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The role of productivity in collective bargaining: Input or output or both?

At a glance ...

- Productivity can play a role in collective bargaining both as an input and as an output; as an input it is a benchmark for wage agreements, as an output it is affected by the collective agreements.
- Our study of four sectors shows some fundamental differences concerning the role of productivity in collective bargaining agreements in different areas of the economy.
- Whereas productivity is still important to define and legitimize wage demands in the metalworking sector, it is no relevant benchmark in the service sectors we analysed.
- The recognition of productivity as an input factor seems to be important for regarding it as an output factor as well. It is only in the metalworking sector where productivity as an output has some significance.
- There are three collective bargaining issues focusing on productivity: performance based pay, profit sharing and, most explicitly, derogations from collective bargaining agreements.

Introduction

This paper is about the role of productivity in collective bargaining in Germany. There are two main questions tackled. The first one is about the role of productivity as an input to collective bargaining today. Is there still – as it has been in former times – a relationship established in collective bargaining between the development of productivity and the development of wages or, to be more exact, the demand on wage increases? How important is the legitimacy of wage demands by productivity increases in the sense of a productivity compromise? The second question is about the role productivity might play as an output of collective bargaining. Are there collective bargaining agreements that, directly or indirectly, are to influence the development of productivity in a positive way? What are they about, and are there any signs of a new productivity compromise based on the attempt to actively influence the development of productivity?

These questions have been analysed in an EU project called "Bargaining for Productivity" which was coordinated by Italian colleagues from ADAPT and joined by other colleagues from the UK, Poland, the Netherlands and Spain. In this paper we summarize the findings for Germany. They are based on data research, interviews with collective bargaining experts from unions and employers' associations and the analysis of collective bargaining agreements. Research was focused on four sectors: metalworking/automotive, retail, health and hotel and catering.

Productivity as an input: the corporatist compromise and its demise

In the time of the economic miracle after World War II, labour productivity developed a strong impact on wage setting in the German system of collective bargaining. In the 1950s it has become a commonplace of economic policy that wages should follow the development of labour productivity. However, at that time the productivity argument was more of theoretical nature and had little real consequences for the wage policy; there was no consensus about the issue between the collective bargaining actors. Things changed in the 1960s when the so called Meinhold wage formula was introduced. The formula defined a cost neutral margin of distribution

by combining productivity, inflation and wage increases. The argument of the economist Helmut Meinhold was that wage increases should be based on the development both of productivity and inflation (Meinhold 1965), for productivity as a pacesetter for wages alone would create injustices for the wage earners if inflation exists that is not created by wage pressures. In this case, according to Meinhold, incalculable parts of the wage increases would be fed up by inflation growth so that real wages may even decline. Moreover, it could be argued that inflation is important for a dynamic capitalist economy, because without inflation shocks would lead automatically to a deflation; therefore today the central banks all over the world have inflation targets higher than zero per cent.

The Meinhold-formula developed a practical impact on collective bargaining when Meinhold in 1965 was appointed as a mediator in a trade dispute of the iron and steel industry where the formula served as a base of consensus between the bargaining parties. From then on the Meinhold-formula became a crucial method to define the goals for wage bargaining. The formula remained contested, as the unions tried to demand an additional wage element of redistribution – in the sense of an expansive wage policy (Agartz 2008) – and the employers usually called the compensation of the inflation rate into question. However, despite these different interpretations, in the end the Meinhold-formula became the cornerstone of corporatist wage setting in Germany. Corporatist wage setting was based on a productivity compromise: Unions accepted productivity increases organized by the employers and, more general, the employers' prerogative to rationalise production and to implement new technologies, and the employers' associations accepted the demand of the unions that the employees have a claim on at least parts of the productivity increases of the economy. From then on, wage conflicts focused mainly on different interpretations of inflation and productivity growth and on the expected economic situation of the respective industry.

Another important aspect of the Meinhold-formula has been that it was calculated on the average productivity growth of the whole economy, although collective bargaining in Germany until today takes place mainly on industry level. To rely on industry based productivity developments would have meant that wage demands and wages would have developed differently between industries according to the respective rates of productivity growth. This would have favoured wages in the manufacturing industries and disfavoured wages in the service sector because of

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its lower average productivity growth (Herr/Horn 2012). The orientation on the average economic productivity growth implied a concept of wage solidarity, because wage growth was redistributed between the sectors of the economy in favour of the sectors with lower productivity growth. This formed the base of the "pattern bargaining" that took place between the industries for a long time in Germany, with the stronger unions from the manufacturing industries negotiating wage increases and the agreements of the other sectors following these increases despite lower productivity growth and weaker organizational power of the unions. The system of pattern bargaining kept the wage growth between the sectors roughly in line without affecting the structural wage differentials between them (Bosch et al. 2007).

However, productivity based wage increases became disputed at the end of the 1990s. The German Council of Economic Experts, which had accepted the Meinhold-formula since the middle of the 1960s, for the first time criticized the formula and productivity based wage increases more generally in its annual report of 1999. The Council argued that in times of mass unemployment wages setting has to be more defensive and that wage increases should be kept below the level of productivity increases until full employment is reached again. This statement went hand in hand with a reorientation of the wage policy from the side of the employers' associations. They more and more tried to keep wage increases below productivity, to agree on single payments instead of long-term wage increases, to strengthen profit sharing wages and to implement opening clauses for plant-level derogations from industry collective bargaining in order to bring wages closer to the productivity developments of the plants.

Whereas trade unions still relied on their old wage formula, they have proven to be less successful to achieve their wage goals. Instead of that, German workers faced real wage losses in the first half of the last decade, and wage increases were much lower than productivity increases (Figure 1).

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Moreover, the wage drift was reduced so that collectively agreed wages were less able to drive the growth of the effective wages (Lesch 2010). The wage increases remained much below the levels of the cost neutral margin on distribution. A closer look shows that it is the growing wage gap between the manufacturing and the service economies that explains the wage restraint in Germany in that period to a large extent. Whereas collectively agreed wages in the manufacturing sector kept roughly in line with productivity and inflation growth, in most industries of the service sector a decoupling of both developments can be observed (Schulten/Bispinck 2014). The traditional form of redistributing wage increases between the industries based on the average productivity growth of the economy did not work any longer in the way it did from the 1960s to the 1990s. Only in the years after the financial crisis real wages increased again.

Productivity as an input: the decline of labour productivity

Another current problem of wage growth is weak productivity growth. Labour productivity can be measured by employee or by employee hour. In the first case the gross value added is divided by the number of employees employed in the economy in the respective years, in the second case it is divided by the number of working hours worked. In the data provided by the German Council of Economic Experts that is used here (German Council of Economic Experts 2018), the gross value added is taken from the official statistics of the national accounts (Statistisches

Bundesamt), and the number of hours worked is based on the working time calculations of the Institut für Arbeitmarkt- und Berufsforschung (IAB). Looking at the "simple" factor productivity of labour, it can be observed that the overall trend of labour productivity growth in Germany is positive (except the two crisis years 2009 and 2010), both for labour productivity measured by employee and by employee hour, whereas the growth rates are declining (Figure 2). The general trend of catching up and outpacing productivity per employee by the hourly labour productivity can be explained by the growing share of part time employment relationships that went hand in hand with the growing labour market participation of women in the last years.





However, the growth of labour productivity declined. Labour productivity per hour has grown at a rate of 1.9% per year from 1995 to 2005, but only at a rate of 0.8% yearly in the period from 2005 to 2014. Even if the crisis year of 2009 were excluded from the calculations, the growth rate would not be higher than 1.3%. The respective figures of labour productivity growth per employee are 1.1% per year for the period from 1995 to 2005 and 0.4% for the years 2005 to 2014.

According to the Economic Council (2016), there are two main reasons for the slowing down of productivity growth in the German economy since the last decade. The first one is that out-sourcing, one of the main trends in the German manufacturing industry in the last two decades,

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has come to an end. According to this argument, companies in the manufacturing sectors finished the process of restructuring they have initiated since the 1990s. Restructuring in the form of outsourcing was an important driver of productivity growth because companies split up mainly labour intensive activities and sourced them out to other companies or relocated them to other countries with lower labour costs. As far as these companies were located in other countries, labour productivity increased for the sector and the whole economy; as far as they are located in Germany, outsourcing had a positive impact on labour productivity only in the manufacturing sector but a negative impact in the receiving sectors which at least partly explains the weak productivity performance of the production oriented service sector. The second reason identified by the Research Council is the growing labour volume especially in the service sectors. This development went hand in hand with a structural shift of the sectoral composition of the economy in favour of the weaker performing service sectors. And moreover, according to the Economic Council, in the process of extending the labour volume new employees entered the workforce in the companies that partly have been unemployed before and that are less productive because they are less qualified on average.

According to some observers, however, productivity growth will reboot again in the next years. This hope is built on the digitalization of the economy in general and of the manufacturing sector in particular, where the concept of Industry 4.0 has created a digitalisation hype. Digitalisation is said to have the potential to reverse the slowdown of labour productivity. According to an estimation of the business association of ICT companies, BITKOM, productivity will increase in ICT intensive industries by about 30% until 2025 (Bauer et al. 2014). Therefore, digitalization at the same time is part of economic concepts to increase productivity.

Productivity as an input: the four sectors

The development of labour productivity differed a lot between the four sectors studied (Figure 3). The growth rate of productivity was by far the highest in the automotive industry, followed by the retail sector. It was much weaker in the health sector and even negative in the hotel and catering sector.





The differences of productivity growth are reflected in the respective developments of real wages. There is a big gap to be observed between the wage trends of the automotive industry on the one and the three service sectors on the other hand. While the automotive wages have been rising for more than 40 basis points – only temporarily restricted by the slump during the crisis 2008/9 – the wages in the service sectors have been stagnating or even fallen during the 2000s, with a slight recovery since 2011 (Figure 4).

Figure 4: Development of real wages in the four sectors 1991–2015/16



(Destatis, own calculations)

In line with these data, it is the metalworking industry where productivity still plays an important role in collective bargaining. The metalworkers' union, the IG Metal, still takes the productivity and inflation figures to define its wage demands, added by a component to redistribute income in favour of wages. The significance of the latter is based on a situational assessment of the power relationships and the economic situation of the industry in each bargaining round. This is what is meant also by the expert from the employers' association when he stresses the relevance of the social climate of the negotiations and that negotiating wage increases is more than mathematics of productivity and inflation:

"Collective bargaining is more than mathematics. It is about social partnership and the capabilities of the actors to act collectively. It is about finding solutions for a conflict of interest in concrete situations and with concrete persons who act." (Expert Metall NRW)

However, in the bargaining round of the industry in spring 2016, the IG Metall had difficulties to define a wage demand because both the inflation forecast and the productivity have been rather low; 0.3% the one and only little more the other. As the average productivity of the whole economy was weak, a strategy of the union could have been to stress the higher productivity growth of the industry. However, the figure for industry productivity growth itself was only 0.6%. According to the union expert, productivity growth has been negatively affected by the fact that many companies have increased the labour intensity of production by hiring employees formerly employed as temp agency workers in order to increase their core workforces, not at least demanded by works councils and the union. The expert of the employers' association adds the interpretation that labour productivity is affected negatively by globalisation as German companies shift production to other countries but leave the formally unproductive activities like research and development, administration or sales at home. However, in this situation the union developed a new indicator, the so called "trend productivity", in order to legitimise the wage demand. The "trend productivity" was an average of the productivity development of the last ten years, not a calculation of a future trend of productivity growth.

"The employers' associations criticised that the trend productivity was not really a trend but an average and that a trend would have shown a negative development of productivity. And they

were right. And when they offered to increase wages for 0.9% they historically for the first time made an offer including both productivity and inflation growth." (Expert IG Metall).

Growing productivity is an interest of the union not only as a precondition for stable jobs, but also as a precondition for higher wage demands. The main reason of the weak productivity performance in the eyes of the union is the low level of investments; indeed, the growth rates of the capital stock are declining since the financial crisis.

"The main reason for the weak performance of productivity is the low investment activity in Germany. Companies accumulate equity capital, but do invest less and less in physical capital. Industry 4.0 would need other forms of investment, in order to make really big technological steps forward you need a lot of investments." (Expert IG Metall)

In the three service sectors analysed, the unions base their demands on the general growth of living costs, rather than on productivity developments. The unions and employers' associations in these sectors do not refer to productivity developments, as the expert of the employers' association of the retail sector (HDE) states.

"From the standpoint of the trade union, the issue of productivity does not appear to play a role. In contrast to other branches of the economy (such as the metalworking and electrical industries), changes in productivity have not been used to back up a negotiating claim (a pay increase) as far as ver.di has been concerned." (Expert HDE)

Even more, the collective bargaining actors do not even know if industry specific productivity data exists and what it looks like, as the experts from the union covering the hotel and catering sector (NGG) stress.

"The employer side has occasionally argued using productivity indicators, but these numbers are not generally credible because they've been very selectively obtained from within the association. They don't play any role in the negotiations." (Expert NGG)

Therefore, decoupling of agreed wages in the manufacturing sector from those in the service sector seems to have little to do with the different developments of productivity growth, as a connection between productivity and wage demands can be found only in manufacturing.

Productivity as an output

Productivity can also be analyzed as an output of collective bargaining in several aspects. In our analysis, we distinguished five topics with some expected direct or indirect effects on productivity: wages, participation, job classifications/skills or work organization. Our analysis shows that the sector with most collective bargaining norms related to productivity is the metalworking industry. Here, wages show three components related to productivity: performance based pay systems, that are used in the production sectors traditionally, but that are on the decline at the moment because many employers favour other systems (Bahnmüller/Hoppe 2016); profit sharing that is regulated on plant level and important among OEM and big suppliers of the automotive industry but not among the smaller companies on the lower levels of the value chains because their profit margins usually are too low (Haipeter/Slomka 2014); and, finally, plant-level derogations from collective bargaining agreements based on opening clauses in the collective bargaining agreements.

Derogations might become a cornerstone of a new productivity compromise in the industry. Here productivity is referred to mainly in the form of investments which are expected to be productivity enhancing. From our own calculations we know that in the years 2004 to 2006 in about 20% of the derogations in the metalworking industry companies promised investments, and around 2/3rds of them made concrete investment figures for the term of the agreements (Haipeter 2009). The share of derogations with investment promises is much higher today according to the union expert, and the union tries to agree on investment plans with fix volumes and dates that can be controlled by union and/or works councils. This is the first condition for the union to agree on a derogation agreement. The second condition is that investments are not replacement investments but future investments to modernise or extend the capital stock and therefore to raise productivity.

"We agree on derogations if two conditions are met: They have to be real future investments, and we have to have a say in what the money is used for. This is why we try to agree on investment plans which define what is invested when and how we can control the investments. Without such a strengthening of codetermination we do not agree" (Expert IG Metall)

This is the strategy of the "Better not cheaper"-campaign the union has developed already in the middle of the last decade when it was confronted with derogations from collective bargaining agreements and employers opting out from the employers' association (Haipeter 2012). According to the union expert, striving for investments and high road strategies of competition is forming the core of a new productivity compromise in the sector in which the union plays a much more active role than in the old corporatist compromise.

"Better not cheaper is the modern form of the old productivity compromise. It is based on the assumption that high wages and employment are based on competitiveness, that competitiveness has to be based on innovation, quality and productivity and not on low wages and that the companies do not recognise this on their own but that they have to be pushed to follow that way." (Expert IG Metall)

In the other sectors, wage norms affecting productivity at least potentially are rare; we could only identify single cases like the agreement on provisions on sharing in sales results for waiting staff in the hotel and catering sector in Bavaria or plant level agreements on performance and profit sharing in textile outlets and specialist electronics retailers. In the public hospitals, two opportunities exist to couple wages and productivity more tightly: by introducing a performance based pay component or by transforming parts of the wages into shares for investment. Whereas the last option is used very rarely, the first on is more widespread.

Participation, which is highly regulated by law in Germany, includes both plant level codetermination by works councils and codetermination on the supervisory boards. There are some plant-level agreements in the metalworking industry on teamwork in production or on project work in the higher qualified white collar segments of the workforce that also include participation rights for employees (like electing speakers of the teams or participation in some areas of group based decision making). As in the metalworking industry, in the public hospital sector performance based wages have to be accepted and agreed on plant level which gives the works councils a right to participate in the implementation of these wage components.

Job classifications in the industry agreements of the sectors are structured differently, however, all of them are based on job requirements that have to be assessed in the plants either in an analytical or a non-analytical way. The less developed agreement in this respect is that of the

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retail industry. This agreement only distinguishes five wage groups and is, as a rather old agreement, based on some quite outdated job descriptions. The other agreements give some incentives for the employees to increase experiences and to qualify further in order to climb up the wage ladder. In the metalworking industry the collective bargaining actors have negotiated an agreement that gives the employees a right to discuss qualification issues with the superior; and it defines who has to cover the costs for what kind of further training. In this way it also contributes to the enlargement of individual employee participation. In the retail sector an agreement on the issue is negotiated at the moment, in the two other sectors no collective industry agreement exists; agreements might exist on plant level if at all.

The most important aspect of work organisation regulated in the metalworking sector as well as in the other sectors related to productivity is working time flexibility. The agreements define compensation periods for fluctuations in the distribution of working times and leave the decision how to regulate flexible working times to the plants. Only in certain regions of the metalworking industry some norms for plant level regulation of working time accounts have been implemented, defining upper limits for hours parked on the accounts and for procedures how to cope with working times that tend to exceed these levels, based mainly on a dialogue between worker and superior and offering the possibility to integrate the works councils. Thereby, and via the possibility for the employee to decide about parking or taking hours on and from the accounts, flexible working times are a crucial way to increase workers' participation. At the same time, the accounts are regarded by the employers as a way to harmonise capacities and actual working demands in a de-central way and thereby to increase labour productivity. From their beginning, flexible working times were part of a productivity compromise, making use of the productivity effects of working time flexibilisation to compensate cost increases caused by working time reductions. This compromise was renewed in the last collective bargaining agreement negotiated at the end of last year by offering the opportunity for full time employees to reduce their working times temporarily to 28 hours and, at the same time, to extent the share of workers working 40 hours voluntarily (Haipeter/Lehndorff 2018). Additionally, working time flexibility allowed the employers to increase productivity by reducing the capacity of personnel and to increase the workload of the workers. Given this, the union in the hospital sector recently managed to push a remarkable vanguard collective agreement in one hospital, the

Charité in Berlin, defining minimum standards for staffing in order to be able to deliver good services to the patients (verdi 2016).

As the comparison of the sectors shows, productivity as an expected output of collective bargaining and plant level agreements is much more common in the metalworking industry than in the industries of service sectors analysed. One might draw the conclusion that this has something to do with the different role productivity plays as an input to collective bargaining: In the sectors where it is used as an input to legitimize wage increases, the collective actors seem to be much more willing to accept the idea that productivity at the same time could be an output in the way that it can be stimulated by collective bargaining norms like those on performance based wages or flexible working time arrangements.

Conclusions

There are five main conclusions to be drawn from our analysis. *First*, labour productivity has played a major role in the German collective bargaining system as an input from the 1960s onwards. For about three decades, the Meinhold-wage-formula - productivity growth plus in*flation* – has been a reference for the negotiations between trade unions and employers. However, the role of productivity inside German industrial relations has decisively changed since the 1990s. Making use of the pressure of globalisation and mass unemployment, the historical productivity compromise was challenged by the employers. The base of the traditional "solidarity wage policy" of the trade unions eroded and the wage spread between different sectors increased. Second, labour productivity has grown for the last decades, however with falling growth rates in the last years. Reasons for the slow-down of productivity seem to be multifactorial. Third, the comparison of the four different sectors automotive industry, hotels and catering, health and retail revealed that productivity as an input has remained an important factor for collective bargaining negotiations only in the automotive sector. In the other three sectors, unions base their demands on the general growth of living costs, rather than on productivity developments. The former pattern bargaining is on the demise, and wage levels between the sectors are fragmenting. Fourth, productivity as an output of collective bargaining is not on the agenda of the German trade unions in the service sector, different from the metalworking sector, where the unions agree on performance based wages and try to develop a new productivity

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compromise by influencing investments like in derogations. In this way *fifth*, and finally, a bargaining-for-productivity-approach seems to make sense only if productivity is linked to high road strategies of competition and to the improvement of working conditions, training, participation and co-determination at the workplace.

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