



REAL AND MONETARY CHALLENGES TO WAGE POLICY IN GERMANY AT THE TURN OF THE MILLENNIUM: TECHNICAL PROGRESS, GLOBALISATION AND EUROPEAN MONETARY UNION

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Wage policy in Germany, at the turn of the millennium, has to face old and new challenges. Old challenges include wage moderation and a more flexible wage structure in order to contribute to a successful fight against persistently high levels of unemployment. Three new challenges are frequently discussed in the public and in the literature, namely skilled-biased technical progress, increasing international integration of labour, product and financial markets (“globalisation”), and the consequences of the monetary integration within the European Monetary Union (EMU). To what extent do these aspects indeed represent causes of the observed labour market problems in Germany and what should be the appropriate reaction of wage policy?

While the share of high-skilled workers doubled, their relative wages did not decline

Upgrading of skills and the wage structure

By any measure, the German workforce has become more skilled. Since labour force participation rates as well as the composition of employment with respect to gender, nationality, and number of working hours has changed dramatically during the time period under consideration, the group of high-skilled represents the more homogeneous population compared to the others. By and

large, the share of unskilled workers nearly halved, whereas the corresponding figure for high-skilled labour is now twice as high as 20 years ago.

What are the consequences of this skill-upgrading for the wage structure? At first glance the answer seems to be clear. In the conventional labour demand and supply framework, the aforementioned substantial increase of skilled labour is expected to reduce wages for high-skilled workers relative to other qualifications. The reverse is expected for wages of low-skilled workers. But this is not what we observe. Wage growth for low and high skilled workers was higher compared to that of medium-skilled workers. Put differently, during the past 20 years we observe a U-shaped pattern across skill groups, i.e., wage dispersion increased between medium and high-skilled workers and decreased between unskilled and medium skilled workers. This holds for both manufacturing and non-manufacturing sectors. However, focusing exclusively on low-skilled workers, we observe that wage dispersion within this group remains fairly unchanged over time. In contrast, for medium and high-skilled workers one observes increasing wage inequality within these groups. Taken together, while wage inequality for full-time working males increases in the time period under consideration, this rise in inequality differs within and between skill groups.

The trends for full-time working females are somewhat different. Wage dispersion across skill groups and also within skill groups in the lower part of the wage distribution decreased sharply from 1975 to 1990. On the other hand, wage dispersion for medium-skilled females above the median tends to increase substantially.

Summing up, the notion of the German wage structure as being fairly compressed and even tending to become more compressed over time is only partly correct. It obscures important differences between skill groups, wage groups, and male and female workers. The more important conclusion is, however, that despite an increased supply of high-

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Skill Composition of the Labour Force in West Germany 1975 and 1995
Percentages^{a)}

Year	Unskilled	Medium-skilled	High-skilled
Labour force			
1975	37.4	49.2	7.0
1995	19.0	59.0	13.7
Total employment			
1975	36.7	49.9	7.1
1995	16.6	60.2	14.4
Full-time working German males aged 18 to 65			
1975	20.2	66.3	4.6
1995	12.3	68.3	10.2

^{a)} Some individual skill-groups were omitted and some imprecision is due to rounding, hence figures do not add to 100%.
 Unskilled: no or unknown vocational training;
 Medium-skilled: apprenticeship training completed;
 High-skilled: university degree and degree of advanced college for higher education (Fachhochschule).

Sources: – Labour force and total employment: Bundesministerium für Bildung, Wissenschaft, Forschung und Technologie (1997), Grund- und Strukturdaten 1997/98, Bonn; calculations by the author.
 – Full-time workers: J. Möller (1999), “Die Entwicklung der qualifikatorischen Lohn- und Beschäftigungsstruktur in Deutschland – Eine empirische Bestandsaufnahme”, *Jahrbücher für Nationalökonomie und Statistik* 219 (forthcoming).

skilled workers their relative wages did not decline. an increased supply of high-skilled workers, their relative wages did not decline. Hence, demand shifts in favour of high-skilled workers must have occurred (and must be still at work). Globalisation and skill-biased technical progress suggest themselves as candidates for an explanation of these demand shifts.

International trade

Conventional wisdom suggests that the expansion of trade – due to, say, reduced trade barriers – will tend to change the wage structure across skill groups. Skilled-labour-abundant developed economies expand their production and exports of commodities that use skilled labour intensively and their import demand for goods requiring low-skilled labour. The opposite holds for emerging low-skilled-labour-abundant countries. Hence, wages of high-skilled labour will rise in developed countries. In principle, wages of low-skilled labour should decline unless wage policy tries to stem the tide and pushes up low wages, with severe unemployment consequences for low-skilled workers, as may be observed in Germany. It goes without saying that the relevant question is not whether international trade affects the wage structure at all. Obviously, when Germany imports trainers produced by low-skilled and low-paid Chinese labour, workers in a German factory producing shoes at

wages ten times those of the Chinese workers will soon find themselves on the dole. The more interesting question is the extent to which “your wages are set in Beijing” (R. Freeman).

The answer is: to some extent, but not fully. The more jobs for unskilled labour are available in the non-traded goods sector, i.e. the service sector, the more are the wages at the bottom determined by domestic forces. Moreover, in developing countries, wage aspirations of workers will also rise, as may be observed in some South-Asian economies. As recent econometric studies

show, there is empirical evidence which supports the view that although international trade via competition from developing countries does affect relative wages and the structure of employment to the detriment of low-skilled workers, this effect can only explain a minor component of the observed changes of the wage structure. To some extent this result is disappointing, if not puzzling, since it is at odds with purely anecdotal evidence. However, trade pressures on wages and employment may become stronger as China, India, and some African economies become integrated into the world economy.

Skill-biased technological change

A second possible explanation is that the increase of the supply of high-skilled workers has been out-paced by shifts in the demand for skilled workers, so that the high-skill wage premium has increased. The other side of the same coin is that this is also a source of the labour market problems of low-skilled workers. They either experience a decline in their relative wage or in the absence of wages flexible enough to square with these developments, their employment opportunities are severely damaged. This is the case in Germany, where low-skilled labour bears the major – yet not the entire – burden of unemployment.

While this view arguably provides a clear explanation of what happened, it is not without its prob-

International trade does have some effect on relative wages and so does skill-biased technological change

lems. It is not sufficient to show that technological change is the driving force behind the rising demand for high-skilled workers. We also must know what type of technological progress accelerated since the early 1970s when labour market problems began to evolve. Most new technologies are supposed to have an adverse impact on the demand for low-skilled workers. History provides a huge body of evidence for industrialisation being synonymous with (low-skilled) labour-saving technological progress. Obvious examples are the diffusion of computers and related technologies and changes in the organisation of work associated with effectively utilising these technologies. But the empirical evidence on the extent to which computers (or pencils, too) have changed the wage structure is anything but unambiguous. Secondly, the impact of new technologies may also go the other way. For example, the introduction of assembly lines may favour low-skilled labour because of the simple routine tasks.

Despite these *caveats*, the empirical evidence tentatively suggests that skill-biased technical progress is at work, indeed, but its impact differs among sectors. Moreover, wage policy, too, shares considerable responsibility for the high unemployment rates of low-skilled workers.

European Monetary Union

Pivotal to the establishment of EMU is the removal of flexible nominal exchange rates and the introduction of a single monetary policy. It has been claimed that wage policy has to serve as a substitute for nominal exchange rate adjustments in the case of divergent economic developments among EMU member countries. Other substitution mechanisms for nominal exchange rate adjustments, besides wage policy, are: labour mobility, capital mobility, relative price changes, and financial transfers between EMU member countries. While all these substitutes may be able to perform the task in theory, in reality they are insufficient or unwarranted or both. But had the adjustable exchange rate in the pre-EMU era really served as a reliable means to smooth divergent economic developments?

First, as has been shown by various recent studies, the variable nominal exchange rate of the Deutsche Mark vis-à-vis major EMU currencies

was, in Germany, hardly an important adjustment tool. Secondly, the nominal exchange rate mechanism does not provide a realistic chance to escape from the necessary domestic measures to overcome adverse economic shocks. The burden of adjustment remains to be borne at home. Third, there is evidence that, on average, the nominal exchange rate volatility resulted in job losses (in Germany) during previous appreciations of the Deutsche Mark, that were not justified by real factors. In EMU, however, this can no longer happen. Seen from these viewpoints, there is no reason for grieving over the loss of the nominal exchange rate adjustability in EMU.

While this is good news, it does not suggest that in the near future the nominal exchange rate mechanism might not have been helpful in buying some time for necessary adjustments. Hence, wage policy as the substitute must be on guard.

Conclusion

What does all of this imply for wage policy in Germany? Both, globalisation and skill-biased technological change, and, to a lesser extent, EMU, constitute challenges for wage policy with respect to greater flexibility. But additional measures are necessary, such as upgrading the skills of the workforce and increasing the international competitiveness of the German economy. Clearly, not everyone may be helped. To provide support to the unskilled will no doubt impose a considerable financial burden on society, including those who, as a majority, are the definite winners of globalisation and skill-biased technical progress.

Adjustable exchange rates in the pre-EMU era did not provide a reliable mechanism for smoothing the effects of adverse shocks