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## The Austrian Pay Transparency Law and the Gender Wage Gap

The European Commission (2013) calls the lack of equal pay between women and men among its European member states one of the most problematic areas. The Austrian (20 percent) and the German (raw, i.e., not corrected for differences in observed characteristics) gender pay gaps (19 percent) are above the EU's average of 14 percent. Pay transparency and more information about relative pay has become a popular tool among politicians to tackle the gender pay gap (European Commission 2021). Many EU member states did not follow an earlier recommendation for transparency measures (European Commission 2017). In March 2021, the European Commission presented a proposal for binding pay transparency measures (European Commission 2021). Among the proposed measures are the right of employees to obtain information on the wage levels, the employers' duty to report the wage levels, wage audits at firms, or making equal wage part of the collective bargaining process. The new proposal also includes the right to compensation for pay discrimination and aims at facilitating access to justice (European Commission 2021).

Several countries, however, have already implemented pay transparency measures. Early adopters were the Scandinavian countries, Italy, Austria, Belgium, and France. Germany, Lithuania, and the UK followed later (Aumayr-Pintar 2018). Canada and the US also have different pay transparency laws. Estonia, Ireland, the Netherlands, Portugal, and Spain have prepared drafts for a transparency legislation, but the laws have not yet been passed.

Austria introduced a wage transparency law in 2011, which requires firms with more than 1,000 employees to provide their employees with a wage report every two years. A report must at least give the number of men and women in each remuneration group and their mean and median wages. Employees must not communicate the results with third parties and employers may sue employees for breach of confidentiality.

In our study (Böheim and Gust 2021), we analyzed the effect of the Austrian pay transparency law on men's wages, women's wages, and the gender wage gap. Austria was among the first countries in Europe to introduce pay transparency. This allowed us to study medium run effects as wages often need time to adjust. We also assessed if the law affected other labor market outcomes such as firm growth, turnover, and the share of female employees.

We find no evidence that the Austrian pay transparency law reduced the gender pay gap. Our results

are in line with Gulyas et al. (2021), who also studied the pay transparency law in Austria but focused on smaller firms which were subject to the law from 2014 onwards.

### FROM AN ECONOMIC PERSPECTIVE, IT IS NOT CLEAR WHAT TO EXPECT FROM PAY TRANSPARENCY

The goal of political decision-makers is the reduction of gender wage gaps. However, from an economic perspective, the expected effects of wage transparency requirements on wages are not clear a priori. Wage transparency might decrease information asymmetries in the wage bargaining, if employees have limited information about the wage structure in the firm or about their outside options in other firms. Information asymmetry allows firms a wage-setting power in the bargaining process. Increasing wage transparency could thus lower the wage setting power of firms, which could lower the wage gap if it were the result of different labor supply elasticities by men and women (Hirsch 2016).

Biasi and Sarsons (2020) suggest that women tend to be less aware of their colleagues' wages than men. If this asymmetric information about wage distributions is the cause for gender wage gaps, women could benefit from more transparency, and more transparency could narrow the gender wage gap. However, Cullen and Pakzad-Hurson (2021) show that wage transparency reduces the individual bargaining power of employees. Under transparency, raising individual wages can lead to costly renegotiations from other employees. To avoid this, employers adjust their bargaining strategy and do not grant any wage raises in the first place. Cullen and Pakzad-Hurson (2021) suggest that transparency laws lead to 2 percent lower wages in the US. Moreover, since wage reports do not link wages to the productivity of employees, a reported wage gap could increase the wage gap if the most productive employees of the



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supposedly underpaid employees leave the firm or if men and women renegotiate their wages differently (Baker et al. 2019).

The empirical evidence suggests that wage transparency reduces wage gaps in firms. In Canada and Denmark, transparency laws increased wages for women and led to a smaller gender wage gap (Baker et al. 2019; Bennedsen et al. 2019). Duchini et al. (2020) show that the UK pay transparency law increased the probability that women are hired in above-median wage occupations and decreased real wages for men. Thus, for these countries pay transparency reduced the gender wage gap.

### THE AUSTRIAN PAY TRANSPARENCY LAW

The law requires firms of different sizes to provide wage reports. In 2011, when the law was announced, it affected firm with more than 1,000 employees. We focus on the large firms as these firms were unexpectedly subject to the law. Firms with 500 or more employees have had to publish reports since 2012. Since 2013, firms with 250 or more employees have also been required to publish wage reports, and since 2014, firms with more than 150 employees. These smaller firms might have anticipated the requirements as the law was announced in 2011 and adjusted the wages earlier. The firms have to submit the report to the works council or, if there is no works council, to all employees within the first quarter following the reporting year (Österreichischer Gewerkschaftsbund 2011). The wages of part-time employees have to be projected for full-time employment and the wages of employees who are employed less than one year to annual employment. The mean and median wages must be aggregated to at least five employees due

to data protection reasons (Österreichischer Gewerkschaftsbund 2011).

If the employer does not provide a wage report, the works council or, in the case no works council exists, an employee may take legal steps at the Labor and Social Court to enforce their inspection and control rights (Österreichischer Gewerkschaftsbund 2011). This can lead to coercive penalties for the employer but, to the best of our knowledge, there has been no corresponding case. The Federal Ministry for Education and Women (2015) assessed the compliance of firms with the wage transparency law based on interviews of managers, employees, and work councils. According to their assessment, most firms stuck to the legal minimum of reporting.

### METHOD AND DATA

To analyze the effects of the Austrian pay transparency law we used administrative data from the Austrian Social Security Database (ASSD). These data contain detailed information on employees' earnings and employment history (Zweimüller et al. 2009). For the analysis, we used 23,085 firm-year observations for the years 2009 to 2017.

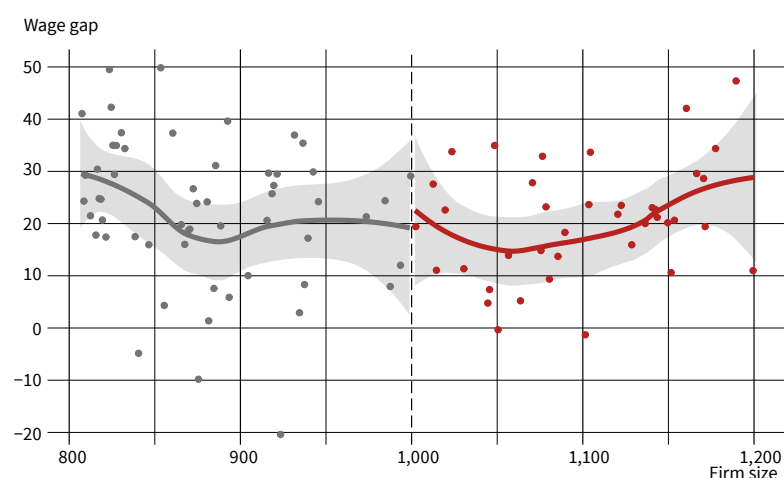
For each step in the staggered introduction, the law defines a clear cut-off in the firm size. We used a regression discontinuities design (RDD) to estimate the causal effects of the law on wages and the gender wage gap (see, e.g., Lee and Lemieux (2010) for details on the RDD). In the RDD, we defined firms just above the cut-off as treated observations and firms just below the cut-off as control observations. Under certain assumptions, a RDD allows estimating the average treatment effect (ATE) of whether a firm is required to publish a wage report or not on outcomes of interest. In addition to wages and the gender pay gap, we also analyzed the impact on firm growth, employee turnover, and the share of women in each firm.

We focused on firms that were first affected by the law, because for them the law came most surprisingly. Although firms just below and just above the arbitrary cut-off are likely to be similar, there might still be small, systematic differences between the treatment and the control observations. To control for that, we also used a difference-in-discontinuities design (Grembi et al. 2016) which combined the RDD with a difference-in-difference model.

### THE AUSTRIAN PAY TRANSPARENCY LAW WAS LARGELY INEFFECTIVE

Figure 1 descriptively shows the median gender pay gap in firms with 1,000–1,199 employees that had to publish a wage report for the first time in 2011 in comparison to firms with 800–999 employees. We do not see different gender pay gaps by whether a firm was just above or just below this threshold.

Figure 1  
Discontinuity Plot for the Gender Pay Gap



Note: The graph presents the regression discontinuity for the year 2011. The vertical line represents the cut-off of 1,000 employees and each dot is the median value in that bin. Firms with less than 1,000 employees are the control group (gray line). Firms with more than 1,000 employees are the treated group (red line). The gray area is the confidence interval. The graph shows that there is no significant difference (discontinuity) in the gender pay gap between these two groups. Note that we chose a fixed bandwidth in this figure for visualization only. In our model we run a local linear regression with a data driven bandwidth parameter.  
Source: Böheim and Gust (2021).

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We also do not see a significant difference if we consider wages for men and wages for women separately. The estimations of the RDD and the difference-in-discontinuities models, along with several robustness checks, confirm this pattern. As there are fewer large firms than smaller and medium sized firms in Austria, we repeated our analysis for smaller firms that were affected by the law in later years. For firms with 150 employees, we also analyzed effects until 2017. Each of these estimations shows no significant effect of the transparency law on the gender wage gap.

It is likely that employees may find it difficult to renegotiate their wages in the short-term upon learning about the firm's wage distribution. We therefore repeated the analysis and focused on newly hired employees who are perhaps more flexible when negotiating their wages. The information on wages and the distribution of wages within the firm might be more salient for the firms' managers, if not for the job applicants. For the firms that hired new employees in 2011, we estimated that women had greater wages in firms just above the threshold than in firms just below the threshold. However, these results are not robust to alternative specifications. For these firms, we also found that the share of women decreased in 2011 compared to slightly smaller firms, which could be related to the finding that wages for women increased.

The transparency law could have impacted on other labor market outcomes. For example, if the law increased firms' costs, we expect treated firms to grow less than untreated firms. Transparency laws could change the employees' turnover if they are positively or negatively surprised about their firms' wage structure. In particular, women might decide to leave firms if they feel they are treated unfairly. We did not find any evidence that the law had an effect on firm growth or turnover.

### WHY DID THE AUSTRIAN PAY TRANSPARENCY LAW HAVE LITTLE EFFECTS?

There are a couple of explanations why the pay transparency reduced the gender pay gap in other countries but not in Austria. However, we have not been able to test these hypotheses empirically. One reason could be that the employees do not know that the reports exist. A survey by the Federal Ministry for Education and Women (2015) found that 70 percent of the employees did not know about the policy and the reports. Many respondents indicated that the reports are not informative. We cannot rule out that the law affected only a particular group of employees, such as employees in the top of the wage distribution, because we cannot verify this with the data we have.

In other countries, such as in the UK and Canada, wages are posted publicly online while in Austria the

reports are only shared internally. This may limit any effect to the within firm gender pay gap. However, a large part of the Austrian gender wage gap is due to the wage gap between firms and between industries, which this law does not target (Gulyas et al. 2021).

In Austria, 99 percent of the employees are under collective bargaining. Cullen and Pakzad-Hurson (2021) found that the wage effects of pay transparency are likely to be close to zero if a large share of the workforce have wages set by collective bargaining.

The current Austrian pay transparency law does not include any consequences if the reports reveal unequal wages. In Switzerland, firms which have large gender wage gaps can be excluded from public contracts (Vaccaro 2018). The Austrian law demonstrates that it is important how transparency requirements are formulated and enforced.

We do not find an immediate response of the gender wage gap to the introduction of the transparency law. It is, however, possible that such changes require more time than the relatively short post-reform period that we are able to study. Over time, as firms hire new employees, we might observe a narrowing of the gender wage gap due to more transparency or because gender wage differences get more attention.

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