviews with firms' managers, who reveal the determining factors for setting wages of newly hired employees and also the reasoning behind their choice. Our approach thus allows for testing the importance of specific theories in wage determination which cannot be directly assessed using actual wage data. We address the following questions:

- What is the relative importance of external labour market conditions compared to internal (within-firm) pay structures in the determination of the wages of newly hired workers? The use of external labour market conditions is taken as a signal of lower stickiness of new hires' wages.
- Does the relative importance of external labour market conditions vary according to the prevailing labour market conditions?
- What reasons do firms report for preventing deviations of the wages of new hires from the wages of existing employees?
- Is there cross-country variation in the relative importance of external labour market conditions in determining hiring pay?
- In which type of firm is the relative importance of external labour market conditions in setting wages of newly hired employees higher?

The results, summarised in Table 1, reveal that on average only about a fifth (22%) of firms report that external labour market conditions (wages outside the firm, availability of workers on the labour market) are the most important factor in determining wages of newly hired employees, while 78% of firms rely on internal factors (collective wage agreement, wages of existing employees in the firm). This suggests that the stickiness of wages of newly hired workers is relatively high in Europe.

The reluctance of firms to follow labour market conditions in the determination of wages of new hires is even higher when asked if managers would change the wages of newcomers depending on whether the labour market is loose or tight. Only 16% of firms would offer a higher wage than that of existing employees with similar skills and experience if the labour market is tight. Furthermore, in a loose labour market only 13% of firms would offer a lower wage. In both hypothetical cases of a tight and loose labour market, firms report fairness considerations and the possible negative impact on effort as the main reasons for preventing the deviation of new hires' wages from the wages of existing employees in the firm. These findings

1 This article is based on Galuščák et al. (2009).

2 The sample covers Austria, Belgium, Czech Republic, Estonia, France, Greece, Hungary, Ireland, Italy, Lithuania, Netherlands, Poland, Portugal, Slovenia and Spain.

are consistent with Bewley (1999, 2007), who reports that firms are wary of the negative impact such a deviation of wages can have on workers' morale. In addition, there is a significant role for collective agreements and labour regulation in preventing a lower wage than the wage of incumbent workers being offered in a loose labour market.

TABLE. 1

Importance of external labour market conditions in hiring pay determination

Country	% firms
Austria	7.3
Belgium	14.0
Czech Republic	13.0
Estonia	32.0
France	32.5
Greece	26.5
Hungary	11.6
Ireland	26.9
Italy	13.1
Lithuania	41.6
Netherlands	12.3
Poland	50.5
Portugal	23.3
Slovenia	8.3
Spain	4.4
Total	**21.7**

Source: Table 4.1 in Galuščák et al. (2009).
Notes: The table presents the percentage of firms in each country which replied that external factors are the main factor determining hiring pay. Figures are employment-weighted.

There are substantial cross-country differences in the results from the survey. In Spain, Austria and Slovenia less than 10% of firms reply that external factors are the main factor determining hiring pay, while in Lithuania and Poland this is the case for more than 40% of firms. These cross-country differences may be explained by different bargaining structures. We find a negative association between the percentage of firms with a collective agreement and the percentage of firms reporting the main importance of external factors in determining hiring pay. A negative association is also found between collective agreement coverage and the use of external factors.

Notwithstanding cross-country differences, the evidence suggests that even within countries there is substantial variation in the degree to which external factors are important in determining hiring pay. In order to explain differences across firms, we focus on the potential role of firm, workforce and product market characteristics.

We find that firms in trade and business services use external factors to a greater extent than manufacturing firms. Compared to manufacturing firms, the probability of using external factors is 3.2 percentage points higher for firms in trade and 7.8 percentage points higher for business service providers. However, once firm and workforce characteristics are included, the role of sectors is no longer significant in explaining the use of external factors. The results further suggest that small firms appear to be more likely to use external factors.

The results support the Bewley hypothesis that external factors are used in the determination of the pay of new hires in secondary jobs.[3] Four results stand out. Firstly, external factors are used in firms with higher employee turnover, measured either by the size of gross flows in the firm or by the proportion of employees with tenure of more than 5 years. Secondly, we find a positive association between the skill level of employees and the use of external factors. The results suggest that in firms in which high-skilled white-collar workers are the dominant occupational group, the likelihood that external factors are more important is higher than in firms in which low-skilled blue-collar workers are the dominant group. Thirdly, the use of external factors is higher in firms facing more competitive

3 Bewley (1999) defined secondary jobs as short-term and part-time, while primary jobs are usually long-term and full-time.

product market conditions. More specifically, firms which are more likely to follow competitors in lowering prices have a higher probability of using external factors. This result is confirmed for an alternative measure of product market competition defined using the export share of sales on a subsample of manufacturing firms. Finally, firms with high collective agreement coverage have a substantially lower probability of reporting external factors as the main determinant in setting wages of newly hired employees.

All the analysis was conducted by conditioning on country fixed effects in order to allow for country specificities. We also tried to see whether we could identify groups of countries in our sample within which the behaviour of firms was more similar. Given the significance of collective agreement coverage for the issue under investigation we split our sample into high and low-coverage countries. In fact, it turns out that all high-coverage countries belong to the euro area, while low-coverage countries are outside the euro area. Three interesting results emerge when we divide the sample into two according to collective agreement coverage. First, we find that the coverage variable was not just proxying for cross-country institutional differences across the whole of Europe; the variable is only significant in the low-coverage sample, in which cross-firm variability in this respect is high. Second, in the high-coverage countries the impact of skills on the use of external factors is less than it is in the low coverage countries. Finally, we find that the competition intensity variable does not show up as statistically significant in high-coverage countries. These results reflect the fact that the countries with high collective agreement coverage are more homogeneous than low-coverage countries. The results from splitting the sample, as described above, suggest that cross-country differences in the use of external factors in hiring pay determination mainly reflect the different institutional set up in low-coverage countries.

This being a survey, and despite the fact that employers were asked hypothetical questions about what they would do when faced with high unemployment or short labour supply, the results cannot be generalised. The survey was conducted at a time when labour markets were in general tight. The economic and financial crisis that started to unfold in the second half of 2008 could prove that employers behave differently.

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CNB Research Open Day

The seventh CNB Research Open Day will be held in the Czech National Bank's Commodity Exchange (Plodinová Burza) building on **Tuesday, 24 May 2011**. This half-day conference will provide an opportunity to see some of the best of the CNB's current economic research work, to learn about the CNB Call for Research Projects 2012 and to meet CNB researchers informally.

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