

Introduction

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This volume stems from a workshop entitled ‘How are Wages Determined in Europe?’ which took place at the European Central Bank in Frankfurt on 10–11 December 2001. The aim of the workshop was to analyse several features of European wage determination and how it has changed in recent years. This topic is particularly relevant at the present juncture in view of the possible effects of the introduction of the euro, the continuing implementation of the Single Market Programme and increasing economic integration. Such reforms, and changes in the economic environment, are unlikely to leave wage determination processes unaffected. The precise nature of these effects will depend crucially on labour market institutions and structures. Hence, a common theme linking the contributions in this volume is the role institutions and labour market structures are playing in wage formation. Moreover, European economic integration may itself feed back onto labour market institutions. Institutions are endogenous¹ and therefore can adapt to changing economic and social circumstances. A number of chapters in this volume seek to shed some light on how ongoing economic integration and new business practices may be leading to changes in institutions.

The chapters in this volume offer, *inter alia*, some new and interesting insights into the impact of trade unions and the nature of collective bargaining, unemployment benefits, minimum wages, employment protection legislation and the use of atypical forms of employment.² Under the general heading of Institutions and Wage Formation in Europe, three distinct broad themes emerged at the workshop. The first was the role of institutions in affecting the dispersion of wages across occupational, age, skill, industry and employment contract categories. The second was the explanation for recent wage moderation in Europe and the role of bargaining systems. The third was the extent to which institutions are evolving within Europe in the light of EMU and other economic and commercial factors. These themes are addressed either at the general European level or by investigating developments within some selected European countries.

INSTITUTIONS AND WAGE DISPERSION

Many labour market institutions that play a relatively significant role in European countries – for example trade unions, minimum wages and unemployment benefits – have been associated with the more compressed wage distribution seen in many European countries when compared with the United States. Issues surrounding wage dispersion and relative wages are at the forefront of the first four chapters of this volume.

In Chapter 1, ‘Is European wage-setting different? Evidence from the Occupational Wages around the World data file’, Richard Freeman and Remco Oostendorp shed light on the role that European wage-setting institutions play in affecting occupational wage formation. An important innovation of this study is the use of occupational wage data drawn from the ILO’s data set ‘Occupational Wages around the World’ (OWW). In order to make these data usable, the authors needed to undertake a large calibration and standardization exercise. They then use these data to examine the extent to which wage patterns and wage determinants differ between advanced European countries and other advanced economies and less developed countries. The authors find substantially different wage patterns between advanced European countries, other advanced economies and less developed countries. In particular it appears that higher GDP per capita is associated with a more compressed distribution of occupational pay in advanced European economies than for other countries. The authors’ interpretation of this observation is that the greater impact of growth on wage dispersion in Europe reflects the influence of European wage-setting institutions. It is also found that institutional factors – trade unionism and measures of economic freedom – have different impacts on European wage-setting compared with other countries.

In Chapter 2, ‘What determines the reservation wages of unemployed workers? New evidence from German micro data’, Eswar Prasad examines the effects of unemployment benefits and the minimum wage on the lower end of the wage distribution in Germany. A key element of both these institutions is that they can affect the reservation wage in wage bargaining models. Prasad constructs a simple theoretical model that relates the reservation wage of unemployed workers to macroeconomic factors (both cyclical and structural) and individual characteristics (for example proxies for human capital). The predictions of the model are tested with data drawn from the German Socio-Economic Panel (GSOEP). This panel of individual data is well suited for such analysis as it explicitly asks unemployed workers for their reservation wage and includes a rich subset of individual and household specific characteristics. A particularly interesting finding of this chapter is a negative relationship between the reservation wage ratio (ratio of reservation to offer wages) and skill levels. In other words, the reservation wage is relatively high in relation

to the available offers for those at the low end of the wage distribution. The tentative conclusion drawn from this finding is that there appear to be significant labour supply rigidities at the low end of the German skill/wage distribution, which may in part be attributable to the unemployment benefit system. The author argues that these point to the need for comprehensive policy reforms which allow for more flexibility in the dispersion of wages and also reduce the disincentives for seeking employment for those at the low end of the wage distribution.

The next contribution considers the effects of temporary contracts, including the relative wages of those on temporary and permanent contracts. In Chapter 3, 'Labour as a buffer: Do temporary workers suffer?', Alison Booth, Marco Francesconi and Jeff Frank examine this issue with data from the UK. They consider whether fixed-term workers are disproportionately female or from other 'equal opportunities' groups, and whether such workers receive less pay than comparably qualified permanent workers. To address these questions, the authors develop a buffer-stock model which provides a number of reasons why ethnic minorities and women may be more likely to be on fixed-term contracts than comparable white males and why those on fixed-term contracts may receive lower pay. These findings are tested empirically using three data sources relating to the UK: the British Household Panel Survey, data on academic economists and data on university employees. In the raw data they find evidence that women (but not ethnic minorities) are more likely to be employed on a fixed-term basis and that there is a positive wage differential favouring permanent employees over fixed-term ones. After controlling for a wide range of individual and workplace characteristics, the evidence on representation in fixed-term work by gender is less clear, although the existence of a wage differential between fixed-term and permanent employment remains. The authors argue that the existence of such a differential combined with a greater prevalence of women in fixed-term employment – even if explainable by observed characteristics – means that there is an important equal opportunities dimension to regulating equal pay and conditions for such work. However, these regulations need to be considered in tandem with any adverse effects on total employment as indicated by the authors' buffer-stock model.

Leandro Arozamena and Mário Centeno study the effect of increasing tenure on the relationship between wages and external labour market conditions in Chapter 4, 'Moving from the external to an internal labour market: Job tenure, cycle and wage determination'. The authors use a matching model that incorporates learning about job quality while employed and introduce business cycle effects by allowing both the expectation of the quality of new matches and the value a match to vary with the cycle. They show that as job-specific human capital is accumulated, the wage received by the worker is protected

from cyclical variation in the external labour market. Arozamena and Centeno test this implication of the model by evaluating the effect of tenure on the elasticity of wages to unemployment using data from the United States. They find that the elasticity is lower for workers with more tenure, thus supporting a key finding of the theoretical model.

CAN BARGAINING SYSTEMS EXPLAIN WAGE MODERATION IN EUROPE?

Three chapters in this volume seek to shed some light on the factors behind the wage moderation that has been seen in many European countries in the run-up to, and early years of, EMU. In Chapter 5, 'Wage developments in the early years of EMU', Karl Pichelmann opens this debate with an examination of the recent evolution of wages in euro area countries and a discussion of possible causal factors. Pichelmann reviews the evidence on wage and unit labour cost developments, which reveals a marked slowdown in both measures in recent years. However, labour costs are growing more rapidly in some EMU member states and there was a pick-up – albeit modest by historical standards – in aggregate unit labour costs in 2001. The role of several possible explanatory factors for the slowdown in wage growth, including reforms to labour and product markets – and the monetary-union process itself – is discussed. The author argues that, while these factors are likely to have played a role in restraining wage growth, there is also likely to have been a role for 'informal incomes policies' in a number of countries. As such policies tend to be 'inherently fragile', this factor cannot be relied upon to sustain moderation in the future.

Piero Casadio analyses the main effects of the 1992–93 Italian income policy agreement in Chapter 6, 'Wage formation in the Italian private sector after the 1992–93 Income Policy Agreements'. Consistent with Pichelmann's finding, Casadio argues that these agreements were a crucial ingredient of the wage moderation at this time. In his view, they facilitated employment growth, fiscal consolidation and the participation in the first wave of EMU. Casadio also suggests that in the Italian case such policies cannot be relied upon to sustain wage moderation in the near future. In the longer term he is more sanguine, arguing that overall wage moderation seems not to be at risk. However, he suggests that firm level flexible arrangements – relating for instance to wage differentials and temporary contracts – may be more vulnerable.

In Chapter 7, 'A widening scope for non-wage components in collective bargaining in the EU?', Véronique Genre, Ramón Gómez Salvador, Nadine Leiner-Killinger and Gilles Moure note that collective bargaining is

increasingly taking place against the background of a growing importance of non-wage elements. They find such elements to be in four main areas: training and life-long learning, health and safety at work, reconciling work and private life and, lastly, working time. Although there are no direct indicators for non-wage components in collective bargaining in most EU countries, it seems that the number of agreements actually covering these non-wage-labour-related aspects, albeit still limited in some countries, has increased in the latter part of the 1990s. It is possible to interpret the bargaining on these non-wage components as beneficial for both workers and firms. On the one hand, employees obtain a compensation in exchange for moderate wage developments. On the other hand, factors such as training and working-time flexibility can increase workers' productivity. Thus, the emergence of non-wage components in wage bargaining may have contributed to a slower growth in wages than would otherwise have been the case.

THE EXTENT TO WHICH INSTITUTIONS ARE EVOLVING IN EUROPE

As indicated at the start of this introduction, a number of chapters examine the changing role of institutions. Stemming both from autonomous private sector responses to the economic environment as well as the impacts of public policies, these ongoing changes raise issues such as whether labour markets are becoming more flexible, the prospects for ongoing wage moderation and the future of centralized bargaining. However, before considering such questions it is useful to take stock and consider how much wage formation differs across euro area countries. This is particularly relevant as it is sometimes argued that EMU will tend to encourage some sort of convergence in labour markets across the euro area.

A problem for labour market analysts since the start of EMU has been to what extent they should focus on trying to understand aggregate euro area developments as opposed to aiming to understand national developments. In Chapter 8, 'Aggregation and euro area Phillips curves', Silvia Fabiani and Julian Morgan address this issue by considering the extent to which the relationship between wage growth, inflation and the tightness of the labour market is similar in the large euro area countries. Their analysis – using a wage–price Phillips relationship – suggests that freely estimated national equations do generate different estimates of the impact of the rate of unemployment on wage formation. However, when considered as a part of a system, some of these differences do not prove to be statistically significant, and it is possible to impose a common unemployment effect on wage growth across countries.

Fabiani and Morgan also consider the potential gains and losses from

pursuing aggregate as opposed to country-level analysis of such relationships. Although the statistical properties of the euro area-wide equation were quite good overall, its standard error was higher than the aggregated standard errors from the national equations, estimated both independently and as a system. The authors also examined the forecast performance of the aggregate and national equations and found that short-term aggregate wage growth (that is, one to two quarters ahead) would have been better predicted if the national approach had been adopted and the results aggregated. Overall, the results point to some advantages from estimating national wage-based Phillips curves rather than conducting the analysis at the euro area-wide level. None the less, the results also suggest that – at least at the macro level – differences in wage formation across euro area countries are less pronounced than is usually supposed.

Moving to the country level, it is widely believed that the labour market reforms implemented in the 1980s and 1990s have led to greater flexibility in the UK. In Chapter 9, ‘Wage flexibility in Britain: Some micro and macro evidence’, Mark Schweitzer addresses this question using data from the New Earnings Survey (1975 to 2000). He considers alternative macro- and micro-economic methods of measuring wage flexibility and investigates whether wages in Britain have become more flexible in recent years. Evidence from macroeconomic wage equations suggests that, although the relationship between wages and employment has changed over time, there has been no significant increase in wage flexibility as the responsiveness of wages to unemployment has declined in the 1990s. The microeconomic tests find that the prevalence of nominal rigidities has not declined, except for weak evidence for the most recent years. Real rigidities are also shown to be statistically significant and overall, the microeconomic evidence points to an increase rather than a decline in real rigidities in recent years. Hence, the evidence that the author finds is not supportive of the view that UK labour markets have become more flexible.

In Chapter 10, ‘Centralized bargaining and reorganized work: Are they compatible?’ by Assar Lindbeck and Dennis Snower, the future of centralized wage bargaining is considered. The authors argue that new information and production technologies are encouraging firms to flatten their hierarchies of control and responsibility, allowing for greater decentralization of decision-making. This means that the new forms of work are often organized around small, customer-oriented teams, rather than large functional departments, with considerable discretion both for the teams and individual workers. With such an organization of work there is a move away from occupational specialization towards multi-tasking. The authors show that, with such new forms of organization, centralized bargaining becomes increasingly inefficient and detrimental to firms’ profit opportunities as it prevents them from offering

their employees adequate incentives to perform the required mix of tasks. Centralized bargaining is also shown to inhibit firms from using wages to encourage workers to learn how to use their experience drawn from one set of tasks to improve their performance at other tasks. They argue that these factors may help explain the increasing resistance to centralized bargaining in many advanced market economies.

While changes in private sector behaviours are likely to impact on wage formation and employment patterns, government interventions are also expected to play a prominent role in influencing labour markets. In recent years, there has been a growing policy focus on active labour market policies (ALMPs). Such measures have the potential to affect labour supply, and in some cases also labour demand, and thereby would be expected to have a bearing on wage pressures. The effects of these policies are analysed in Chapter 11 by Julian Morgan and Annabelle Mourougane entitled 'The impact of active labour market policies in Europe'. This chapter highlights the policy measures that are being undertaken in the European Union, reviews the literature on the effectiveness of such interventions and draws some general conclusions on their likely impact on unemployment and wage formation. The analysis indicates important differences in the effects of different types of ALMPs (for instance, training or subsidized employment schemes) and that key elements in scheme design (for instance, whether the training is classroom based or provided by potential employers) can have a major bearing on its effectiveness.

To sum up, the chapters in this volume address the role played by institutional factors in wage formation. Under this general heading, there are three distinct broad themes. The first emphasizes the role of institutions in affecting the dispersion of wages across occupational, age, skill, industry and employment contract categories. The contributions make clear the profound effect that European institutions can have in influencing, and in most cases compressing, such pay differentials with consequent implications for the employment prospects of certain segments of the labour force. The second theme is the explanation for recent wage moderation in Europe. The contributions here emphasize the role of developments in the bargaining systems of European countries and the presence of a number of temporary or specific factors which have helped to bring about wage moderation. The third, and final, broad theme is the extent to which institutions are changing within Europe in the light of EMU and the adoption of new business practices.

NOTES

1. As emphasized by Saint-Paul (2002).
2. Morgan and Mourougane (2001) provide a brief review of the likely effects of these institutions on wage bargaining.

REFERENCES

- Morgan, J. and A. Mourougane (2001), *What can changes in structural factors tell us about unemployment in Europe*, ECB Working Paper No. 81.
- Saint-Paul, G. (2002), 'The political economy of employment protection', *Journal of Political Economy*, June **110** (3), 672–704.