

Third Evaluation Report (2020) – Management Summary¹ –

- 1** Since 1 January 2015, a general statutory minimum wage has been in force in Germany. Decisions on adjustments to the level of the minimum wage are made by the Minimum Wage Commission.² In addition to these decisions on adjustments, the Minimum Wage Commission is required by law to prepare a report on the effects of the minimum wage on worker protection, on competitive conditions and on employment with regard to specific industries and regions as well as on productivity.
- 2** This report reviews the observable effects of the minimum wage. It documents the current state of knowledge on the introduction of and two increases in the minimum wage. The period under review finished at the end of 2019, and thus the economic crisis caused by the COVID-19 pandemic is not covered by this report. In this respect, no statements can be made on the effects of the statutory minimum wage on earnings, employment and competition in such an exceptional situation.
- 3** Depending on the underlying model or model assumptions, minimum wages can have negative, positive or neutral effects. Today, approximately five years after the statutory minimum wage came into force in Germany, numerous empirical analyses are available. Their findings thus cover not only short-term but also medium-term effects. The studies are based on descriptive and causal analyses. The clearest effects at the level of employees and companies can be identified for the period immediately after the introduction of the statutory minimum wage. By contrast, hardly any additional effects can be observed as a result of the subsequent minimum wage adjustments. The introduction and the first increase in the statutory minimum wage took place in a generally favourable economic environment.
- 4** As with all evaluations, minimum wage research faces the challenge of identifying, on the basis of existing data, the effects of the statutory minimum wage on earnings, employment and a variety of other indicators. This identification issue relates, first, to the challenge of being able to isolate the effect of the minimum wage from other influencing factors, such as the economic cycle or other labour market and economic policy measures. Second, the analyses are usually based on survey data from employees and companies. Such data are subject to various types of measurement error, which must

¹ English translation of the management summary of the German Minimum Wage Commission's Third Evaluation Report to the Federal Government on the effects of the statutory minimum wage. For the full report (in German) see Mindestlohnkommission (2020), Dritter Bericht zu den Auswirkungen des gesetzlichen Mindestlohns. Bericht der Mindestlohnkommission an die Bundesregierung nach § 9 Abs. 4 Mindestlohngesetz, Berlin, <https://www.mindestlohn-kommission.de/DE/Bericht/pdf/Bericht2020.html?nn=7081728>

² For more details on the Minimum Wage Commission (in English), see https://www.mindestlohn-kommission.de/EN/Commission/Commission_node.html

be taken into account in interpreting the results. This applies in particular to the question of how many employees receive hourly wages below the statutory minimum wage.

Minimum wage and worker protection

- 5 The introduction of the statutory minimum wage has led to significant increases in hourly wages at the lower end of the wage distribution. According to the Federal Statistical Office's Structure of Earnings Survey (SES), the hourly wages of employees affected by the minimum wage increased by 21.8 percent between 2014 and 2018. In the same period, the average wage growth of all employees amounted to 11.4 percent. An above-average increase was primarily observed after the introduction of the minimum wage in 2015 and 2016. For the subsequent years, 2017 and 2018, the increases were roughly in line with the general wage trend.
- 6 Developments in gross monthly wages vary considerably depending on the form of employment. According to the Structure of Earnings Survey, the gross monthly wages of employees who earned less than 8.50 euros per hour before the introduction of the minimum wage rose by a total of 10.8 percent between the years 2014 and 2018, i.e., by approximately half as much as hourly wages. This result is mainly due to the small change in the monthly wages of marginally employed workers, who account for about half of the employees who earned less than 8.50 euros per hour before the introduction of the statutory minimum wage. For full-time employees, however, the increase in monthly wages closely tracked the development of hourly wages. The same applies to part-time workers. A major reason for this is the development of working hours. Following the introduction of the statutory minimum wage, average working hours fell among employees affected by the minimum wage, especially those in marginal employment. Thus, the increased hourly wages for this group have frequently not led to higher monthly wages.
- 7 The minimum wage has changed the structure of the wage distribution. First, a compression of the wage distribution can be observed. After the introduction of the minimum wage, a wage bracket with many jobs emerged at or slightly above the minimum wage. Second, there may be spillover effects, which means the minimum wage may also have induced increases in wages that were already above the minimum wage before its implementation. A number of studies suggest the presence of spillover effects, while other studies do not find such effects. Since wage growth was above average at the lower end of the distribution, the wage gap with higher wage segments has narrowed. There are mixed findings regarding the development of the scope of low-wage employment in Germany. According to some data sets, there has been a slight decline; according to others, there has been no change.
- 8 Despite significant wage increases, there are still deficits in the implementation of the statutory minimum wage. This is illustrated by, among other things, the controls of the customs authorities, whose *Finanzkontrolle Schwarzarbeit* (Financial Monitoring Unit for Illicit Employment, FKS) is responsible for monitoring the minimum wage. In 2019, 55,141 employers were inspected. The Minimum Wage Act is primarily applicable to approximately 36,000 of these employers, while the others primarily fall within the scope of the *Arbeitnehmer-Entsendegesetz* (Act on the Posting of Workers) or the *Arbeitnehmerüberlassungsgesetz* (Law on Temporary Employment). In 2019, 6,732 preliminary proceedings were initiated for violations of the Minimum Wage Act. Of the preliminary

proceedings, approximately half related to failure to pay the minimum wage or to pay it on time (3,011) and the other half to violations of documentation obligations (3,594). From the point of view of the Minimum Wage Commission, minimum wage violations are not acceptable. It is important for customs authorities to focus their inspections more on those industries, company sizes, forms of employment and regions in which the statutory minimum wage is particularly relevant. A high density of inspections and inspections not based on suspicion in those areas that are particularly affected by the minimum wage make an important contribution to ensuring that violations of the Minimum Wage Act are promptly detected and punished.

- 9** Customs inspections and qualitative studies have identified various ways that employers circumvent the minimum wage. These include incorrectly recording – or entirely failing to record – working hours and setting unrealistically high performance targets. In addition, the unjustified offsetting of room and board against the minimum wage, the unjustified offsetting of working hours against consumer purchases, benefits in kind and vouchers, the unjustified use of exemptions from the minimum wage and bogus self-employment were also observed. According to the assessment of the customs authorities and the available qualitative studies, explicitly agreed hourly wages below the minimum wage are hardly observed. Of the practices mentioned, the incorrect recording of working time is particularly relevant. This includes, among other things, non-documentation of hours worked, inclusion of breaks not granted in the working time, non-compensation for time spent on set-up, preparatory or finishing work, non-compensation for empty runs in the passenger transport industry and incorrectly managed working time accounts. The available data do not allow any conclusions to be drawn about the effects of the minimum wage on undeclared work.
- 10** Violations of the Minimum Wage Act are rarely reflected in the agreed hourly wage. Accordingly, the available and frequently quoted figures from both the Structure of Earnings Survey (SES) of the Federal Statistical Office and the Socio-Economic Panel (SOEP) of the German Institute for Economic Research (DIW Berlin) are of limited relevance to the question of how many employees presumably still earn below the minimum wage on the basis of paid or agreed hours. Neither survey is designed to measure non-compliance with the minimum wage. This also explains the wide range of results available. Regardless of their limited relevance for measuring non-compliance with the statutory minimum wage, both surveys are important data sets for analysing developments in wages and working hours.
- 11** Knowledge of the current level of the statutory minimum wage is an important prerequisite for the implementation of the minimum wage. Representative employee surveys commissioned by the Minimum Wage Commission conclude that only approximately 15 percent of employees in the low-wage sector know the correct level of the minimum wage. Approximately 40 percent know the approximate level of the minimum wage within a range of 50 cents around the actual value. As a central source of information for employees and companies, the Federal Ministry of Labour and Social Affairs has set up a telephone minimum wage hotline in addition to online information, with approximately 700 calls received each month. Approximately half of the calls come from companies or tax consultancies, and one-third from employees. Most frequently, callers inquire about the regulations on internships, wage and salary calculations and the personal scope of application of the Minimum Wage Act. From the point of view of the Minimum Wage Commission, an important

prerequisite for compliance with the minimum wage law is that companies and employees are aware of the current level of the wage.

- 12** The number of employees who require unemployment benefits (*Arbeitslosengeld II*) in addition to their earned income to rise above the poverty line (such employees are known as *Aufstocker*) declined only marginally more after the implementation of the minimum wage law than during the years prior to the introduction and upwards adjustment of the minimum wage. The fact that the minimum wage did not trigger more than this moderate drop shows the limited effect of the minimum wage in reducing in-work poverty. This is mainly because in-work poverty results primarily from short working hours and the number of non-working members in the household, mostly children. In addition, high rent, especially in metropolitan areas, often causes dependence on benefits for wage earners. Only approximately 3 percent of all *Aufstocker* are single full-time employees, the group for whom the minimum wage level was set with the intention of making them independent of unemployment benefits. Consequently, the decline in the number of *Aufstocker* after the introduction of the minimum wage is stronger in single-person households and in households without children than in households with children. The analysis of the overall risk of poverty shows a similar pattern. The minimum wage has only limited potential to reduce households' risk of poverty. Of the employees working at the minimum wage in 2018, only approximately 28 percent lived in households that were at risk of poverty.
- 13** In the context of the introduction of the minimum wage, its effects on statutory pension insurance were discussed. The minimum wage can influence the development of pensions via the development of wages. However, the minimum wage-induced increase in pension contributions is small compared to the total contribution sum, so hardly any actual effects can be observed. Moreover, the possible effects of the minimum wage on the current pension value and on the contribution rate are largely compensated by the mechanism of the sustainability reserve. At the individual level, the pension entitlements of insured persons may increase, depending on their earnings below 8.50 euros per hour before the introduction of the statutory minimum wage. The pension expectancies of insured persons are below the level of the basic provision in old age, even if they have been in full-time employment for many years and earn an income equal to the minimum wage. In interpreting the results at the individual level, it should be noted that with regard to the risk of poverty, it is not the individual situation but the household context that is important.

Minimum wage and employment

- 14** Overall employment has increased continually since the introduction of the minimum wage. This overall development hides heterogeneous developments for different types of employment and for industries that were characterised by a high or a low share of employees earning less than 8.50 euros an hour before the introduction of the minimum wage. Marginal employment declined strongly in 2015 and steadily in the years after. Regular employment grew continually during the period under review. Immediately after the introduction of the minimum wage, employment growth was stronger in industries with a high share of minimum-wage employees than in industries with a low share of minimum-wage employees. This pattern changed in the medium term. Since the middle of 2016, growth rates in industries with a high share of minimum-wage employees are lower than those in industries with a low share of minimum-wage employees. Causal analyses show a decrease in marginal

employment due to the implementation of the minimum wage. This effect also led to a decrease in overall employment, which is made up of regular and marginal employment, relative to its level in a situation without the minimum wage. In contrast, the minimum wage had no statistically significant effect or only a small effect, which was positive or negative depending on the study, on regular employment. These results are valid for the short-term period after the introduction of the minimum wage and for the medium-term period after the first increase in its level.

- 15** One study points out that job losses are primarily found in regions with low economic growth during the period before the introduction of the minimum wage. It remains to be seen how the minimum wage will impact employment trends in the current recession. The minimum wage did not affect the labour market share of routine-intensive occupations, which have the potential to be automated. The concern that the minimum wage may negatively affect routine jobs has thus not been borne out so far. Unemployment has continued to fall since 2015. There was no increased inflow into unemployment from employees in industries that were highly affected by the introduction of the minimum wage. Causal analyses also show no statistically significant effect of the minimum wage on the development of unemployment.
- 16** Findings from company surveys and qualitative studies reveal that reductions in working time, e.g., as a result of reductions in opening hours, and increases in workloads are among the essential channels whereby companies have adjusted to the introduction of the minimum wage. Descriptive analyses comparing the years 2014 and 2018 show a significant decline in hours worked, especially among marginally employed persons. By reducing their working time, marginally employed persons ensured to remain below the earnings threshold of 450 euros per month despite receiving increased hourly wages. For full-time and part-time employees, hardly any decline in hours worked can be observed. Causal studies consistently find a minimum wage-induced decline in agreed working hours only for the year 2015. The results for subsequent years as well as for actual working hours and overtime are mixed.
- 17** The number of vacancies reported has continued to develop positively. However, this increase was significantly lower in industries seriously affected by the minimum wage in Eastern Germany than in the economy as a whole. Nevertheless, causal studies do not show a statistically significant effect of the minimum wage on the number of vacancies. Some findings suggest that employers have increased their qualification and proficiency requirements for the hiring of new personnel who are paid the minimum wage.
- 18** Concerning the participation of firms in vocational education and training and further training, no minimum wage effects are discernible. The number of applicants for apprenticeship training positions has not declined since the introduction of the minimum wage. There are no causal analyses on the effects of the introduction of the minimum wage on internships. The trend in the number of internships does not display any striking changes since this introduction. However, there are indications that a shift is occurring in terms of the types of internship on offer, specifically a shift towards shorter and compulsory internships, and that internship pay has grown more strongly since the minimum wage introduction than it did in the years before. The complex rules of the minimum wage law for different types of internships led to insecurity and a need for guidance on the part of employers, employees and students.

19 Solo self-employment can be an alternative to dependent employment. In industries severely affected by the minimum wage introduction, the proportion of solo self-employed persons in 2014 was approximately 11 percent, while in the whole economy, it was approximately 6 percent. Causal analyses indicate that solo self-employment has declined due to the introduction of the minimum wage. Especially in regions and industries where low average wages were observed before the introduction of the minimum wage, solo self-employment became less attractive compared to dependent employment. While there was no statistically significant minimum wage effect in trade and manufacturing, an increase in solo self-employment was found in the service sector.

Minimum wage and competition

20 The share of companies affected by the statutory minimum wage varies between 12 and 37 percent, depending on the data set. A company is considered to be affected if at least one employee received less than 8.50 euros per hour gross before the introduction of the minimum wage. Small enterprises in particular have a high proportion of employees who earned less than 8.50 euros per hour before the introduction of the statutory minimum wage. The percentage of affected companies decreases with increasing company size. On average, companies in Eastern Germany and in the service sector were more affected than the average firm. Gross total wages per employee and thus monthly wages increased more strongly after the introduction of the minimum wage in affected than in unaffected companies. After the first increase in the statutory minimum wage, wage costs in affected companies also increased more than on average, albeit less strongly than when the statutory minimum wage was introduced.

21 At the macroeconomic level, the introduction of the statutory minimum wage has had no measurable impact on common competitiveness indicators such as labour costs, unit labour costs, productivity and profits. This is mainly because the statutory minimum wage had only a limited impact on the overall wage bill. The Federal Statistical Office estimates, assuming that all employees entitled to the minimum wage received it and that there were no changes to working hours, that the overall wage bill increased by 0.43 percent in 2015 and by 0.07 percent in 2017 following the increase in the minimum wage to 8.84 euros.

22 With the introduction of the statutory minimum wage, the documentation obligations of employers with regard to working hours were extended. This applies to certain sectors of the economy and, irrespective of the sector, to some 6.65 million marginal employment relationships. According to estimates by the Institute for Employment Research (IAB), an additional 1.95 million employment relationships subject to social insurance contributions are subject to the documentation obligations under the Minimum Wage Act. This corresponds to approximately 6 percent of all employment relationships subject to social insurance contributions in Germany. As part of the Federal Statistical Office's Earnings Survey (VE), companies were asked about, among other things, possible extra effort resulting from the statutory obligation to keep records. In 2015, 42 percent of the companies among which the minimum wage triggered adjustment measures considered the extra effort resulting from the documentation obligations to be considerable. 43 percent classified the extra effort as minor, and 13 percent did not report any extra effort. A qualitative study suggests that the documentation obligations have now largely become established. A comprehensive quantification of this extra effort

is currently being conducted as part of a research project of the Federal Ministry of Labour and Social Affairs, the results of which are to be included in the overall evaluation of the Minimum Wage Act at the end of 2020. In discussions of fulfilment effort, the documentation obligations anchored in the Minimum Wage Act must be separated from the provisions of the *Arbeitszeitgesetz* (Working Hours Act), which was already in force before the minimum wage introduction but whose requirements apparently became more of a focus for companies in the course of implementing the minimum wage documentation obligations. This applies, for example, to compliance with the maximum daily working time and the documentation of overtime. From the point of view of the customs authorities, to fulfil their statutory control mandate, they require the information provided by the obligatory documentation. This documentation can also make it easier for employees to pursue claims for payment for work performed, if necessary.

- 23** On the basis of the available data, it can be observed that the minimum wage led to a decline in investments in fixed capital in the year of its introduction, while investment behaviour in later years has no longer been influenced by the minimum wage. This applies to both total investments and expansion investments. The level of investment is generally much lower in enterprises affected by the minimum wage than in other enterprises. Over the period of the introduction of the minimum wage, hardly any effects on productivity, defined as turnover per employee, are discernible, whereas after the minimum wage increase, a slight decline in this indicator is apparent for Eastern Germany. There has also been an increase in the mobility of employees towards more productive enterprises due to the introduction of the minimum wage, while at the same time, an increase in the number of closures of micro-enterprises can be observed. Studies based on surveys of employees show a slight increase in job satisfaction among employees who have benefited from the minimum wage. Qualitative studies show dissatisfaction among some employees with hourly wages just above the minimum wage whose wages have not been increased to the same extent. At the same time, the demands on this group of people and their workload have increased.
- 24** In macroeconomic terms, corporate profits have been developing positively since 2014. Between 2015 and 2017, profits, defined as the difference between revenue and the main cost components of inputs and labour costs, were on average approximately 12 percent lower in companies affected by the minimum wage introduction than in unaffected companies. This can be explained by the increase in wage costs due to the minimum wage. For the minimum wage increases, no statistically significant effects on profits can be identified.
- 25** In company surveys, increases in consumer prices appear as one of the most common adjustment channels whereby companies responded to higher minimum wage-related wage costs. Descriptive analyses indicate that especially for 2015, above-average price increases can be observed in some of the industries that were highly affected by the minimum wage. For the following years, such price increases can no longer be observed. Up to 2018, above-average increases in consumer prices could especially be found with regard to taxi rides, newspapers and magazines as well as fruits and vegetables. Price increases in the industries especially affected by the minimum wage, however, can be attributed not only to the minimum wage but also to price developments in general. Only one causal analysis on this issue has been published to date. It identifies a minimum wage-induced increase in producer prices.

- 26** From 2010, a positive development of private demand is observable. The consumption ratio, which reflects the ratio of consumer spending to household income, is highest in households with low net household income. In these households, an increase in net household income leads to the strongest increase in consumption. Between 2014 and 2016, net monthly household income rose by approximately 4.3 percent or 92 euros more in households affected by the introduction of the minimum wage than in unaffected households. However, the increase in the minimum wage had no statistically significant additional effect on net household income.
- 27** Since the introduction of the statutory minimum wage, company dynamics and competition intensity have not shown noteworthy signs of change at the level of the economy as a whole or in the industries particularly affected by the implementation of the minimum wage. Nor did market exits in the form of business deregistrations or insolvencies or the number of business registrations increase. Moreover, there are no statistically significant effects of the minimum wage introduction on the outsourcing or spin-off behaviour of firms. However, causal analyses do point to micro-business closures induced by the minimum wage implementation; the employees of these firms then moved to larger companies.

Research perspectives

- 28** Five years after the introduction of the statutory minimum wage, numerous research studies on its effects are now available. The Minimum Wage Commission has commissioned approximately 20 projects, which can be found on the Commission's website. In the present report, the Commission has once again outlined topics and issues that it believes are of interest for future research. These include, on the one hand, the continuation and deepening of the central research topics on which this report is based, such as the effects of the minimum wage on wages, employment, working hours and companies. On the other hand, in particular, the question of the longer-term effects of the minimum wage on, for instance, the composition of companies' workforce and competitive situation, should be investigated. Moreover, empirical measurement of non-compliance with the minimum wage law remains a challenge. From the point of view of the Minimum Wage Commission, an improvement of the data basis would be desirable in this respect.
- 29** In its Second Report, the Minimum Wage Commission recommended improving the availability of official data on earnings and working hours. It therefore welcomes the amalgamation and modification of the Federal Statistical Office's Structure of Earnings Survey (VSE), Earnings Survey (VE) and Quarterly Earnings Survey (VVE) to form a uniform earnings survey from 2022 onwards.