Rising between-workplace inequalities in high-income countries

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Edited by Michael Hout, New York University, New York, NY, and approved March 6, 2020 (received for review October 17, 2019)

It is well documented that earnings inequalities have risen in many high-income countries. Less clear are the linkages between rising income inequality and workplace dynamics, how within- and between-workplace inequality varies across countries, and to what extent these inequalities are moderated by national labor market institutions. In order to describe changes in the initial between- and within-firm market income distribution we analyze administrative records for 2,000,000,000+ job years nested within 50,000,000+ workplace years for 14 high-income countries in North America, Scandinavia, Continental and Eastern Europe, the Middle East, and East Asia. We find that countries vary a great deal in their levels and trends in earnings inequality but that the between-workplace share of wage inequality is growing in almost all countries examined and is in no country declining. We also find that earnings inequalities and the share of between-workplace inequalities are lower and grew less strongly in countries with stronger institutional employment protections and rose faster when these labor market protections weakened. Our findings suggest that firm-level restructuring and increasing wage inequalities between workplaces are more central contributors to rising income inequality than previously recognized.

inequality | workplaces | administrative data | earnings | institutions

Rising income inequalities are increasingly recognized as social, political, moral, and macroeconomic problems for high-income nations (e.g., refs. 1–3). Using linked employer–employee (LEE) administrative data for 14 countries (Canada, Czechia, Denmark, France, Germany, Hungary, Israel, Japan, the Netherlands, Norway, Slovenia, South Korea, Sweden, and the United States) we describe changes in the initial market income distribution produced by workplaces over roughly the last quarter century. Almost all rising wage inequalities in the United States are between firms (4), with the increased market power of super star firms (5) and outsourcing and subcontracting of production to low-wage employers (6) as the two most plausible mechanisms. We explore the global extent of this trend and the degree to which it is moderated by national labor market institutions.

Although most wages come from employers, most prior research on earnings inequalities rely on self-reported earnings from surveys of individuals (e.g., ref. 7). Increasingly, social scientists have been able to access and develop administrative data collected from employers by national governments, typically as part of their tax and social welfare systems. These data often have nearly complete, highly accurate information on individual earnings, making it possible to examine the job-level (person–employer match) wage distribution, changes in that distribution, and their association with organizational characteristics. LEE data allow us to locate inequalities in the firms that produce them. An analytic focus on employers is crucial if countries are to develop labor market or industrial policies that focus on the quality of jobs.

In some influential accounts rising inequality is treated as ubiquitous and almost inevitably increasing across high-income capitalist nations (e.g., ref. 3). Others have pointed out that there is considerable national variation in low-wage work, as well as earnings inequality levels and trends (e.g., refs. 8 and 9). The

Significance

Understanding the causes of rising inequality is of concern in many countries. Using administrative data, we find that the share of inequality that is between workplaces is growing in 12 of 14 countries examined, and in no country has it fallen. Countries with declining employment protections see growth in both between- and within-workplace inequalities, but this impact is stronger for between-workplace inequalities. These results suggest that to reduce market income inequality requires policies that raise the bargaining power of lower-skilled workers. The widespread rise in between-workplace inequality additionally suggests policy responses that target the increasing market power of firms in concentrated markets as well as curb the ability of powerful firms to outsource low skill employment.

Author contributions: D.T.-D., A.R., D.A.-H., N.B., D.C., O.G., G.H., M.H., A.S.H., F.H., J.J., A.K.-M., J.K., N.K., A.K., Z.L., S.M.M., E.M., A. Penner, T.P., A. Poje, M.S., and Z.T. designed research; I.B., O.G., G.H., M.H., L.F.H., A.S.H., F.H., J.J., J.K., N.K., T.K., A.K., Z.L., S.M.M., E.M., A. Poje, M.S., and M.T. performed research; D.T.-D., A.R., J.K., and S.M.M. contributed new reagents/analytic tools; D.T.-D., A.R., and F.H. analyzed data; and D.T.-D., A.R., D.A.-H., O.G., M.H., A.S.H., and J.K. wrote the paper.

The authors declare no competing interest.

This article is a PNAS Direct Submission.

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This article contains supporting information online at https://www.pnas.org/lookup/suppl/doi:10.1073/pnas.1918249117/-/DCSupplemental.

former stress institutional similarities among capitalist countries and the centripetal forces of globalization and technological change, both of which are understood to reduce the demand for routine production roles. The latter stress national variation in institutions that reduce employee's dependence on employers, provide various forms of job security, and put a floor under wages, all of which reduce the possible levels of wage inequalities associated with employee bargaining power. Although both perspectives emphasize the relative bargaining power of employers and employees, neither has typically had access to LEE wage data.

Early LEE studies found for multiple countries that within-workplace wage variance tended to be substantially higher than between-workplace inequalities (10). In contrast, recent studies have shown that most of the rising inequality in the United States (4, 11), West Germany (12), and Sweden (13) has been produced by rising between-workplace (Sweden and Germany) or firm (United States) inequality.

Rising between-workplace inequality occurs when workplaces become more dissimilar in their average pay. This can be produced by some firms becoming more powerful in their market positions and so accumulating larger shares of national (or global) income. Examples of these organizational dynamics include the rise of superstar firms, such as the global dominance of a few technology firms such as Microsoft, Apple, Facebook, Google, and Amazon (5), and the power of financial service firms in some countries to accumulate national and global income (14, 15). Akerman (16) suggests that this process leads to the concentration of more educated workers in higher-wage firms and the less educated in lower-wage firms.

Between-firm earnings polarization can also be propelled by the reconfiguring of organizational boundaries in which firms with market or organizational power specialize in high value-added work and outsource or subcontract routine production. Examples of such organizational reconfigurations include dominant brand manufacturers spinning off supplier functions to lower-wage firms (17), unionized workers being replaced by independent contractors (18), branded companies subcontracting out both production and capital investment while absorbing the profits associated with the brand (6), and global commodity chains in which routine production are sourced from low-wage locales by large retailers or manufacturers in high-income countries (19). Outsourcing of low-skill jobs from high-wage firms has been linked to earnings declines in the range of 10 to 15% in Germany and 4 to 24% in the United States (20, 21).

This package of dynamic shifts in the power, productivity, boundaries, and global scope of dominant firms appears to have been encouraged in some countries by the contemporary policy model of reduced government regulation and employment protections (22), as well as by the reconfiguration of large firms as more narrowly responsible to shareholders rather than other stakeholders, such as employees, communities, customers, and even their nation of origin (23).

Our analyses document substantial variation between countries in inequality trends. Total inequality is rising in nine countries, declining in three, and stagnant in two. Most strikingly, we find in 12 of the 14 countries examined that the organizational structure of production is shifting toward increasing between-workplace wage dispersion. In all of those 12 countries this process is more pronounced in the private sector, but we also find rising between-workplace inequality in the public sector in eight countries. Finally, we show that trends in rising between-workplace wage dispersion are closely aligned with declining national labor market institutions, institutions that in some countries once protected the bargaining power of employees relative to employers.

In what follows we first establish country variation in the levels and trends in earnings inequalities for all job–person matches and for subsamples of full-time job–person spells. We then decompose each country's inequality levels and trends into between- and within-workplace variance components. Next, we compare levels and trends in the proportion of inequality attributable to the between-workplace component across countries in terms of their shifting labor market institutions. We then discuss results, followed by a presentation of *Materials and Methods*. The paper is followed by *SI Appendix*, organized as five appendices.

Results

We present results for both the levels and trends in total and between-workplace earnings inequality as well as the proportion of total inequality that is between workplaces. There is substantial variation across countries in both the levels and trends in total inequality. In contrast, between-workplace inequality is rising in 10 countries. Additionally, because in some countries the within-workplace inequality component falls, the proportion of inequality that is between firms is rising in 12 of 14 countries.

Trends in Total Inequality. Fig. 1 presents trends in the total variance in logged earnings and the between-workplace variance estimates for all jobs for 14 countries. There are striking disparities in the levels of inequalities, with the United States, Canada, and Israel more and the Nordic countries less unequal in their initial market distribution of income.

Rising wage inequality is not an international constant. There is substantial variation across countries, with strong growth rates between the first and last observation in Czechia (+26.0%), Germany (+62.6%), Korea (+35.0%), Norway (+43.6%), and Sweden (+32.0%); slower growth rates in Denmark (+8.5%), Israel (+8%), the Netherlands (+8%), and the United States (+10.8%); declines in France (−21.7%), Hungary (−4.5%), and Slovenia (−11.5%); and relatively stable distributions in Canada and Japan. There is also a tendency in several countries, most notably Germany and Slovenia, for inequality declines after the great recession of 2008 to 2010.

In five of the countries examined, job-level wage inequalities are either roughly stable or falling. Trends for full-time jobs largely mirror those of the entire economy for every country, with only minor discrepancies (see *SI Appendix*, Appendix 2, for full-time estimates).

Trends in Between-Workplace Inequality. Variance in between-workplace wage inequalities for all jobs are rising absolutely in 10 of 14 countries. At the high end, Germany has experienced a 92.5% growth in between-workplace inequality. Other countries range between a growth rate of 66.5% (Sweden) and 7.9% (Japan). Countries which have seen absolute declines in between-workplace inequality are France (−11.6%), Slovenia (−14.9%), and Hungary (−3.9%). Canada has experienced essentially no change.

Initially, the proportion (rather than the level) of between-workplace inequality ranges from a low of 18.5% in the Netherlands to over 50% in Germany, Hungary, and Japan. Canada and Denmark show relatively low initial between-establishment inequality shares (*SI Appendix*, Appendix 2, and Table S1.4). Czechia, Israel, Korea, Norway, France, Slovenia, Sweden, and the United States are sandwiched in the middle of these distributions. By the end of the period in seven countries (Czechia, Israel, Japan, Hungary, Germany, Norway, and South Korea), half or more of their total wage variance is produced by between-workplace wage dispersion.

Fig. 2 provides the trends in the proportion of inequality attributable to the between-workplace component for the total economy, as well as for the private and public sectors. The proportion of total inequality attributable to the between-workplace component has grown in every country except

Fig. 1. National trends in the total variance of log wages (*Left*) and between-workplace variance for all jobs (*Right*). USA-Song denotes Song et al. (4) estimates, which span 1993 to 2013. USA-Census denotes estimate from the US Census, which begin in 2005 and end in 2013. South Korea's estimates are limited to full-time jobs only, and 2005 estimates are missing.

Hungary and Canada. Between-workplace wage dispersion occurs even in countries which have very high initial proportions. Germany and Japan's between-workplace inequality proportion grew from 55.9 to 66.2% and 52.4 to 58.0%, respectively. Czechia, Germany, the Netherlands, and Sweden all show the largest increases in the between-workplace component, growing by 9% or more. Denmark, France, Israel, Norway, South Korea, and the United States all experienced growth of 5% or more in the between-workplace inequality component. Although between-workplace inequality declined over Slovenia's entire economy, their private sector experienced a rise in between-workplace inequality of about 2.5%.

The between-workplace component in both Canada and Hungary, on the other hand, has remained stable overall. Importantly, not a single country experienced a decline in either the level or proportion of the between-workplace component of inequality. Wage inequality dynamics in the last 2 decades have been driven increasingly by the relative importance of between-workplace earnings dispersion in most countries examined.

If between-workplace earnings dispersion is driven primarily by market pressures, it should be confined largely to the private sector. On the other hand, if public sectors are responding to institutional pressures to look more like the private sector, we might find that this pattern happens there as well. In all countries, between-workplace dispersion is larger in the private sector than in the public sector. For six of these countries, between-workplace wage dispersion has also grown at a faster rate in the private sector. In 8 of the 14 countries, dispersion is occurring in the public sector as well. Only in Hungary and Slovenia do we observe declines in the between-workplace component in the public sector (around 5% for both countries).

Institutional Variation. Much prior research has shown that wage inequalities and particularly the prevalence of low wages tend to be lower in countries with national or industrial institutions that increase the bargaining power of employees relative to employers (e.g., refs. 24 and 25). We ranked each country in terms of six labor market institutional protections: the centralization of collective bargaining units and worker's councils; the level at which businesses, labor, and government engage in wage coordination (national, industry, workplace, and individual); the proportion of the economy that is affected by corporatist arrangements, such as industry-wide wage bargaining; the percentage of workers covered by collective bargaining agreements; regular contract individual's legal employment protections; and

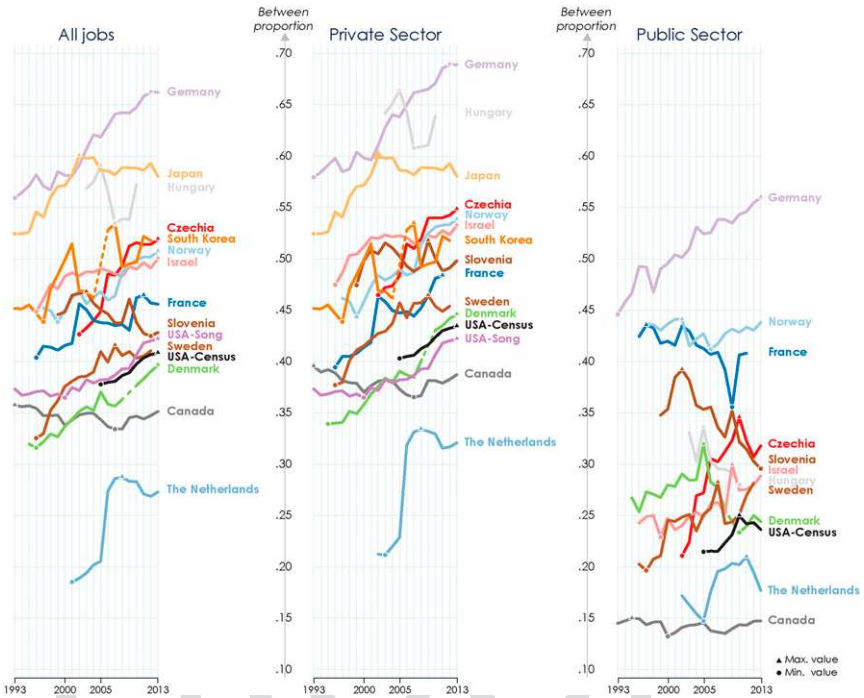

Fig. 2. The proportion of total inequality that is between firms for the total (*Left*), private (*Middle*), and public sectors (*Right*). Estimates are for all jobs except for South Korea, which are full-time jobs only. Japan, South Korea, and USA-Song only have private sector estimates. South Korea is missing for 2005.

temporary contract individual's legal employment protections (see *SI Appendix*, SI Appendix 3, for full details).

Fig. 3 shows trends in institutional protections for each country, as well as trends in the between-workplace share of total wage inequality. At the beginning of our period, the countries fell into three distinct institutional groupings: The United States and Canada both had very low scores, reflecting an almost total absence of institutional employment protections. These two countries also remain stably low through our time period. The next set of countries, Sweden, Norway, Germany, Slovenia, the Netherlands, France, and Denmark, all began with quite high institutional employment protections. Of these, Germany, Sweden, and Norway all experienced strong declines. France, the Netherlands, and Denmark maintained their robust institutional labor market protections. Slovenia's protections collapsed in the early 1990s, only to be built back up to their former strength by the early 2000s. Czechia, Hungary, Israel, South Korea, and Japan start in between the extremes of the two former groups.

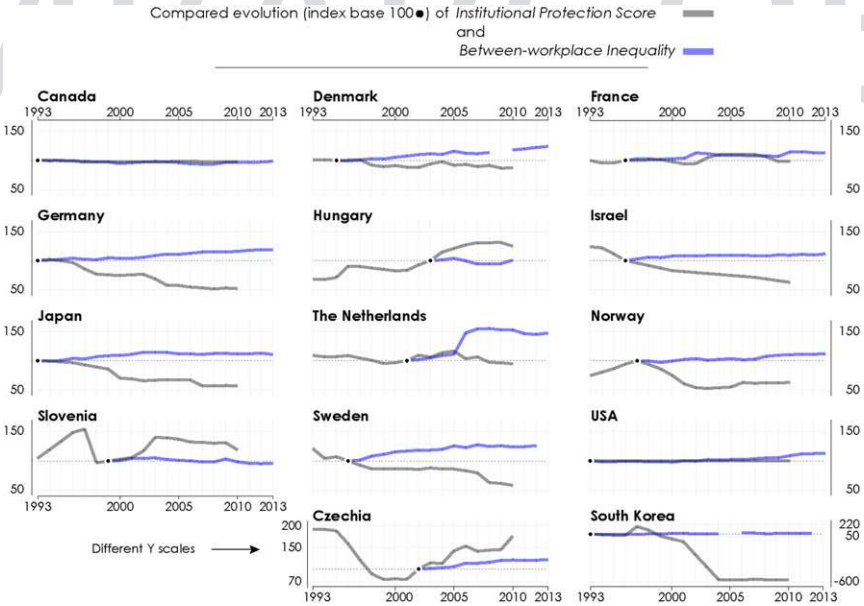

Fig. 3. The relationship between institutional employment protections and the between-workplace component. All estimates are on all job samples, except for South Korea, which is full-time jobs only. US (4), Japanese, and South Korean estimates are private sector only and missing for 2005.

Czechia and Japan both remain relatively stable, whereas Hungary steadily increased the strength of its institutional protections, and Israel and South Korea weakened theirs.

Fig. 3 displays a general pattern of association between shifts in institutional protections and changes in the between-workplace inequality share. When labor market institutions weaken, between-workplace inequalities tend to rise. In Denmark, France, Germany, Israel, Japan, the Netherlands, Norway, Sweden, and South Korea, when labor market institutions weakened, workplace inequalities rose. In Canada and the United States where institutions remain stably weak, we see little change. Institutional protections strengthen in Czechia, Hungary, and Slovenia. In Hungary the between-workplace share of inequality is flat; in Slovenia it declined overall but grew in the private sector. Czechia is the anomaly, with a strong rise in between-workplace inequality despite strengthening labor market institutions.

To more formally investigate this process, we estimated a series of error correction statistical models to explore the potential impact of institutional change on rising within- and between-workplace inequalities. The first stage of the error correction model takes the following form:

$$\Delta Y_t = \alpha_0 + \alpha_c + \alpha_1 Y_{t-1} + \beta_0 \Delta X_{t-(t-1)} + \beta_1 X_{t-1} + \varepsilon_t.$$

The model estimates the impact of levels and change in institutional protections on change in inequality, controlling for both the lagged value of inequality and a country fixed effect to absorb stable unobserved country attributes. See ref. 26 for more information.

From the first stage model we can directly estimate the short-term coefficient and SE of ΔX (institutional change). In a second stage, the long run effect of institutional change is calculated as $\beta_1 X_{t-1}$ divided by the error correction rate $(\alpha_1 Y_{t-1})$. We then use the Bewley model (27) to estimate the SE of the long-run effect of X. Code for these estimations is provided in *SI Appendix*, Appendix 5.

To rule out the most prominent alternative explanations we control for changes in unemployment, labor force participation, and female labor share. We do not have country year measures of concentrated economic power, and so our models remain vulnerable to omitted variable bias. The ability of powerful firms to outsource production is likely to be restricted when countries have strong labor market institutions. The focus on logged earnings and models that include lagged dependent variables and country fixed effects, as well as jackknife estimations to rule out influential case explanations, increase confidence that our estimates are likely to be reasonable, if not definitive.

We hypothesize that declining institutional protections will be associated with a rising proportion of between-workplace inequality. We also estimate models of the total, between, and within inequality components. None of these models are strictly speaking causal models as we think that the mechanisms that produce rising between-workplace inequality are primarily organizational. Rather, shifts in institutional protections are indicators of an economic environment that is more or less conducive to organizational strategies of outsourcing, franchising, subcontracting, and the like, as well as more individual and firm-level wage bargaining.

Table 1 reports the results. In no case do we see instantaneous inequality responses, which rules out the interpretation that rising between-firm inequality encourages declining institutional protections. We do see long-term shifts in inequalities accompanying changes in institutional labor market protections in all models. Rising proportions of country between-workplace inequalities respond most strongly to declining institutional protections, and this result is on average stronger in the private sector than in the public sector. In response to declining employment protections, between-workplace variance in inequality rises in both the private and public sectors. The same is true for within-workplace inequalities, although the estimated effect sizes are relatively weaker, as is model fit.

Discussion

Market wage inequalities are not rising in all countries. The pattern of rising between-workplace wage dispersion, however, is more ubiquitous. In 12 of 14 countries examined, between-workplace inequalities are rising in the private sector. In eight this pattern is also present in the public sector. No country shows a clear decline in the between-workplace proportion of wage inequality.

Institutions that support the bargaining power of labor and the employment security of individuals strongly condition the levels of potential inequality both between and within firms. These institutions include collective bargaining through labor unions, national-level wage bargains, high minimum wages, the existence and power of worker's councils in the workplace, and employee protections from dismissals. The United States and Canada stand out for their low levels of employment protection and high levels of wage inequalities. However, even in the United States, there is evidence from the 1970s, prior to the 1980s collapse of unionization, that collective bargaining was associated with lower between-workplace inequality (28). The erosion of institutional protections in multiple countries appears to have given individual firms greater leeway to engage in organizational practices which generate increased wage inequalities, presumably via such mechanisms as outsourcing, franchising, independent contractors, and labor subcontracting, all of which decouple less powerful workers from dominant firm production and silence their potential claims on the lead firm's income.

Prominent research on Germany suggests that weakening labor market institutions and union bargaining power are linked to rising between-workplace inequalities (12). Other research has found that when institutional protections weaken, organized labor is less able to extend protection to low-skilled workers, leaving those workers increasingly vulnerable to outsourcing and independent contracting (29–31). It is the linkage between these institutional processes and rising between-firm inequality that we have the strongest confirmatory evidence. We strongly suspect that weak or declining institutional employment protections increase high-wage firms' incentive to restructure production via outsourcing and other forms of externalized production. Conversely, weak institutional protections enable the creation of low-wage firms to absorb this work. Doellgast (30), for example, shows that declining union power in the German telecommunications industry facilitates labor outsourcing. Similarly, Weil (6) for the United States stresses the absence of union and other employment protections for the outsourcing of production and risk to dependent supplier firms.

We do not observe rising firm market power in this paper. There is evidence elsewhere of rising product market concentration in our study period in Europe, the United States, and Japan (5, 32, 33). The rising market power of firms has been found to raise wages in those firms (5, 14, 15). We suspect that this market power also makes it easier for those firms to source or outsource risk and production to dependent supplier and franchisee firms (6, 19). There is good evidence for the United States, at least, that the concentration of revenue in the largest firms has increased even as employment has shrunk (34). It is also possible that these and other market processes have led to a rising economic return to educated labor (16). Other research has suggested that sectoral and industrial change, which is clearly implicated by the outsourcing mechanism, may also be important drivers of between-country inequality trajectories (35).

This paper has not adjudicated between these various mechanisms but has shown that rising between-workplace inequality is

Table 1. Error correction times series estimates regressing change in inequality on lagged inequality, lagged institutional protections, and changes in institutional protections

	Short-term impact of institutional protections	Long-term impact of institutional protections	*P* value: long-term impact	Model fit (adj. r^2)	Country years
Proportion of total inequality between workplaces					
All sectors	−0.032 (0.039)	−0.071 (0.014)	0.000	0.732	162
Private sector	−0.044 (0.043)	−0.104 (0.012)	0.000	0.739	161
Public sector	0.015 (0.039)	−0.069 (0.023)	0.014	0.490	117
Between-workplace variance					
All sectors	−0.021 (0.019)	−0.182 (0.009)	0.000	0.881	162
Private sector	−0.023 (0.024)	−0.195 (0.009)	0.000	0.868	161
Public sector	−0.005 (0.013)	−0.129 (0.009)	0.000	0.810	117
Within-workplace variance					
All sectors	0.001 (0.018)	−0.068 (0.009)	0.000	0.736	162
Private sector	0.005 (0.020)	−0.061 (0.009)	0.000	0.738	161
Public Sector	0.013 (0.031)	−0.059 (0.012)	0.001	0.514	117

Table reports coefficients, with SEs in parentheses. The institutional scale is available until 2010, and so our analyses begin with the first observation for a country and end in 2010. Israel was not included because of missing information on employment protection legislation. For all sectors and private sector estimations, Song et al. (4) estimates were used; for public sector models, US Census estimates were used. All models control for yearly unemployment rates and labor force participation and are robust to additional statistical control for changes in female labor force participation as well as jackknife estimations.

widespread. We look forward to the next round of research to unpack the (likely) nationally contingent impact of institutional, firm market power, and business strategy mechanisms.

Our results suggest that policies aimed at reducing rising inequalities in national production systems might focus on between-firm and workplace inequalities via mechanisms that strengthen the bargaining power of employees and address the ability of powerful firms to outsource risk while absorbing revenue. Strengthening institutional protections for lower-skilled workers will not only improve their wages and job security but also reduce the ability of more powerful firms to outsource production to lower-wage firms. Policies to limit the market power of dominant firms may moderate both the earnings going to the top of those firms and their ability to externalize labor costs.

Materials and Methods

Data Availability. Source data for this paper are highly confidential and available only under license from the country of origin. We provide country–year aggregate data for all data points discussed in the paper in *SI Appendix*, Appendices 2 and 3.

Data Harmonization. We endeavored to harmonize all measurement and sampling decisions, excepting only the definition of full, part-time, and marginal job wage; in those cases, national definitions were given priority. *SI Appendix*, Appendix 1, details country-specific sampling, operationalizations of all variables, and the consequences of sample restrictions for final sample size and describes country-specific variation in sample coverage.

In all analyses we exclude marginal jobs with very low wages, individuals below age 16, and workplaces with only one employee after the prior two exclusions.

Samples. For Canada, Denmark, France, Israel, the Netherlands, Norway, Slovenia, Sweden, and the United States we have population or near-population administrative data covering nearly all workplaces and nearly all employees. In Czechia, Germany, Japan, and Korea we analyze very large random samples of workplaces and their employees. In Hungary we have a random sample of 50% of all employees with firm identifiers.

Japan and South Korea only have private-sector estimates available. The other 12 countries have both public and private sector estimates. We begin in the early 1990s because that is when most national economies began to generate LEE data. More detail on country-specific data descriptions can be found in *SI Appendix*, Appendix 1.

In all countries we excluded jobs with earnings so low that they might represent reporting error or extremely short job spells. In the United States, Canada, and Israel these were done with income cutoffs and produced substantial exclusions, presumably of short-duration job spells. In the other countries, low-income cutoffs were also used, but these identified very few marginal jobs, which we suspect represent employer reporting error (*SI Appendix*, Appendix 1).

In all countries, informal economic activity is not captured.

We use two sets of estimates for the United States. Estimates provided by Song et al. (4) range from 1993 to 2013 and include only the private sector. We supplement the Song et al. estimates with estimates provided by J.K. while employed by the US Census Bureau. These Census Bureau estimates cover only 2005 to 2013 but provide information on both the private and public sectors, as well as estimates for the subset of full-time jobs.

Statistical Significance. Because we have population data or very large samples we do not test for statistical significance in our trend analyses. Our smallest country–year sample is for Korea in 2003 with 362,789 jobs and 52,085 workplaces. We do test for statistical significance in country–year models that examine the relationship between changes in labor market institutions and inequality components. We provide the statistical code used to produce these estimates in *SI Appendix*, Appendix 5.

Units of Observation. Our core observational units are jobs within establishments. A job is a person–workplace match in a specific year. We focus on all jobs, which includes part-time and part-year job spells, as well as the subsample of full-time only jobs. Our focus on jobs highlights the output of the economy in terms of the employment opportunities that individuals and households confront.

Job Earnings Measurement. All earnings data are based on personnel records and reported by employers and so have very little measurement error. Our preferred earnings concept is logged hourly earnings. We include all earnings associated with a job spell including regular, overtime, and bonus earnings.

In nine countries we observe hourly earnings. For Germany and Hungary we observe daily earnings. In the United States, Canada, and Israel we observe yearly earnings associated with a job spell and have no information on hours or days worked. For these countries we use low wage cutoffs to define both marginal and full-time jobs (see *SI Appendix*, Appendix 4, for more detail). In these three countries we cannot clearly distinguish between jobs that are not full-time including both year-long part-time, low-earning part-year jobs, and some combinations of the two. For these countries we ran robustness checks for different definitions of marginal jobs and trends for total inequality and between and within components were very similar.

Organizational Units. For 12 countries we observe establishments, that is, actual workplaces. In Canada we use firm within state as a proxy for establishment. In the United States we use simply firm identifiers as our data lack state-identifying information. For those countries for which we have both firm and establishment identifiers, we are able to show that establishment and firm-level estimates track quite closely, and the inequality trends of the countries do not differ substantively between establishment and firm organizational concepts.

Earnings Inequality Measurement. We measure earnings inequality as the variance in logged wages, computed as $\sigma^2 = (\sum(X - \mu)^2/N)$, where σ^2 is the variance, X is the observed logged wage for each job match, μ is the mean logged wage for all job matches, and N is the total number of job matches. The variance in log wage is scale invariant, directly decomposable into component parts, and particularly sensitive to income transfers lower in the income distribution (36). Thus, it is particularly useful for comparisons across time and countries, can be directly decomposed into between- and within-firm components, and is most appropriate when the normative concern is the social welfare of those with less income (37, 38, 39).

We follow Lazear and Shaw (10) in decomposing the logged earnings variance into within-workplace and between-workplace inequality with the following formula:

$$\sigma^2 = \sum_{j=1}^{J} p_j \sigma_j^2 + \sum_{j=1}^{J} p_j (\overline{w}_j - \overline{\overline{w}}_.)^2 ,$$

where p_j is the share of workers in the economy who are working in firm j, σ_j^2 is the variance of wages in firm j, $\overline{w}_j$ is the mean wage for firm j (across its workers), and $\overline{\overline{w}}$ is the mean wage for the entire economy across its workers and firms (ref. 10, pp. 7–8).

Because wages in all countries are right skewed, with more people below the mean than above, variance measures are particularly sensitive to the levels and shifts in inequality among the majority of working people who earn less than or near to their country's mean wage. Most social welfare and labor market policies are focused on this population of earners. Our analyses do not inform debates about earnings trends for top earners, CEOs, or movie or sporting stars.

Institutional Protection Measure. Prior research in industrial relations (22) and comparative political economy (8) have stressed the importance when explaining national variation in employment outcomes to focus on the packages of policy configurations that employers and employees confront. We follow this practice, measuring the strength of national institutional employment protections with a six-item scale. The first indicator is collective bargaining coverage [taken from the Database on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts (40)]. Collective bargaining coverage measures the percentage of all workers under a collective bargaining contract and functions as a measure of union bargaining strength across the national economy. The next two components of the scale both concern the levels of legal protection employees have from collective or individual dismissals. One concerns employees working "regular" contracts, the second temporary employees. These are primarily indicators of individual bargaining power and job security. The final three items come from Jahn's corporatism scale (41) which includes indicators of the organizational structure and power of collective bargaining groups and worker's councils, the functional level at which the government engages in wage coordination with interest groups, and the level (cross-industry, sectoral, and firm) of wage bargaining. We weight each of the six items equally in a standardized scale. All of the items are strongly positively correlated with each other, and the scale Cronbach alpha is 0.892. The items are described in depth, and their values for each country year can be found in *SI Appendix*, Appendix 3.

ACKNOWLEDGMENTS. The research and writing of this paper has been supported by many institutions. Monetary support from the US National Science Foundation (grant SES-1528294), the Alexander von Humboldt Foundation (grant AR8227), the European Research Council Advanced Grant (grant 340045), the Independent Research Fund Denmark (grant 5052-00143b), Swedish Forte (grant 2015-00807), the European Social Fund and state budget of the Czech Republic (grant CZ.03.1.51/0.0/0.0/15_009/0003702) institutional support: Rozvoj Výzkumné Organizace (RVO: 68378025), Research Council of Norway (Grant 287016), and the French Research Agency (Grant ANR-17-CE41-0009-01). This paper is released to inform interested parties of research and to encourage discussion. The views expressed are those of the authors and not necessarily those of the US Census Bureau. Tabular materials presented in this paper were approved for release by the US Census Bureau's Disclosure Review Board (CBDRB-FY18-258). Yannick Savina of Sciences Po produced the figures used in the paper.

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Supplementary Materials

This section is composed of 5 appendices. The first details the data sources for all countries, population coverage for each country's data, our coding choices in regards to full-time, part-time, and marginal jobs, as well as the wage concepts and measurements for each country. Appendix 2 contains all inequality estimates used or discussed in the text. Appendix 3 details how we constructed the Institutional Protections Score used in the paper. Values for the Institutional Protection Scores and its components for each country are provided as well. Appendix 4 examines the consequences of our coding decisions for U.S. and Canadian estimates in particular. Results show that our results are robust to various coding decisions regarding marginal jobs. Stata code to reproduce statistical estimation results from the error correction models are available in Appendix 5.

Appendix 1: Country specific data sources, coding choices and limitations

A1.1 Population Coverage

Data effectively fall into two groups: entirely or partly population-level data and data generated from very large workplace wage surveys. In the first category are Canada, Denmark, France, Hungary, Israel, Netherlands, Norway, Slovenia, Sweden, and the US. Czechia, Germany, Japan, and South Korea have data generated from random samples of establishments and the establishment's personnel records of workers within them

A1.2 Data Sources and Sample Exclusions

For all countries, respondents aged 15 years and younger are excluded. In order to minimize reporting error and the influence of very short job spells, we also excluded very low earning jobs from each national sample. In all countries, except Canada, Israel and the US this was a very small proportion of the sample. Finally, establishments composed of only a single individual after the two previous exclusions are also dropped.

Canada. Data were generated by Statistics Canada. The data are population-level and include all sectors, industries and employees. Full-time work is defined as a person-job match in which the annual earnings reported is at least equal to the wage one would make working 52 weeks at 40 hours a week at the minimum wage. Person-job matches which reported earnings of less than the hourly minimum wage for half-time and half-year (i.e., 20 hours a week for 26 weeks) were excluded, eliminating roughly 27% of person-job matches in each year. Sensitivity analyses were conducted by excluding only the bottom 5% and bottom 10% of jobs as well. Although the levels of inequality changed (the more jobs kept in, the higher the inequality), the trends in inequality were not effective by wage thresholds (see Appendix 4).

Czechia. Data were generated via the Average Earnings Information System (ISPV) survey conducted by the private agency TREXIMA for the Ministry of Labor and Social

Affairs. The data consists of the entire population of public sector workplaces, plus a sample of private sector workplaces. The private sector sample consists of workplaces with at least 10 employees. A stratified sampling of private sector workplaces with 10-250 employees were taken based on the size of the workplace. All private sector workplaces with over 250 employees are included in the data. There are no industry or sector restrictions. Full-time workers were defined as those working at least 95% of a full-time contract. Those jobs which earned less than 50% of the minimum wage were removed, but in practice this eliminated barely any jobs. Estimates are weighted to reflect the national labor force.

Denmark. The data consists of population-level observations of both private and public sector workplaces and includes all primary and secondary jobs registered in November. All industries are included. Because Denmark does not have a national minimum wage, the bottom 5% of jobs were eliminated. Data were purchased from Statistics Denmark. Data are derived from the register-based workforce statistics (RAS) and population statistics (BEF) register source files. In 2009 there was a shift in job level record processing at Statistics Denmark which led to a one year drop in the total, between, and within inequality trends. We drop this year from all figures, but include it in the statistical analyses reported in Table 1.

France. Data were taken from the Annual Declaration of Social Data (DADS). Access to the DADS data was obtained through the CASD dedicated to researchers authorized by the French *Comité du secret statistique.* The data consists of population-level observations of private sector workers, plus all hospital and local civil service workers. State civil servants are missing. Full-time work is estimated by the *Institut national de la statistique et des études* by comparing the workers' number of hours with the usual number hours in the sector. Person-job matches that report wages less than half of the hourly minimum wage are excluded, eliminating around 4% of person-job matches in each year.

Germany. Data comes from a customized sample for the project "Dynamics of organizational inequality: Investigation within the Comparative Organizational Inequality International Network (COIN)" of the Integrated Employment Biographies Sample (IEBS) of the Federal Employment Agency. Our sample covers roughly 5% of the German working population and about 20,000 firms, spanning the years 1990-2015. Workplaces were first sampled proportional to total employment between 1990-2015, and then information on all employee inside those workplaces were appended. In very large workplaces, the employee sample was limited to 1000 randomly chosen workers. The data includes all industries and sectors. Marginal jobs were defined as those which reported less than 450 euros per month. In practice, this resulted in very, very few jobs being removed. Because the German data is top-coded, an imputation strategy based on Card, Heining, and Kline (*12*) was used to impute top daily earnings. The method uses a tobit model that incorporates individual and workplace-specific components in the prediction equation. Estimates are weighted to reflect the national labor force.

Hungary. Data comes from the Institute of Economics Centre for Economics and Regional Studies of the Hungarian Academy of Science. It is a 50% random sample of the Hungarian population followed from 2003 to 2010. The wage concept is daily earnings from each person's primary job. Marginal workers are defined as workers earning less than half of the lowest wage decile in a given year. Part-time work is defined as someone earning less than 25% of the average in a sector-occupation-gender-year cell. A given firm is categorized public if the fraction of employees with the title of public servant is above 10%. Otherwise, the firm is considered private. Estimates are weighted to reflect the national labor force.

Israel: Data were generated by the Israeli Central Bureau of Statistics (CBS). The data are population-level and include all sectors and industries and employees. Full-time work is defined as a person-job match in which the annual earnings reported is at least equal to the wage one would make working 50 weeks at 30 hours a week at the minimum wage. Person-job matches that report monthly earnings of less than quarter of the monthly minimum wage are excluded, eliminating roughly 11% of person-job matches in each year. The Israeli LEEP data was top-coded by the CBS at the 95th percentile. Top-code imputations use the same procedure as for Germany.

Japan. Data are generated from the Basic Survey on Wage Structure conducted by the Ministry of Health, Labor, and Welfare of Japan. The survey is a two-stage design in which a sample of private sector establishments with at least 5 employees are selected, and then a uniform random sampling of workers among these establishments is taken. Full-time work is defined in the survey as those working "general hours." Person-job matches that report monthly earnings less than half of the minimum wage are excluded. This eliminates less than .01% of all person-job matches. Estimates are weighted to reflect the national labor force.

South Korea. Data are from the Wage Structure Survey conducted by the Ministry of Labor. The data consists of a sample of private sector establishments, first stratified by size and then by region and industry. An establishment must have had a minimum of five employees to be included in the sample before 1999, and 10 employees beginning in 1999. All industries except Agriculture are included. The dataset contains only full-time employees. Estimates are weighted to reflect the national labor force.

Netherlands. Data were taken from the System of Social Statistics Datasets (Stelstel van Sociaal Statistische Bestanden SSB) managed by the Central Bureau of Statistics of the Netherlands (CBS). The data are population-level, including all industries and sectors. An age-based exclusion rule was used to remove marginal jobs. The rule was as follows: Age >22: Lower than 4 euros per hour. Age>20: Lower than 3 euros per hour. Age=20: Lower than 2.5 euro per hour. Age<20: Lower than 2 euro per hour. This removed between .03% and 2% of all jobs in a given year.

Norway. Data were generated by Statistics Norway and consist of a nearly population-level sample in which all sectors and industries are included. In the public sector, all

employees are included. In the private sector, all large employers are sampled but the sample is stratified by industry and the number of employees. The threshold for selection based on the firm's number of employees varies by industry. Smaller firms are selected with a decreasing sampling probability based on the number of employees, but weights are used to adjust the results to national labor force estimates. Full-time work is defined as a job which is a so-called "100% employment position." In general, the full-time work week is around 37.5 hours. However, in some occupations, such as those involving shift work, the full-time hours may be lower. Marginal jobs, defined as those with wages below 50% of the first decile in each yearly hourly wage distribution, are dropped. This eliminates less than 1% of person-job matches.

Slovenia. Data were generated by the Statistical Office of the Republic of Slovenia. The data are population-level, including all sectors and industries. Full-time employment was defined as working at least 36 hours per week. There were no marginal jobs in Slovenia, when defined as wages below 50% of the annual minimum wage.

Sweden. Data were generated by Statistics Sweden and consist of a nearly population-level sample in which all sectors and industries are included. Private sector firms with less than 500 employees are sampled, but weights are used to adjust results to reflect the entire labor force. Full-time work is defined as working at least 80% of a full-time contract. Following prior research, person-job matches that report monthly earnings less than 10,000 SEK are excluded. This eliminates less than 1% of person-job matches.

USA Song et al. The first set of estimates in this paper were prepared by Song et al. (2018) and we thank those authors for sharing their estimates. These earnings data come from IRS Form W-2 from 1993-2013, covering employees in all private sector workplaces. Workers are linked to their firm by employer identification number (EIN); in the case of single unit business entities, EINs correspond to an establishment, while for multiunit establishments this identifier applies to the firm. Although this holds for the vast majority of businesses, it is nevertheless possible for a firm to have more than one EIN, often for accounting purposes. These data are advantageous in that earnings are not top coded, but they do not contain information on the number of hours or weeks worked. W-2 earnings reflect the total earnings for a given employment spell at a firm in that year. See Song et al. (2016) for details. The "all jobs" sample is limited to jobs whose earnings were the equivalent of working 10 hours per week for 52 weeks at the federal minimum wage (i.e. in 2013 this was \$7.25 × 10 hrs. × 52 weeks = \$3,700).

USA Census Bureau. The second set of US estimates were prepared by Joe King while employed at the US Census Bureau. Earnings data also come from Box 1 on IRS Form W-2 from 2005-2013, covering the universe of employees in all private sector and federal, state, and local government workplaces. To build our linked employer-employee dataset we select individuals' highest-earning W-2 spell and that corresponding EIN; in the case of multiple equally high-earning jobs across firms, we select one at random. In a second step, we merge W-2 earnings information to the Social Security Administration's 2016 Numerical Identification File (Numident) and the Census Bureau's Business

Register (2005-2015) for demographic and firm information, respectively. Because short (i.e. part-year) employment spells lead to an underestimation of trends in earnings inequality in US administrative data (*38*), similar to Song et al. (*4*) we limit the "all jobs" sample to jobs whose earnings were the equivalent of working 10 hours per week for 52 weeks at the federal minimum wage. This restriction eliminated approximately 15 percent of jobs across all years. We also obtain similar findings using other low earnings cut-points (see Appendix 4). We classify full-time jobs as W-2s earnings totaling at least the equivalent of working the federal minimum wage for 40 hours per week over 50 weeks in a year (i.e. $14,500 in 2013).

A1.3 Definitions of Marginal, All and Full-time Jobs

Prior research concerning between-workplace inequality has typically either focused on full-time workers (*12*) or has applied some sort of marginal wage cutoff (*13, 4*). We applied a wage cutoff of less than 50% of the minimum wage for countries with earnings measured in hours or days. In Canada and the US, only yearly earnings are available. Jobs with yearly earnings below the minimum wage for a 10 hour a week, 52-week job were dropped. These jobs are likely to reflect individuals with very low labor market attachment, bad job matches that last for only short periods of time, and reporting error by employers.

In general, the job-person matches removed by our cutoff ranged from very small to almost none in most countries. The only exceptions were Canada, Israel, and the U.S., where 27%, 10%, and 15% of jobs were eliminated, respectively. For these countries, we are likely dropping many part-year jobs and some full-year part-time jobs with very low wages and few hours. In the US, at least, some of these jobs may be associated with fraudulent individual identifiers (*39*). The higher proportion of marginal jobs in Canada probably reflects the higher minimum wage in that country. Sensitivity analyses conducted on Canada and the US show that while the levels of inequality vary depending on the cutoff used (the more inclusive the sample, the higher the variance), the trends in total and between-workplace inequality are not affected by the definition of marginal jobs.

We repeated all estimates for full-time jobs only. Country specific definitions of full-time were employed. In most countries we had a direct measure of either hours worked, contractual hours, or full-time status. In Sweden we lacked a full-time indicator for early years and based on prior research used a full-time indicator defined as at least 88% of a full-time contract. In Canada we used an earnings cut-off of the minimum wage times 30 hours times 52 weeks. For the US, it was 40 hours per week over 50 weeks out of the year at the federal minimum wage. Full-time workers in Israel were defined as those jobs earning at least the equivalent of a minimum wage worker working 30 hours a week for 50 weeks out of the year. For Korea estimates are limited to full time employees.

The table below displays for first and last year observed the means, standard deviations, and sample sizes of each country for each sampling exclusion (total sample, excluding marginal jobs, and full-time only jobs).

Table S1: Consequences of Sampling Decisions on Marginal and Full-time Jobs

	All			Non-Marginal				Full-time			
	N	Mean (logged wage)	SD (logged wage)	N	% Non-Marginal	Mean (logged wage)	SD (logged wage)	N	% Full-time	Mean (logged wage)	SD (logged wage)
Canada 1993	16,439,203	1.724	1.748	12,118,814	0.737	2.577	0.893	8,283,869	0.684	3.089	0.526
Canada 2013	22,461,379	1.821	1.831	16,220,525	0.722	2.751	0.898	10,948,527	0.675	3.266	0.560
Czechia 2002	1,014,870	4.554	0.445	1,014,825	1.000	4.554	0.444	968,886	0.955	4.505	0.439
Czechia 2013	2,108,392	4.965	0.492	2,108,035	1.000	4.966	0.492	1,930,354	0.916	4.917	0.495
Denmark 1995	2,168,402	4.881	0.403	2,136,183	0.985	4.902	0.364	1,956,208	0.935	4.917	0.361
Denmark 2013	2,804,363	5.216	0.434	2,748,594	0.980	5.242	0.393	2,049,273	0.773	5.297	0.369
France 1996	26,729,141	4.095	0.516	25,032,033	0.973	4.116	0.485	16,814,093	0.672	4.126	0.471
France 2013	32,531,520	2.641	0.506	31,942,321	0.971	2.675	0.429	21,605,957	0.676	2.711	0.435
Germany 1993	1,568,429	4.440	0.428	1,476,841	0.942	4.790	0.484	1,337,688	0.906	4.421	0.450
Germany 2013	1,477,200	4.458	0.551	1,320,583	0.894	5.179	0.657	1,090,058	0.804	4.487	0.520
Hungary 2003	1,666,218	6.548	0.795	1,632,543	0.980	6.611	0.684	1,429,867	0.989	6.440	0.662
Hungary 2010	1,672,954	6.548	0.795	1,617,421	0.967	6.611	0.684	1,423,379	0.991	6.838	0.646
Israel 1996	2,360,975	-0.088	1.104	2,183,655	0.925	-2.421	0.657	977,880	0.462	0.115	0.902
Israel 2013	4,139,583	0.544	1.199	3,741,140	0.904	-1.794	0.896	1,773,484	0.484	1.497	0.567
Japan 1993	1,379,968	2.950	0.594	1,374,954	0.996	2.951	0.593	1,255,195	0.913	2.984	0.539
Japan 2013	1,297,471	2.779	0.574	1,291,433	0.995	2.779	0.574	948,104	0.734	2.975	0.521
Korea 1993	437,384	13.500	0.462	436,694	0.998	13.500	0.461	385,012	0.882	13.440	0.449
Korea 2013	699,490	14.660	0.565	687,947	0.983	14.680	0.547	592,102	0.861	14.650	0.493
Netherlands 2001	1,046,039	2.692	0.671	1,042,994	0.997	2.692	0.671	511,532	0.490	2.633	0.518
Netherlands 2013	9,911,313	3.025	0.772	9,705,618	0.979	3.077	0.687	4,094,454	0.422	2.982	0.535
Norway 1997	929,303	4.710	0.263	928,233	0.999	4.712	0.259	657,988	0.714	4.766	0.280
Norway 2013	1,648,155	5.423	0.324	1,644,899	0.998	5.426	0.320	1,092,213	0.676	5.456	0.332
Slovenia 1999	645,041	6.352	.5468	645,041	1.000	6.352	.5468	622,785	0.994	6.367	0.542
Slovenia 2013	640,985	7.167	.5153	640,985	1.000	7.167	.5153	601,477	0.960	7.195	0.502
Sweden 1996	2,075,965	9.802	0.263	2,074,083	0.999	9.803	0.263	1,103,113	0.533	9.893	0.303
Sweden 2012	2,415,096	10.140	10.140	2,414,658	1.000	10.140	0.309	1,797,104	0.746	10.170	0.318
USA (Census Bureau) 2005	151,900,000	9.801	1.505	129,600,000	0.853	10.250	0.950	102,200,000	0.789	10.620	0.674
USA (Census Bureau) 2013	161,100,000	9.880	1.475	138,300,000	0.858	10.310	0.942	106,100,000	0.767	10.700	0.678

A1.4 Wage And Full-time Concepts and Measures

For each country, we have tried to get as close to the hourly wage as is reasonably possible with the data at hand. All countries utilized some adjustment method to calculate earnings. Similarly, countries were encouraged to use country-specific definitions of what constituted a full-time job. We also distinguished “marginal jobs” from regular employment. In general, marginal jobs were those jobs earning less than 50% of that country’s yearly/monthly/hourly minimum wage. The table below summarizes each country’s wage concept, how they adjusted observed earnings, their definition of full-time employment, and their definition of “marginal jobs.”

Table S2: Definitions of Earnings Concept, Full-time Employment, and Marginal Employment					
	Concept	**Observed**	**Adjusted**	**Def. of Marginal**	**Def. of Full-time**
Canada	Hourly Earnings	Yearly Earnings	Yearly Earnings/52weeks/40 hours	Earnings less than the equivalent of provincial minimum wage x 20 hrs x 26 weeks	Earnings ≥ provincial minimum wage x 40 hrs X 52 weeks
Czechia	Hourly Earnings	quarterly earnings	quarterly earnings / quarterly hours worked	Lower than half minimum wage	95% Full-time estimate (FTE)
Denmark	Hourly Earnings	Yearly Earnings	Yearly Earnings / hours worked (categorical variable)	lowest half-decile were removed. Those who worked less than 20 hours a week were also removed	A categorical hours-worked variable was used
France	Hourly Earnings	Yearly Earnings	Yearly Wage/ Yearly # of Hours Worked	Less than 1/2 minimum hourly wage	Full-time work is estimated by Insee by comparing the workers' number of hours with usual number hours in the sector.
Germany	Daily Earnings	Daily Earnings	N/A	Jobs which make less than 450 euro per month.	Variable in the Dataset
Hungary	Daily Earnings	Monthly Earnings	Monthly Earnings/Monthly # of Days Worked	Less than half of the bottom decile	Less than 25% of gender/occupation/age cell mean
Israel	Monthly Earnings	Yearly Earnings	Yearly Earnings / # of months worked	Less than 1/4 of monthly minimum wage	Annual earnings >= minimum wage x 50 weeks x 30 hours
Japan	Hourly Earnings	(monthly + yearly bonus div. by 12)/monthly hrs worked	Contract	temporary workers with contract less than a month	Variable in the Survey
Korea	Monthly Earnings	Monthly Earnings	N/A	Less than 15 days a month or 7 hours a day	N/A
Netherlands	Hourly Earnings	Yearly Earnings	Yearly Earnings divided by (number of days worked times fraction of full-time contract)	Age >22: Lower than 4 euros per hour. Age>20: Lower than 3 euros per hour. Age=20: Lower than 2.5 euro per hour. Age<20: Lower than 2 euro per hour	90% of FTE contract
Norway	Hourly Earnings	Monthly Earnings	Monthly Earnings / Monthly Hours	Wages below 50% of the first decile in each yearly, hourly wage distribution	In a so-called "100% employment position." A full-time week is roughly equal to 37.5 hours
Slovenia	Monthly Earnings	Yearly Earnings	Contracted hours	Less than 1/2 minimum wage.	Working at least 36 hours per week
Sweden	Monthly Earnings	Monthly Earnings	Contract (% of FT)	Lower than 10K SEK monthly	88% of FT contract
USA (Song)	Yearly Earnings	Yearly Earnings	N/A	Earnings less than the equivalent of federal minimum wage × 10 hrs × 52 weeks	N/A
USA (Census Bureau)	Yearly Earnings	Yearly Earnings	N/A	Earnings less than the equivalent of federal minimum wage × 10 hrs × 52 weeks	Earnings ≥ federal minimum wage × 40 hrs × 50 weeks

Appendix 2: Supplementary Earnings Inequality Tables

Table S3.1: Total Logged Earnings Variance by Year and Country

	Canada	Czechia	Denmark	France	Germany	Hungary	Israel	Japan	Korea	Netherlands	Norway	Slovenia	Sweden	USA (Song)	USA (Census Bureau)
1993	0.798				0.241			0.333						0.763	
1994	0.800				0.237			0.323						0.746	
1995	0.795		0.131		0.245			0.317						0.761	
1996	0.791		0.132	0.234	0.248		0.814	0.331					0.073	0.775	
1997	0.808		0.129	0.232	0.250		0.823	0.328			0.078		0.076	0.765	
1998	0.821		0.133	0.228	0.283		0.815	0.335			0.076		0.082	0.752	
1999	0.824		0.134	0.226	0.286		0.834	0.333			0.077	0.296	0.087	0.765	
2000	0.846		0.135	0.227	0.303		0.837	0.326			0.080	0.299	0.091	0.777	
2001	0.850		0.136	0.228	0.314		0.830	0.334		0.431	0.087	0.299	0.095	0.803	
2002	0.861	0.200	0.134	0.207	0.390		0.833	0.344		0.431	0.091	0.296	0.094	0.804	
2003	0.867	0.201	0.132	0.208	0.360	0.442	0.829	0.332		0.445	0.092	0.295	0.092	0.827	
2004	0.873	0.206	0.132	0.208	0.378	0.443	0.825	0.332		0.447	0.092	0.291	0.094	0.825	
2005	0.878	0.212	0.134	0.200	0.387	0.457	0.845	0.346		0.449	0.092	0.289	0.095	0.839	0.903
2006	0.878	0.229	0.135	0.195	0.401	0.429	0.844	0.345		0.435	0.095	0.296	0.094	0.853	0.923
2007	0.878	0.226	0.137	0.199	0.416	0.431	0.846	0.347		0.437	0.101	0.302	0.098	0.871	0.889
2008	0.857	0.230	0.134	0.203	0.427	0.433	0.846	0.340		0.451	0.103	0.305	0.098	0.844	0.851
2009	0.822	0.246	0.130	0.209	0.426	0.436	0.853	0.348		0.452	0.105	0.313	0.096	0.819	0.809
2010	0.810	0.245	0.141	0.191	0.434	0.422	0.865	0.331		0.451	0.106	0.286	0.095	0.814	0.831
2011	0.809	0.251	0.141	0.184	0.403		0.890	0.332		0.468	0.109	0.278	0.096	0.832	0.846
2012	0.799	0.255	0.143	0.186	0.403		0.873	0.331		0.459	0.110	0.269	0.096	0.846	0.859
2013	0.807	0.253	0.142	0.184	0.392		0.879	0.325		0.466	0.112	0.262		0.846	0.866
Change	0.009	0.052	0.011	-0.051	0.151	-0.020	0.065	-0.008		0.035	0.034	-0.034	0.023	0.083	-0.037
% Change	0.012	0.260	0.085	-0.217	0.626	-0.045	0.080	-0.025		0.080	0.436	-0.115	0.320	0.108	-0.041

Table S3.2: Between Logged Earnings Variance by Year and Country

	Canada	Czechia	Denmark	France	Germany	Hungary	Israel	Japan	Korea	Netherlands	Norway	Slovenia	Sweden	USA (Song)	USA (Census Bureau)
1993	0.285				0.135			0.175						0.285	
1994	0.285				0.134			0.170						0.274	
1995	0.284		0.042		0.140			0.167						0.280	
1996	0.280		0.042	0.095	0.144		0.365	0.181					0.024	0.287	
1997	0.281		0.041	0.096	0.143		0.379	0.177			0.035		0.025	0.284	
1998	0.285		0.044	0.094	0.161		0.387	0.188			0.034		0.029	0.275	
1999	0.286		0.044	0.093	0.168		0.393	0.190			0.034	0.132	0.031	0.282	
2000	0.286		0.045	0.094	0.176		0.404	0.186			0.036	0.134	0.034	0.283	
2001	0.292		0.047	0.095	0.182		0.404	0.194		0.080	0.040	0.139	0.036	0.301	
2002	0.299	0.085	0.047	0.094	0.231		0.403	0.207		0.081	0.043	0.138	0.036	0.299	
2003	0.303	0.087	0.047	0.094	0.218	0.251	0.404	0.198		0.086	0.042	0.138	0.035	0.316	
2004	0.305	0.091	0.047	0.091	0.234	0.255	0.402	0.199		0.090	0.043	0.133	0.037	0.313	
2005	0.301	0.095	0.050	0.088	0.239	0.270	0.414	0.203		0.092	0.043	0.130	0.039	0.321	0.341
2006	0.295	0.111	0.048	0.086	0.252	0.243	0.412	0.202		0.119	0.044	0.132	0.038	0.326	0.351
2007	0.294	0.110	0.049	0.086	0.267	0.230	0.411	0.202		0.125	0.047	0.132	0.041	0.337	0.338
2008	0.286	0.113	0.048	0.088	0.274	0.233	0.409	0.200		0.130	0.050	0.134	0.040	0.331	0.329
2009	0.284	0.126	0.047	0.090	0.274	0.235	0.420	0.205		0.128	0.052	0.144	0.039	0.322	0.315
2010	0.281	0.126	0.053	0.088	0.281	0.241	0.424	0.195		0.128	0.053	0.125	0.038	0.331	0.331
2011	0.278	0.129	0.054	0.085	0.265		0.442	0.195		0.127	0.055	0.119	0.039	0.348	0.341
2012	0.277	0.131	0.056	0.085	0.267		0.428	0.196		0.123	0.055	0.114	0.040	0.355	0.349
2013	0.284	0.131	0.056	0.084	0.259		0.440	0.189		0.127	0.057	0.112		0.357	0.353
Change	-0.002	0.046	0.014	-0.011	0.125	-0.010	0.075	0.014		0.047	0.022	-0.020	0.016	0.072	0.012
% change	-0.005	0.534	0.345	-0.116	0.925	-0.039	0.205	0.079		0.592	0.612	-0.149	0.665	0.253	0.036

Table S3.3: Within Logged Earnings Variance by Year and Country

	Canada	Czechia	Denmark	France	Germany	Hungary	Israel	Japan	Korea	Netherlands	Norway	Slovenia	Sweden	USA (Song)	USA (Census Bureau)
1993	0.513				0.106			0.159						0.478	
1994	0.515				0.103			0.154						0.472	
1995	0.511		0.089		0.105			0.150						0.481	
1996	0.511		0.090	0.140	0.104		0.449	0.150					0.049	0.488	
1997	0.528		0.087	0.136	0.108		0.444	0.151			0.043		0.051	0.481	
1998	0.536		0.089	0.134	0.123		0.428	0.147			0.042		0.053	0.477	
1999	0.537		0.090	0.133	0.119		0.441	0.143			0.043	0.164	0.055	0.483	
2000	0.560		0.089	0.133	0.127		0.433	0.140			0.044	0.165	0.057	0.494	
2001	0.558		0.089	0.133	0.132		0.426	0.140		0.351	0.047	0.160	0.059	0.502	
2002	0.561	0.115	0.087	0.113	0.159		0.430	0.137		0.349	0.048	0.158	0.058	0.505	
2003	0.564	0.114	0.085	0.114	0.141	0.191	0.425	0.134		0.359	0.050	0.157	0.056	0.511	
2004	0.568	0.116	0.086	0.116	0.143	0.188	0.423	0.133		0.357	0.050	0.158	0.057	0.512	
2005	0.576	0.117	0.084	0.112	0.148	0.187	0.430	0.143		0.357	0.049	0.159	0.056	0.518	0.562
2006	0.582	0.118	0.087	0.110	0.148	0.186	0.432	0.143		0.316	0.051	0.164	0.057	0.527	0.573
2007	0.585	0.117	0.088	0.112	0.149	0.201	0.435	0.145		0.312	0.054	0.170	0.057	0.535	0.550
2008	0.570	0.117	0.085	0.114	0.153	0.200	0.438	0.140		0.321	0.053	0.172	0.058	0.512	0.522
2009	0.538	0.120	0.083	0.119	0.153	0.201	0.433	0.143		0.324	0.053	0.169	0.056	0.497	0.494
2010	0.529	0.118	0.088	0.103	0.153	0.180	0.442	0.136		0.323	0.053	0.161	0.057	0.483	0.501
2011	0.530	0.122	0.087	0.098	0.138		0.448	0.137		0.341	0.054	0.159	0.057	0.484	0.505
2012	0.521	0.124	0.087	0.101	0.136		0.444	0.135		0.336	0.055	0.155	0.057	0.490	0.510
2013	0.524	0.122	0.086	0.100	0.132		0.439	0.136		0.339	0.055	0.150		0.489	0.512
Change	0.011	0.006	-0.003	-0.040	0.026	-0.010	-0.010	-0.022		-0.013	0.012	-0.014	0.008	0.011	-0.049
% Change	0.021	0.057	-0.037	-0.285	0.246	-0.054	-0.021	-0.141		-0.036	0.291	-0.088	0.154	0.022	-0.088

Table S3.4: Change in Between Proportion of Variance

	Canada	Czechia	Denmark	France	Germany	Hungary	Israel	Japan	Korea	Netherlands	Norway	Slovenia	Sweden	USA (Song)	USA (Census Bureau)
1993	0.357				0.559			0.524						0.373	
1994	0.356				0.565			0.524						0.367	
1995	0.357		0.320		0.571			0.526						0.368	
1996	0.354		0.316	0.404	0.582		0.449	0.546					0.325	0.371	
1997	0.347		0.322	0.415	0.571		0.461	0.540			0.452		0.330	0.371	
1998	0.347		0.329	0.414	0.567		0.475	0.560			0.450		0.352	0.366	
1999	0.348		0.327	0.411	0.585		0.471	0.570			0.438	0.446	0.362	0.368	
2000	0.338		0.337	0.416	0.581		0.483	0.571			0.450	0.448	0.376	0.365	
2001	0.343		0.344	0.418	0.581		0.486	0.582		0.185	0.462	0.465	0.381	0.375	
2002	0.348	0.426	0.351	0.456	0.591		0.483	0.600		0.189	0.469	0.466	0.385	0.372	
2003	0.349	0.433	0.356	0.450	0.607	0.568	0.487	0.598		0.194	0.456	0.468	0.386	0.382	
2004	0.349	0.440	0.352	0.440	0.621	0.575	0.487	0.599		0.202	0.463	0.457	0.390	0.379	
2005	0.343	0.449	0.370	0.438	0.619	0.590	0.490	0.586		0.205	0.468	0.450	0.410	0.382	0.378
2006	0.337	0.485	0.359	0.437	0.629	0.566	0.488	0.586		0.274	0.460	0.446	0.400	0.383	0.380
2007	0.334	0.484	0.356	0.435	0.641	0.534	0.485	0.582		0.286	0.464	0.437	0.416	0.387	0.381
2008	0.334	0.493	0.363	0.436	0.642	0.539	0.483	0.589		0.287	0.487	0.438	0.406	0.393	0.386
2009	0.345	0.512	0.364	0.431	0.642	0.538	0.492	0.589		0.283	0.495	0.461	0.410	0.393	0.389
2010	0.347	0.516	0.377	0.462	0.648	0.572	0.490	0.588		0.283	0.499	0.438	0.403	0.407	0.398
2011	0.344	0.514	0.383	0.465	0.658		0.496	0.586		0.271	0.502	0.427	0.405	0.418	0.404
2012	0.347	0.514	0.390	0.457	0.662		0.491	0.593		0.269	0.502	0.425	0.410	0.420	0.407
2013	0.351	0.519	0.396	0.456	0.662		0.500	0.580		0.273	0.507	0.428		0.422	0.408
Change	-0.006	0.093	0.077	0.052	0.103	0.004	0.052	0.056		0.088	0.055	-0.017	0.085	0.049	0.030

Table S4.1: Total Logged Earnings Variance by Year and Country - Fulltime Jobs

	Canada	Czechia	Denmark	France	Germany	Hungary	Israel	Japan	Korea	Netherlands	Norway	Slovenia	Sweden	USA (Song)	USA (Census Bureau)
1993	0.277				0.221			0.310	0.211						
1994	0.278				0.216			0.300	0.200						
1995	0.280		0.130		0.223			0.293	0.195						
1996	0.283		0.131	0.225	0.225		0.787	0.305	0.197				0.100		
1997	0.294		0.127	0.225	0.227		0.796	0.300	0.193		0.082		0.106		
1998	0.302		0.132	0.225	0.260		0.812	0.302	0.205		0.080		0.112		
1999	0.303		0.132	0.226	0.264		0.827	0.299	0.216		0.083	0.294	0.093		
2000	0.318		0.133	0.227	0.280		0.826	0.293	0.234		0.085	0.297	0.098		
2001	0.322		0.134	0.227	0.291		0.832	0.300	0.236		0.092	0.297	0.102		
2002	0.326	0.197	0.132	0.213	0.348		0.827	0.307	0.249	0.301	0.096	0.293	0.101		
2003	0.329	0.197	0.130	0.213	0.324	0.438	0.829	0.297	0.257	0.302	0.098	0.291	0.098		
2004	0.336	0.202	0.130	0.211	0.342	0.439	0.825	0.303	0.260	0.294	0.098	0.286	0.101		
2005	0.341	0.208	0.132	0.204	0.352	0.453	0.849	0.332		0.300	0.098	0.284	0.102		0.451
2006	0.343	0.228	0.133	0.201	0.364	0.426	0.857	0.330	0.266	0.275	0.102	0.290	0.101		0.466
2007	0.346	0.224	0.135	0.204	0.377	0.426	0.849	0.339	0.283	0.285	0.109	0.296	0.105		0.447
2008	0.336	0.228	0.132	0.209	0.387	0.428	0.834	0.336	0.269	0.289	0.109	0.299	0.105		0.423
2009	0.320	0.244	0.127	0.214	0.383	0.431	0.837	0.346	0.264	0.288	0.111	0.306	0.103		0.397
2010	0.315	0.242	0.137	0.200	0.390	0.417	0.849	0.328	0.264	0.291	0.112	0.279	0.102		0.410
2011	0.315	0.248	0.137	0.192	0.348		0.861	0.328	0.275	0.301	0.116	0.271	0.103		0.423
2012	0.310	0.252	0.138	0.192	0.338		0.834	0.332	0.285	0.296	0.116	0.261	0.103		0.433
2013	0.313	0.249	0.139	0.190	0.327		0.844	0.323		0.312	0.118	0.254			0.437
Change	0.037	0.052	0.009	-0.035	0.106	-0.021	0.057	0.013	0.074	0.011	0.036	-0.040	0.003		-0.028
% change	0.133	0.266	0.066	-0.155	0.479	-0.047	0.072	0.042	0.348	0.036	0.435	-0.135	0.034		-0.061

Table S4.2: Between Logged Earnings Variance by Year and Country - Fulltime Jobs

	Canada	Czechia	Denmark	France	Germany	Hungary	Israel	Japan	Korea	Netherlands	Norway	Slovenia	Sweden	USA (Song)	USA (Census Bureau)
1993	0.085				0.128			0.154	0.095						
1994	0.086				0.126			0.148	0.090						
1995	0.087		0.042	0.094	0.130			0.146	0.089						
1996	0.086		0.041	0.090	0.135		0.401	0.158	0.088				0.028		
1997	0.088		0.041	0.091	0.133		0.416	0.153	0.085		0.036		0.031		
1998	0.091		0.043	0.092	0.150		0.438	0.156	0.096		0.033		0.036		
1999	0.092		0.043	0.093	0.158		0.449	0.158	0.105		0.034	0.132	0.034		
2000	0.094		0.045	0.095	0.165		0.454	0.156	0.117		0.036	0.134	0.037		
2001	0.095		0.046	0.095	0.171		0.463	0.163	0.122		0.040	0.138	0.039		
2002	0.099	0.082	0.046	0.093	0.209		0.459	0.170	0.117	0.077	0.042	0.137	0.039		
2003	0.100	0.084	0.046	0.092	0.200	0.249	0.468	0.165	0.120	0.082	0.043	0.137	0.038		
2004	0.102	0.088	0.046	0.089	0.216	0.253	0.466	0.169	0.120	0.082	0.043	0.131	0.040		
2005	0.103	0.092	0.049	0.087	0.222	0.268	0.483	0.190		0.086	0.043	0.129	0.042		0.150
2006	0.101	0.111	0.048	0.085	0.233	0.242	0.488	0.188	0.140	0.087	0.044	0.130	0.040		0.157
2007	0.101	0.109	0.048	0.086	0.245	0.229	0.480	0.194	0.151	0.093	0.047	0.130	0.044		0.149
2008	0.098	0.113	0.046	0.089	0.251	0.232	0.467	0.194	0.132	0.093	0.048	0.132	0.043		0.143
2009	0.097	0.124	0.045	0.089	0.248	0.233	0.473	0.201	0.131	0.093	0.050	0.142	0.043		0.134
2010	0.096	0.125	0.050	0.088	0.255	0.239	0.477	0.190	0.131	0.094	0.051	0.123	0.042		0.141
2011	0.096	0.127	0.051	0.086	0.229		0.487	0.191	0.143	0.097	0.052	0.116	0.042		0.148
2012	0.094	0.129	0.052	0.085	0.223		0.467	0.196	0.148	0.094	0.053	0.111	0.043		0.154
2013	0.097	0.128	0.052	0.084	0.215		0.480	0.185		0.095	0.054	0.109			0.155
Change	0.012	0.046	0.011	-0.006	0.087	-0.010	0.079	0.031	0.052	0.018	0.018	-0.022	0.015		0.006
% change	0.144	0.556	0.261	-0.062	0.675	-0.039	0.196	0.203	0.546	0.240	0.510	-0.170	0.512		0.037

Table S4.3: Within Logged Earnings Variance by Year and Country - Fulltime Jobs

	Canada	Czechia	Denmark	France	Germany	Hungary	Israel	Japan	Korea	Netherlands	Norway	Slovenia	Sweden	USA (Song)	USA (Census Bureau)
1993	0.192				0.093			0.156	0.116						
1994	0.192				0.090			0.152	0.110						
1995	0.194		0.088		0.092			0.147	0.106						
1996	0.196		0.089	0.135	0.090		0.386	0.148	0.109				0.071		
1997	0.206		0.086	0.133	0.094		0.380	0.147	0.108		0.046		0.074		
1998	0.211		0.088	0.134	0.109		0.373	0.146	0.108		0.047		0.076		
1999	0.211		0.089	0.133	0.107		0.378	0.142	0.112		0.049	0.162	0.060		
2000	0.224		0.088	0.132	0.115		0.372	0.137	0.117		0.049	0.163	0.061		
2001	0.227		0.088	0.132	0.120		0.369	0.138	0.115		0.052	0.158	0.063		
2002	0.227	0.114	0.086	0.120	0.140		0.367	0.137	0.133	0.224	0.054	0.156	0.062		
2003	0.229	0.113	0.084	0.121	0.124	0.189	0.361	0.133	0.137	0.219	0.055	0.154	0.060		
2004	0.233	0.114	0.085	0.121	0.126	0.186	0.359	0.134	0.140	0.212	0.055	0.155	0.061		
2005	0.238	0.116	0.083	0.118	0.130	0.185	0.366	0.142		0.214	0.055	0.156	0.060		0.305
2006	0.242	0.117	0.085	0.115	0.131	0.184	0.369	0.142	0.126	0.188	0.058	0.160	0.061		0.314
2007	0.244	0.115	0.087	0.118	0.132	0.197	0.370	0.145	0.132	0.193	0.062	0.166	0.061		0.302
2008	0.238	0.116	0.086	0.121	0.136	0.196	0.366	0.142	0.136	0.196	0.061	0.167	0.062		0.285
2009	0.223	0.120	0.082	0.125	0.136	0.198	0.364	0.144	0.133	0.195	0.061	0.164	0.060		0.266
2010	0.219	0.118	0.087	0.111	0.135	0.178	0.372	0.138	0.133	0.196	0.062	0.156	0.060		0.273
2011	0.219	0.121	0.086	0.106	0.119		0.374	0.138	0.131	0.204	0.063	0.155	0.061		0.279
2012	0.216	0.123	0.087	0.107	0.115		0.367	0.136	0.137	0.202	0.063	0.150	0.060		0.285
2013	0.216	0.121	0.086	0.106	0.113		0.364	0.138		0.216	0.064	0.145			0.286
Change	0.025	0.006	-0.002	-0.029	0.019	-0.011	-0.022	-0.018	0.021	0.002	0.018	-0.017	-0.011		-0.018
% Change	0.128	0.056	-0.026	-0.217	0.210	-0.057	-0.057	-0.116	0.185	0.011	0.378	-0.107	-0.156		-0.059

Table S4.4: Proportion Between Variance - Fulltime Jobs

	Canada	Czechia	Denmark	France	Germany	Hungary	Israel	Japan	Korea	Netherlands	Norway	Slovenia	Sweden	USA (Song)	USA (Census Bureau)
1993	0.307				0.580			0.496	0.452						
1994	0.308				0.583			0.494	0.451						
1995	0.309		0.320		0.586			0.498	0.455						
1996	0.306		0.315	0.399	0.600		0.510	0.516	0.447				0.284		
1997	0.301		0.322	0.407	0.587		0.522	0.509	0.439		0.437		0.297		
1998	0.301		0.329	0.406	0.579		0.540	0.517	0.471		0.417		0.324		
1999	0.304		0.327	0.410	0.596		0.543	0.526	0.485		0.413	0.447	0.362		
2000	0.296		0.337	0.418	0.589		0.549	0.532	0.499		0.421	0.450	0.377		
2001	0.295		0.344	0.418	0.588		0.557	0.542	0.515		0.439	0.466	0.384		
2002	0.303	0.419	0.351	0.435	0.599	0.569	0.556	0.555	0.469	0.255	0.442	0.468	0.387		
2003	0.303	0.426	0.356	0.432	0.617	0.575	0.565	0.553	0.468	0.272	0.436	0.470	0.387		
2004	0.305	0.434	0.351	0.424	0.631	0.591	0.565	0.557	0.462	0.278	0.434	0.459	0.393		
2005	0.302	0.444	0.370	0.423	0.630	0.567	0.569	0.571		0.287	0.438	0.452	0.411		0.332
2006	0.295	0.487	0.358	0.425	0.640	0.537	0.570	0.569	0.528	0.316	0.432	0.449	0.400		0.337
2007	0.292	0.486	0.356	0.421	0.650	0.541	0.565	0.573	0.535	0.325	0.433	0.440	0.418		0.334
2008	0.293	0.493	0.351	0.424	0.650	0.541	0.561	0.577	0.492	0.323	0.441	0.440	0.409		0.339
2009	0.303	0.510	0.352	0.417	0.646	0.574	0.565	0.583	0.495	0.324	0.449	0.464	0.415		0.338
2010	0.304	0.514	0.363	0.443	0.653		0.562	0.579	0.497	0.325	0.450	0.441	0.409		0.343
2011	0.304	0.512	0.369	0.446	0.659		0.566	0.581	0.522	0.322	0.453	0.429	0.411		0.350
2012	0.304	0.512	0.374	0.444	0.659		0.560	0.591	0.518	0.319	0.454	0.426	0.416		0.356
2013	0.310	0.515	0.378	0.443	0.656		0.569	0.573		0.306	0.460	0.429			0.355
Change	0.003	0.096	0.059	0.044	0.077	0.005	0.059	0.077	0.066	0.050	0.023	-0.018	0.131		0.024

Table S5.1: Total Logged Earnings Variance by Year and Country - Private Sector

	Canada	Czechia	Denmark	France	Germany	Hungary	Israel	Japan	Korea	Netherlands	Norway	Slovenia	Sweden	USA (Song)	USA (Census Bureau)
1993	0.810				0.247			0.333	0.211					0.763	
1994	0.816				0.242			0.323	0.200					0.746	
1995	0.816		0.160		0.250			0.317	0.195					0.761	
1996	0.815		0.159	0.248	0.254		0.799	0.331	0.197				0.084	0.775	
1997	0.834		0.153	0.241	0.257		0.812	0.328	0.193		0.097		0.086	0.765	
1998	0.847		0.159	0.239	0.288		0.805	0.335	0.205		0.094		0.095	0.752	
1999	0.851		0.158	0.240	0.292		0.819	0.333	0.216		0.095	0.285	0.100	0.765	
2000	0.872		0.159	0.231	0.310		0.830	0.326	0.234		0.098	0.296	0.105	0.777	
2001	0.880		0.160	0.233	0.322		0.819	0.334	0.236		0.106	0.292	0.110	0.803	
2002	0.888	0.224	0.157	0.216	0.403		0.821	0.344	0.249	0.429	0.113	0.290	0.108	0.804	
2003	0.894	0.224	0.155	0.234	0.371	0.450	0.818	0.332	0.257	0.445	0.112	0.290	0.105	0.827	
2004	0.902	0.226	0.154	0.232	0.388	0.460	0.813	0.332	0.260	0.456	0.112	0.288	0.109	0.825	
2005	0.905	0.229	0.155	0.226	0.400	0.470	0.835	0.346		0.461	0.112	0.287	0.110	0.839	0.946
2006	0.906	0.249	0.158	0.217	0.416	0.437	0.832	0.345	0.266	0.457	0.116	0.291	0.109	0.853	0.968
2007	0.907	0.244	0.160	0.222	0.431	0.434	0.836	0.347	0.283	0.451	0.123	0.300	0.112	0.871	0.933
2008	0.885	0.246	0.156	0.230	0.444	0.438	0.838	0.340	0.269	0.461	0.127	0.303	0.113	0.844	0.893
2009	0.847	0.269	0.155	0.211	0.446	0.451	0.835	0.348	0.264	0.457	0.129	0.308	0.110	0.819	0.849
2010	0.836	0.268	0.172	0.211	0.450	0.464	0.854	0.331	0.264	0.453	0.131	0.282	0.109	0.814	0.872
2011	0.835	0.274	0.173	0.203	0.421		0.881	0.332	0.275	0.470	0.135	0.275	0.109	0.832	0.890
2012	0.827	0.280	0.174	0.199	0.427		0.861	0.331	0.285	0.459	0.136	0.269	0.109	0.846	0.902
2013	0.835	0.275	0.172	0.197	0.416		0.868	0.325		0.472	0.138	0.266		0.846	0.910
Change	0.025	0.051	0.012	-0.051	0.169	0.014	0.070	-0.008	0.074	0.043	0.041	-0.019	0.025	0.083	-0.036
% Change	0.030	0.225	0.074	-0.206	0.686	0.031	0.087	-0.025	0.348	0.101	0.422	-0.068	0.301	0.108	-0.038

Table S5.2: Between Logged Earnings Variance by Year and Country - Private Sector

	Canada	Czechia	Denmark	France	Germany	Hungary	Israel	Japan	Korea	Netherlands	Norway	Slovenia	Sweden	USA (Song)	USA (Census Bureau)
1993	0.320				0.143			0.175	0.095					0.285	
1994	0.318				0.141			0.170	0.090					0.274	
1995	0.320		0.054		0.148			0.167	0.089					0.280	
1996	0.317		0.054	0.098	0.152		0.379	0.181	0.088				0.032	0.287	
1997	0.318		0.052	0.098	0.150		0.395	0.177	0.085		0.045		0.033	0.284	
1998	0.321		0.056	0.097	0.169		0.405	0.188	0.096		0.043		0.038	0.275	
1999	0.322		0.055	0.098	0.176		0.413	0.190	0.105		0.042	0.135	0.041	0.282	
2000	0.323		0.057	0.096	0.186		0.424	0.186	0.117		0.045	0.147	0.043	0.283	
2001	0.331		0.059	0.098	0.192		0.427	0.194	0.122		0.050	0.149	0.046	0.301	
2002	0.338	0.104	0.059	0.100	0.246		0.427	0.207	0.117	0.091	0.054	0.147	0.046	0.299	
2003	0.342	0.106	0.060	0.107	0.233	0.289	0.428	0.198	0.120	0.094	0.054	0.150	0.045	0.316	
2004	0.344	0.107	0.058	0.104	0.248	0.300	0.424	0.199	0.120	0.100	0.054	0.147	0.048	0.313	
2005	0.338	0.111	0.061	0.101	0.255	0.312	0.436	0.203		0.105	0.055	0.144	0.050	0.321	0.381
2006	0.333	0.128	0.061	0.098	0.271	0.281	0.433	0.202	0.140	0.146	0.056	0.144	0.048	0.326	0.392
2007	0.331	0.124	0.062	0.099	0.285	0.264	0.431	0.202	0.151	0.149	0.060	0.146	0.051	0.337	0.379
2008	0.325	0.128	0.063	0.104	0.295	0.267	0.432	0.200	0.132	0.154	0.065	0.149	0.052	0.331	0.368
2009	0.323	0.145	0.065	0.098	0.297	0.275	0.436	0.205	0.131	0.152	0.068	0.159	0.051	0.322	0.353
2010	0.319	0.145	0.074	0.101	0.302	0.297	0.445	0.195	0.131	0.149	0.070	0.141	0.049	0.331	0.369
2011	0.317	0.148	0.075	0.098	0.289		0.465	0.195	0.143	0.148	0.072	0.134	0.049	0.348	0.383
2012	0.316	0.152	0.077	0.096	0.295		0.451	0.196	0.148	0.145	0.073	0.132	0.049	0.355	0.390
2013	0.323	0.151	0.077	0.094	0.286		0.463	0.189		0.151	0.074	0.132		0.357	0.395
Change	0.003	0.046	0.022	-0.003	0.144	0.008	0.084	0.014	0.052	0.060	0.030	-0.003	0.018	0.072	0.014
% Change	0.009	0.445	0.411	-0.033	1.006	0.027	0.220	0.079	0.546	0.663	0.659	-0.021	0.566	0.253	0.037

Table S5.3: Within Logged Earnings Variance by Year and Country - Private Sector

	Canada	Czechia	Denmark	France	Germany	Hungary	Israel	Japan	Korea	Netherlands	Norway	Slovenia	Sweden	USA (Song)	USA (Census Bureau)
1993	0.490				0.104			0.159	0.116					0.478	
1994	0.498				0.100			0.154	0.110					0.472	
1995	0.496		0.106		0.102			0.150	0.106					0.481	
1996	0.498		0.105	0.150	0.102		0.420	0.150	0.109				0.052	0.488	
1997	0.516		0.101	0.144	0.107		0.417	0.151	0.108		0.052		0.054	0.481	
1998	0.526		0.103	0.142	0.119		0.400	0.147	0.108		0.051		0.057	0.477	
1999	0.529		0.103	0.142	0.116		0.406	0.143	0.112		0.053	0.150	0.059	0.483	
2000	0.549		0.102	0.135	0.124		0.405	0.140	0.117		0.053	0.148	0.061	0.494	
2001	0.549		0.101	0.136	0.130		0.393	0.140	0.115		0.056	0.144	0.063	0.502	
2002	0.550	0.120	0.098	0.116	0.157		0.394	0.137	0.133	0.338	0.058	0.144	0.062	0.505	
2003	0.552	0.118	0.096	0.127	0.138	0.161	0.390	0.134	0.137	0.351	0.058	0.141	0.060	0.511	
2004	0.558	0.119	0.096	0.128	0.140	0.161	0.389	0.133	0.140	0.355	0.058	0.141	0.061	0.512	
2005	0.568	0.118	0.095	0.125	0.145	0.158	0.399	0.143		0.356	0.057	0.143	0.060	0.518	0.565
2006	0.573	0.121	0.097	0.120	0.146	0.156	0.399	0.143	0.126	0.311	0.060	0.148	0.061	0.527	0.576
2007	0.576	0.120	0.099	0.124	0.146	0.170	0.405	0.145	0.132	0.302	0.063	0.154	0.061	0.535	0.554
2008	0.561	0.118	0.094	0.126	0.150	0.171	0.407	0.140	0.136	0.307	0.062	0.154	0.061	0.512	0.525
2009	0.524	0.124	0.090	0.113	0.149	0.175	0.399	0.143	0.133	0.305	0.061	0.148	0.059	0.497	0.496
2010	0.517	0.123	0.098	0.109	0.148	0.168	0.409	0.136	0.133	0.304	0.062	0.141	0.060	0.483	0.503
2011	0.519	0.126	0.098	0.105	0.132		0.416	0.137	0.131	0.321	0.063	0.141	0.060	0.484	0.507
2012	0.511	0.128	0.097	0.103	0.133		0.411	0.135	0.137	0.314	0.064	0.137	0.059	0.490	0.512
2013	0.512	0.124	0.095	0.102	0.129		0.406	0.136		0.320	0.064	0.133		0.489	0.515
Change	0.022	0.004	-0.011	-0.048	0.026	0.006	-0.014	-0.022	0.021	-0.017	0.012	-0.016	0.007	0.011	-0.050
% Change	0.044	0.032	-0.099	-0.318	0.247	0.038	-0.033	-0.141	0.185	-0.051	0.220	-0.109	0.140	0.022	-0.088

Table S5.4: Between Proportion by Year and Country - Private Sector

	Canada	Czechia	Denmark	France	Germany	Hungary	Israel	Japan	Korea	Netherlands	Norway	Slovenia	Sweden	USA (Song)	USA (Census Bureau)
1993	0.395				0.579			0.524	0.452					0.373	
1994	0.390				0.584			0.524	0.451					0.367	
1995	0.392		0.339		0.591			0.526	0.455					0.368	
1996	0.389		0.340	0.394	0.598		0.475	0.546	0.447				0.377	0.371	
1997	0.381		0.341	0.405	0.585		0.486	0.540	0.439		0.462		0.380	0.371	
1998	0.379		0.351	0.405	0.587		0.503	0.560	0.471		0.458		0.401	0.366	
1999	0.379		0.349	0.408	0.604		0.505	0.570	0.485		0.444	0.474	0.411	0.368	
2000	0.370		0.358	0.414	0.598		0.512	0.571	0.499		0.458	0.498	0.415	0.365	
2001	0.376		0.368	0.419	0.596		0.521	0.582	0.515		0.473	0.508	0.421	0.375	
2002	0.381	0.465	0.375	0.463	0.610		0.520	0.600	0.469	0.212	0.484	0.505	0.427	0.372	
2003	0.382	0.472	0.384	0.458	0.628	0.642	0.523	0.598	0.468	0.212	0.479	0.515	0.429	0.382	
2004	0.381	0.474	0.379	0.450	0.640	0.651	0.521	0.599	0.462	0.220	0.483	0.511	0.437	0.379	
2005	0.373	0.484	0.390	0.447	0.638	0.664	0.523	0.586		0.229	0.489	0.502	0.457	0.382	0.403
2006	0.367	0.514	0.387	0.449	0.650	0.643	0.521	0.586	0.528	0.319	0.484	0.493	0.443	0.383	0.405
2007	0.365	0.510	0.384	0.444	0.662	0.608	0.515	0.582	0.535	0.331	0.487	0.488	0.457	0.387	0.406
2008	0.367	0.519	0.400	0.452	0.663	0.609	0.515	0.589	0.492	0.334	0.514	0.492	0.457	0.393	0.412
2009	0.382	0.540	0.417	0.464	0.665	0.611	0.522	0.589	0.495	0.332	0.525	0.518	0.464	0.393	0.416
2010	0.381	0.540	0.430	0.481	0.671	0.639	0.521	0.588	0.497	0.329	0.531	0.500	0.454	0.407	0.424
2011	0.379	0.540	0.435	0.484	0.685		0.528	0.586	0.522	0.316	0.533	0.488	0.449	0.418	0.430
2012	0.383	0.543	0.442	0.484	0.689		0.524	0.593	0.518	0.317	0.533	0.491	0.454	0.420	0.432
2013	0.387	0.548	0.446	0.480	0.689		0.533	0.580		0.321	0.538	0.498		0.422	0.434
Change	-0.008	0.083	0.107	0.085	0.110	-0.003	0.058	0.056	0.066	0.108	0.077	0.024	0.077	0.049	0.031

Table S6.1: Total Logged Earnings Variance by Year and Country - Public Sector

	Canada	Czechia	Denmark	France	Germany	Hungary	Israel	Japan	Korea	Netherlands	Norway	Slovenia	Sweden	USA (Song)	USA (Census Bureau)
1993	0.678				0.228										
1994	0.664				0.230										
1995	0.657		0.088		0.236										
1996	0.647		0.091	0.210	0.230		0.961						0.056		
1997	0.661		0.091	0.214	0.233		0.932				0.060		0.057		
1998	0.669		0.092	0.208	0.275		0.906				0.058		0.059		
1999	0.663		0.095	0.199	0.274		0.961				0.059	0.310	0.061		
2000	0.692		0.095	0.219	0.285		0.903				0.061	0.308	0.064		
2001	0.685		0.096	0.216	0.294		0.915				0.066	0.314	0.066		
2002	0.698	0.125	0.098	0.184	0.370		0.927			0.408	0.067	0.308	0.066		
2003	0.704	0.132	0.095	0.161	0.339	0.416	0.915			0.431	0.069	0.303	0.067		
2004	0.703	0.144	0.098	0.163	0.360	0.390	0.917			0.413	0.069	0.296	0.065		
2005	0.708	0.152	0.100	0.153	0.356	0.416	0.927			0.417	0.069	0.293	0.065		0.696
2006	0.712	0.154	0.097	0.153	0.358	0.404	0.942			0.359	0.071	0.304	0.065		0.711
2007	0.712	0.152	0.097	0.153	0.377	0.422	0.930			0.371	0.073	0.307	0.070		0.678
2008	0.698	0.158	0.095	0.152	0.381	0.416	0.911			0.389	0.073	0.310	0.068		0.660
2009	0.679	0.154	0.092	0.204	0.382	0.391	0.986			0.413	0.074	0.325	0.068		0.635
2010	0.659	0.152	0.095	0.151	0.399	0.301	0.954			0.426	0.075	0.294	0.069		0.658
2011	0.662	0.155	0.094	0.144	0.395		0.959			0.448	0.077	0.285	0.070		0.651
2012	0.651	0.155	0.097	0.158	0.396		0.952			0.446	0.077	0.268	0.072		0.657
2013	0.659	0.162	0.093	0.157	0.384		0.959			0.438	0.079	0.255			0.654
Change	-0.019	0.037	0.005	-0.053	0.156	-0.115	-0.001			0.030	0.019	-0.055	0.016		-0.042
% Change	-0.028	0.299	0.058	-0.254	0.684	-0.277	-0.001			0.074	0.319	-0.177	0.284		-0.061

Table S6.2: Between Logged Earnings Variance by Year and Country - Public Sector

	Canada	Czechia	Denmark	France	Germany	Hungary	Israel	Japan	Korea	Netherlands	Norway	Slovenia	Sweden	USA (Song)	USA (Census Bureau)
1993	0.098				0.102										
1994	0.098				0.105										
1995	0.098		0.024		0.110										
1996	0.097		0.023	0.089	0.113		0.233						0.011		
1997	0.095		0.025	0.093	0.115		0.232				0.026		0.011		
1998	0.098		0.025	0.090	0.128		0.227				0.025		0.012		
1999	0.097		0.025	0.083	0.135		0.220				0.025	0.108	0.013		
2000	0.092		0.027	0.092	0.141		0.223				0.026	0.109	0.016		
2001	0.093		0.027	0.090	0.148		0.216				0.029	0.121	0.016		
2002	0.098	0.026	0.029	0.080	0.186		0.223			0.070	0.029	0.121	0.016		
2003	0.101	0.030	0.027	0.069	0.173	0.138	0.228			0.070	0.029	0.116	0.017		
2004	0.101	0.039	0.028	0.068	0.191	0.118	0.232			0.064	0.029	0.106	0.015		
2005	0.103	0.041	0.032	0.063	0.186	0.140	0.230			0.061	0.030	0.104	0.016		0.149
2006	0.098	0.047	0.027	0.062	0.188	0.122	0.246			0.063	0.029	0.108	0.017		0.153
2007	0.097	0.046	0.027	0.062	0.203	0.125	0.244			0.073	0.031	0.103	0.020		0.146
2008	0.094	0.049	0.024	0.060	0.205	0.123	0.230			0.077	0.031	0.101	0.017		0.148
2009	0.095	0.050	0.021	0.073	0.204	0.114	0.295			0.084	0.032	0.115	0.017		0.147
2010	0.095	0.052	0.022	0.061	0.217	0.084	0.262			0.086	0.032	0.094	0.017		0.165
2011	0.095	0.050	0.022	0.059	0.216		0.264			0.094	0.033	0.090	0.019		0.157
2012	0.096	0.047	0.024	0.061	0.219		0.266			0.087	0.033	0.081	0.020		0.160
2013	0.097	0.052	0.023	0.062	0.215		0.277			0.078	0.035	0.075			0.155
Change	-0.001	0.025	-0.001	-0.027	0.113	-0.053	0.044			0.008	0.008	-0.032	0.009		0.005
% Change	-0.012	0.958	-0.033	-0.308	1.115	-0.388	0.188			0.108	0.322	-0.301	0.785		0.034

Table S6.3: Within Logged Earnings Variance by Year and Country - Public Sector

	Canada	Czechia	Denmark	France	Germany	Hungary	Israel	Japan	Korea	Netherlands	Norway	Slovenia	Sweden	USA (Song)	USA (Census Bureau)
1993	0.580				0.126										
1994	0.567				0.125										
1995	0.558		0.065		0.126										
1996	0.550		0.068	0.121	0.117		0.728						0.044		
1997	0.566		0.066	0.121	0.119		0.700				0.034		0.046		
1998	0.571		0.067	0.118	0.146		0.680				0.033		0.047		
1999	0.566		0.069	0.116	0.140		0.741				0.033	0.202	0.048		
2000	0.600		0.068	0.127	0.144		0.679				0.034	0.199	0.048		
2001	0.592		0.070	0.126	0.146		0.699				0.037	0.193	0.050		
2002	0.599	0.099	0.070	0.104	0.185		0.705			0.338	0.037	0.187	0.050		
2003	0.604	0.103	0.068	0.092	0.166	0.278	0.687			0.361	0.041	0.188	0.050		
2004	0.602	0.105	0.070	0.096	0.169	0.272	0.685			0.349	0.040	0.190	0.050		
2005	0.605	0.111	0.068	0.090	0.169	0.276	0.697			0.356	0.040	0.189	0.048		0.546
2006	0.614	0.107	0.070	0.091	0.170	0.281	0.696			0.296	0.041	0.196	0.049		0.558
2007	0.615	0.106	0.070	0.090	0.174	0.297	0.686			0.299	0.043	0.204	0.050		0.532
2008	0.603	0.109	0.070	0.093	0.176	0.294	0.681			0.312	0.042	0.209	0.052		0.513
2009	0.585	0.104	0.071	0.131	0.178	0.277	0.691			0.329	0.042	0.210	0.052		0.488
2010	0.565	0.099	0.073	0.089	0.182	0.217	0.692			0.340	0.043	0.199	0.052		0.494
2011	0.567	0.105	0.071	0.085	0.179		0.695			0.354	0.044	0.195	0.051		0.493
2012	0.555	0.107	0.073	0.097	0.176		0.686			0.359	0.044	0.187	0.051		0.497
2013	0.562	0.111	0.071	0.095	0.169		0.683			0.361	0.044	0.180			0.499
Change	-0.018	0.012	0.006	-0.026	0.043	-0.062	-0.045			0.023	0.011	-0.023	0.007		-0.048
% Change	-0.031	0.124	0.090	-0.214	0.338	-0.221	-0.062			0.067	0.315	-0.111	0.157		-0.087

Table S6.4: Between-Workplace Proportion by Year and Country - Public Sector

	Canada	Czechia	Denmark	France	Germany	Hungary - Ad.	Israel	Japan	Korea	Netherlands	Norway	Slovenia	Sweden	USA (Song)	USA (Census Bureau)
1993	0.145				0.446										
1994	0.147				0.457										
1995	0.150		0.267		0.467										
1996	0.150		0.254	0.424	0.493		0.243						0.203		
1997	0.144		0.273	0.435	0.492		0.249				0.437		0.196		
1998	0.146		0.271	0.433	0.467		0.250				0.436		0.208		
1999	0.147		0.267	0.418	0.490		0.229				0.430	0.348	0.211		
2000	0.132		0.280	0.420	0.495		0.247				0.437	0.354	0.245		
2001	0.136		0.278	0.416	0.504		0.236				0.441	0.384	0.244		
2002	0.141	0.211	0.290	0.435	0.501		0.240			0.172	0.441	0.392	0.248		
2003	0.143	0.224	0.284	0.430	0.510	0.331	0.249			0.163	0.415	0.382	0.251		
2004	0.144	0.269	0.285	0.416	0.531	0.303	0.253			0.154	0.422	0.357	0.235		
2005	0.146	0.272	0.319	0.413	0.524	0.336	0.248			0.147	0.427	0.353	0.251		0.215
2006	0.138	0.305	0.283	0.407	0.525	0.303	0.261			0.176	0.412	0.356	0.257		0.215
2007	0.136	0.302	0.277	0.409	0.538	0.296	0.263			0.196	0.417	0.336	0.282		0.215
2008	0.135	0.312	0.255	0.392	0.538	0.295	0.252			0.198	0.427	0.326	0.242		0.223
2009	0.140	0.323	0.232	0.356	0.535	0.292	0.299			0.203	0.432	0.352	0.244		0.231
2010	0.144	0.345	0.233	0.406	0.543	0.280	0.275			0.202	0.428	0.322	0.251		0.250
2011	0.143	0.323	0.239	0.408	0.546		0.275			0.210	0.434	0.315	0.269		0.242
2012	0.147	0.307	0.250	0.386	0.554		0.280			0.195	0.430	0.303	0.282		0.243
2013	0.147	0.318	0.244	0.393	0.560		0.288			0.177	0.438	0.296			0.236
Change	0.002	0.107	-0.023	-0.031	0.114	-0.051	0.046			0.005	0.001	-0.052	0.079		0.022

Table S7.1: Number of Jobs per Year

	Canada	Czechia	Denmark	France	Germany	Hungary	Israel	Japan	Korea	Netherlands	Norway	Slovenia	Sweden	USA (Song)	USA (Census Bureau)
1993	12,118,814				1,476,804			1,379,161	436,694						
1994	12,257,412				1,450,458			1,319,033	422,508						
1995	12,387,467		2,093,095		1,448,735			1,382,085	398,812						
1996	12,359,882		2,130,618	24,480,759	1,401,933		2,117,017	1,352,509	424,604				2,068,080		
1997	12,775,822		2,172,718	25,714,558	1,373,122		2,169,959	1,367,908	404,755		921,119		2,110,171		
1998	13,107,696		2,220,285	26,671,392	1,387,844		2,176,487	1,333,030	383,348		929,647		2,072,848		
1999	13,534,732		2,238,311	28,140,841	1,388,621		2,370,980	1,316,184	478,721		994,108	626,634	2,144,623		
2000	14,127,187		2,263,104	29,798,342	1,405,919		2,480,613	1,258,286	496,855		1,051,970	642,471	2,266,418		
2001	14,432,681		2,286,150	30,273,453	1,393,545		2,554,613	1,232,619	496,173		1,139,535	644,384	2,250,969		
2002	14,409,426	1,014,739	2,262,625	30,328,079	1,366,980		2,599,424	1,231,228	375,493	10,055,462	1,222,659	644,614	2,286,146		
2003	14,582,348	1,188,195	2,228,787	30,190,752	1,326,972	1,445,062	2,580,469	1,217,151	369,112	9,773,779	1,242,168	648,176	2,275,812		
2004	14,834,279	1,706,460	2,238,763	30,232,397	1,293,206	1,453,493	2,669,841	1,277,175	362,789	9,609,706	1,241,933	653,593	2,263,072		
2005	15,266,648	1,863,982	2,281,997	30,890,312	1,277,066	1,439,574	2,736,698	1,213,070		9,664,590	1,263,712	660,772	2,265,754		129,600,000
2006	15,595,115	1,982,698	2,340,149	31,341,895	1,287,428	1,455,210	3,031,979	1,238,745	486,405	9,793,913	1,330,802	673,112	2,307,074		132,200,000
2007	15,943,570	2,100,693	2,370,155	32,202,588	1,322,418	1,546,402	3,204,651	1,198,231	455,071	10,204,573	1,401,905	691,696	2,320,622		133,400,000
2008	16,053,236	2,154,895	2,808,181	32,265,825	1,337,759	1,540,772	3,288,751	1,204,187	644,793	10,265,255	1,462,134	700,128	2,446,247		132,400,000
2009	15,416,997	2,035,446	2,692,166	30,848,146	1,315,245	1,474,989	3,248,754	1,219,304	639,188	9,882,171	1,506,006	682,140	2,383,956		126,900,000
2010	15,486,311	2,030,394	2,675,322	31,566,878	1,318,681	1,436,133	3,418,181	1,224,091	664,781	9,839,187	1,524,167	653,584	2,421,758		125,500,000
2011	15,870,874	2,075,312	2,651,707	31,494,533	1,363,941		3,571,888	1,201,373	667,781	10,064,686	1,553,845	648,819	2,392,421		127,100,000
2012	16,029,766	2,073,465	2,642,221	31,107,477	1,372,795		3,430,387	1,284,135	687,947	9,793,744	1,594,408	623,948	2,410,535		130,300,000
2013	16,220,525	2,105,437	2,652,410	30,977,125	1,356,456		3,667,536	1,296,577		9,481,759	1,616,348	618,528			132,500,000
Total	302,810,788	22,331,716	45,248,764	538,525,352	28,665,928	11,791,635	51,318,228	26,746,082	9,295,830	118,428,825	21,996,466	9,812,599	38,686,506		1,169,900,000

Table S7.2: Number of Workplaces per Year

	Canada	Czechia	Denmark	France	Germany	Hungary	Israel	Japan	Korea	Netherlands	Norway	Slovenia	Sweden	USA (Song)	USA (Census Bureau)
1993	579,782							57,235	2,600						
1994	587,699							54,756	2,557						
1995	591,286		115,898					57,892	2,411						
1996	592,259		118,053	1,179,125			99,609	56,607	3,128				54,582		
1997	606,837		120,322	1,274,128			100,269	57,056	3,016		38,880		53,319		
1998	618,562		120,805	1,300,160			97,591	56,209	3,124		36,557		55,136		
1999	628,846		122,130	1,332,596			100,549	55,233	5,047		39,078	35,901	55,117		
2000	639,588		123,571	1,348,334			98,471	52,941	5,052		41,379	36,909	60,244		
2001	649,714		124,318	1,353,000			99,914	51,294	5,077		42,199	37,168	59,669		
2002	654,865	3,630	123,764	1,360,429			103,879	51,915	5,103	297,802	44,175	37,617	58,739		
2003	662,614	4,200	124,227	1,374,339		109,115	106,113	51,118	5,037	292,323	44,802	37,889	59,178		
2004	674,621	17,206	126,136	1,397,288		111,905	111,799	52,085	4,956	869,522	46,860	38,360	58,442		
2005	689,181	19,098	131,584	1,422,844		112,495	115,578	51,555		294,280	47,987	38,970	58,191		
2006	699,658	23,235	132,348	1,456,459		115,428	124,778	54,654	6,096	291,287	49,833	39,827	59,058		
2007	715,032	24,881	134,161	1,474,464		117,358	129,637	52,595	5,923	311,092	51,319	41,186	59,069		
2008	722,109	25,632	145,727	1,485,799		118,133	132,469	53,356	16,873	319,792	53,845	42,486	59,150		
2009	715,020	26,470	140,020	1,503,576		112,150	136,222	55,656	16,930	317,687	56,579	42,210	59,314		
2010	717,858	26,978	140,349	1,491,795		110,054	141,470	55,229	17,788	310,809	57,858	40,678	59,900		
2011	724,412	27,317	139,720	1,454,964			144,515	54,726	17,219	291,110	58,291	40,026	56,791		
2012	727,113	27,109	138,602	1,454,188			136,818	57,390	17,542	299,809	59,383	38,049	57,806		
2013	731,615	27,394	137,906	1,449,811			149,991	57,719		294,778	60,583	38,131			
Total	13,928,671	253,150	2,459,641	25,113,299		906,638	2,129,672	1,147,221	145,479	4,190,291	829,608	585,407	983,705		

Appendix 3: Coding national employment institutions

Countries vary dramatically in their national institutions that regulate labor market practices. Institutions with implications for the degree of labor market inequality include those that strengthen the bargaining power of employees relative to employers and those that coordinate wage setting across firms and industries. In this appendix we rank countries in terms of their national institutions that directly support employee's bargaining power and employment security in workplaces.

We create a standardized summated scale from six measures of institutional employment protections (Cronbach alpha = .892). The first three items refer to the bargaining power of labor and are taken from Detlef Jahn's (*40*) corporatism scale. These include institutional: (1) structure, which includes the organizational structure and power of collective bargaining groups and worker's councils; (2) function, which concerns the level at which the government engages in wage coordination with interest groups; and (3) scope, which captures the degree to which an economy is affected by corporatist arrangements, such that industry-wide bargaining would score higher than firm-level bargaining. These items capture the degree to which worker's collective bargaining position are protected at the national or collective level. We include collective bargaining coverage (taken from the ICTWSS dataset (*41*)) as the fourth component. Collective bargaining coverage measures the percentage of all workers under a collective bargaining contract and functions as a measure of union bargaining strength across the national economy. The final two components of the scale both concern the levels of legal protection employees have from collective or individual dismissals. One concerns employees working "regular" contracts, the second temporary employees. The OECD constructed these employment protection scores from a close reading of each country's labor laws.[1] These are primarily indicators of individual bargaining power and job security.

Before summing the items, we first standardize each component with a mean of 0 and a standard deviation of 1 for the years 1993-2010 using the scores of all countries. We then add all six components and divide by 6. Tables S9.1-S9.9 provide the scores for the summary measure and each individual component for each country and year.

Jahn's corporatism scale only extended to 2010; since we lose half of our Institutional Protections scale there, we established 2010 as our cut-off point for statistical comparisons. Because Israel has large amounts of missing data for legal employment

[1] The OECD did not calculate employment protection scores for Slovenia prior to 2008. We substituted estimates based on a similar method. See M. Vodopivec, P. Dolenc, M. Vodopivec, A. Balde, Mobilnost dela in fleksibilnost sistema plač (Labour Mobility and Wage Flexibility). Koper: Fakulteta za management Koper (2007)

protections, the Institutional Protections Score consists only of the first 4 components. As such, we did not include Israel in the error correction models.

Note that for some countries there are a large number of years missing for collective bargaining coverage. However, these countries have also retained very stable levels of coverage throughout our time period (e.g. Sweden's coverage only declines from 94% to 89% over twenty years, France from 93.4% to 98%). If a year had missing data, we impute the score using a moving average. This means the closest previous year and future with data available are used to compute missing data, where available-data years are weighted according to how close they are to the year with missing data. Cells shaded in green indicate imputed years.

We estimated a series of additional models that entered each scale item separately (reported in Table S8A-C). These models are not robust to jackknifing nor are estimates consistent across samples. We think that the institutional index used in the main analyses are superior for describing the package of institutional labor market protections. When items are entered separately we find that declining collective bargaining coverage and declining protections of temporary workers were most strongly and consistently associated with rising between workplace inequalities for the total and private sector samples. Net of shifts in collective bargaining and temporary labor protections**,** we also find that corporatism scope and permanent employment protections were associated with rising between workplace inequality levels in the total and private sector samples. Only temporary employment protections were associated with lower between workplace inequality in the state sector. If these relatively unstable results were to be taken at face value, they suggest that the outsourcing process is more likely in the context of union decline and policies that permit low road temporary employment strategies. The positive impact of both corporatism scope and permanent employment protections suggest that labor market dualization, while protecting permanent workers in core sectors, also encourages the externalization of labor (29, 30).

Table 8A: Error Regression Models on Between-Workplace Proportion of Inequality with Institutional Protections Scale Broken into Individual Components - Between-workplace Proportion

	Total				Private				Public			
	Short-term Impact		Long-term Impact		Short-term Impact		Long-term Impact		Short-term Impact		Long-term Impact	
VARIABLES	coeff	se	coeff	se	coeff	se	coeff	se	coeff	se	coeff	se
lag_betw_prop	-0.167***	-0.046			-0.186***	-0.038			-0.418***	-0.105		
▲ Corporatism Structure	0.016	-0.021	0.094***	-0.023	0.016	-0.019	0.087***	-0.02	-0.012	-0.103	-0.029	-0.101
Lagged Corporatism Structure	0.004	-0.011	0.022*	-0.011	0.002	-0.011	0.008	-0.011	0.046	-0.046	0.111*	-0.055
▲ Corporatism Function	0.001	-0.003	0.005	-0.003	0	-0.004	0	-0.004	0.008	-0.011	0.019	-0.011
Lagged Corporatism Function	-0.001	-0.004	-0.004	-0.004	-0.003	-0.005	-0.014**	-0.005	-0.004	-0.017	-0.011	-0.018
▲ Corporatism Scope	0	-0.003	-0.002	-0.003	0	-0.003	0.002	-0.003	-0.005	-0.007	-0.012	-0.007
Lagged Corporatism Scope	0.002	-0.004	0.009**	-0.004	0.002	-0.004	0.008**	-0.004	0.003	-0.015	0.006	-0.015
▲ Collective Bargaining	-0.033	-0.024	-0.198***	-0.028	-0.04	-0.029	-0.216***	-0.034	0.016	-0.022	0.039	-0.022
Lagged Collective Bargaining	-0.02	-0.017	-0.117***	-0.019	-0.026	-0.02	-0.142***	-0.022	0.015	-0.02	0.036*	-0.019
▲ Regular EPL	0.016	-0.014	0.093***	-0.017	0.008	-0.016	0.045**	-0.017	0.041	-0.03	0.099**	-0.034
Lagged Regular EPL	0.003	-0.014	0.019	-0.015	-0.001	-0.017	-0.006	-0.017	-0.012	-0.035	-0.029	-0.034
▲ Temporary EPL	0.007	-0.007	0.044***	-0.007	0.007	-0.006	0.037***	-0.006	0	-0.013	-0.001	-0.013
Lagged Temporary EPL	-0.001	-0.007	-0.005	-0.007	-0.002	-0.007	-0.011	-0.007	-0.009	-0.011	-0.021*	-0.01
unemp	0.001	-0.001	0.008***	-0.001	0.001	-0.001	0.006***	-0.001	0	-0.001	0.001	-0.001
lf_partic	0	-0.001	-0.002*	-0.001	-0.001	-0.001	-0.005***	-0.001	0.001	-0.001	0.002	-0.001
deltayhat			-4.994***	-0.273			-4.362***	-0.205			-1.390***	-0.25
Constant	0.098	-0.09	0.587***	-0.092	0.159	-0.111	0.852***	-0.102	0.055	-0.121	0.132	-0.116
Observations	147		147		146		146		117		117	
R-squared	0.202		0.786		0.231		0.794		0.283		0.558	
Number of Countries	12		12		12		12		11		11	

Table 8B: Error Regression Models on Between-Workplace Proportion of Inequality with Institutional Protections Scale Broken into Individual Components - Between-workplace Variance in Logged Earnings

	Total				Private				Public			
	Short-term Impact		Long-term Impact		Short-term Impact		Long-term Impact		Short-term Impact		Long-term Impact	
VARIABLES	coeff	se	coeff	se	coeff	se	coeff	se	coeff	se	coeff	se
lag_betw_var	-0.148***	-0.045			-0.168***	-0.042			-0.387***	-0.075		
▲ Corporatism Structure	0.019*	-0.009	0.127***	-0.011	0.022*	-0.012	0.128***	-0.013	0.027**	-0.012	0.070***	-0.014
Lagged Corporatism Structure	0.009	-0.006	0.058***	-0.006	0.01	-0.008	0.057***	-0.008	0.033	-0.023	0.085***	-0.023
▲ Corporatism Function	0.001	-0.002	0.006**	-0.002	0.001	-0.002	0.006**	-0.002	0.005	-0.005	0.012**	-0.005
Lagged Corporatism Function	-0.001	-0.002	-0.004*	-0.002	-0.001	-0.002	-0.004	-0.002	0	-0.006	-0.001	-0.006
▲ Corporatism Scope	0	-0.002	0.002	-0.002	0.001	-0.002	0.006**	-0.002	-0.002	-0.003	-0.005*	-0.003
Lagged Corporatism Scope	0.002	-0.003	0.016***	-0.003	0.003	-0.004	0.018***	-0.004	0.001	-0.004	0.003	-0.004
▲ Collective Bargaining	-0.021*	-0.01	-0.143***	-0.011	-0.031**	-0.013	-0.181***	-0.014	0.01	-0.006	0.027***	-0.005
Lagged Collective Bargaining	-0.016**	-0.007	-0.110***	-0.008	-0.024**	-0.009	-0.140***	-0.009	0.009	-0.008	0.024***	-0.007
▲ Regular EPL	0.012*	-0.006	0.080***	-0.006	0.018*	-0.008	0.105***	-0.009	-0.002	-0.012	-0.006	-0.012
Lagged Regular EPL	0.014*	-0.006	0.093***	-0.006	0.015*	-0.007	0.092***	-0.006	-0.009	-0.019	-0.023	-0.018
▲ Temporary EPL	0.005	-0.003	0.033***	-0.004	0.007	-0.004	0.042***	-0.004	-0.007	-0.006	-0.019***	-0.006
Lagged Temporary EPL	-0.005	-0.003	-0.031***	-0.002	-0.005	-0.003	-0.030***	-0.003	-0.015***	-0.004	-0.038***	-0.002
unemp	0	0	-0.002***	0	0	-0.001	0	-0.001	-0.001	-0.001	-0.002*	-0.001
lf_partic	-0.001	-0.001	-0.003***	-0.001	-0.001	-0.001	-0.004***	-0.001	0.001*	0	0.003***	0
deltayhat			-5.758***	-0.303			-4.945***	-0.247			-1.587***	-0.194
Constant	0.064	-0.054	0.436***	-0.065	0.076	-0.059	0.453***	-0.069	-0.051	-0.035	-0.132***	-0.031
Observations	147		147		146		146		117		117	
R-squared	0.198		0.906		0.24		0.899		0.231		0.842	
Number of Countries	12		12		12		12		11		11	

Table 8C: Error Regression Models on Between-Workplace Proportion of Inequality with Institutional Protections Scale Broken into Individual Components - Within-workplace Variance in Logged Earnings

	Total				Private				Public			
	Short-term Impact		Long-term Impact		Short-term Impact		Long-term Impact		Short-term Impact		Long-term Impact	
VARIABLES	coeff	se	coeff	se	coeff	se	coeff	se	coeff	se	coeff	se
lag_within_var	-0.255***	-0.042			-0.257***	-0.043			-0.504***	-0.089		
▲ Corporatism Structure	0.005	-0.006	0.018**	-0.006	0.005	-0.006	0.018**	-0.006	0.03	-0.047	0.059	-0.046
Lagged Corporatism Structure	0.006	-0.004	0.022***	-0.004	0.006	-0.005	0.023***	-0.005	0.007	-0.038	0.015	-0.037
▲ Corporatism Function	0.001	-0.001	0.004***	-0.001	0.002	-0.001	0.006***	-0.001	0.007	-0.005	0.014**	-0.005
Lagged Corporatism Function	0.001	-0.002	0.005**	-0.002	0.003	-0.003	0.013***	-0.003	0.01	-0.014	0.021	-0.013
▲ Corporatism Scope	-0.001	-0.001	-0.004***	-0.001	-0.001	-0.001	-0.004***	-0.001	-0.007	-0.007	-0.014*	-0.007
Lagged Corporatism Scope	-0.001	-0.002	-0.003	-0.002	-0.001	-0.002	-0.004*	-0.002	-0.005	-0.008	-0.011	-0.008
▲ Collective Bargaining	0.011	-0.012	0.043***	-0.014	0.009	-0.015	0.034*	-0.016	0.028	-0.021	0.056**	-0.023
Lagged Collective Bargaining	-0.002	-0.016	-0.006	-0.016	-0.002	-0.019	-0.01	-0.018	0.027	-0.031	0.054	-0.032
▲ Regular EPL	0.004	-0.005	0.015***	-0.005	0.011	-0.008	0.043***	-0.007	-0.03	-0.025	-0.059**	-0.024
Lagged Regular EPL	0.006	-0.006	0.024***	-0.006	0.006	-0.009	0.024**	-0.009	-0.03	-0.024	-0.060**	-0.026
▲ Temporary EPL	-0.002	-0.003	-0.009***	-0.003	-0.002	-0.003	-0.008**	-0.003	-0.01	-0.008	-0.020**	-0.008
Lagged Temporary EPL	-0.004	-0.003	-0.015***	-0.003	-0.004	-0.004	-0.015***	-0.004	-0.016**	-0.007	-0.032***	-0.007
unemp	-0.003**	-0.001	-0.010***	-0.001	-0.002*	-0.001	-0.009***	-0.001	-0.004**	-0.001	-0.008***	-0.002
lf_partic	0	-0.001	-0.001	-0.001	0	-0.001	-0.001	-0.001	0.002	-0.002	0.004**	-0.002
deltayhat			-2.924***	-0.165			-2.898***	-0.166			-0.984***	-0.176
Constant	0.091	-0.091	0.359***	-0.086	0.094	-0.096	0.368***	-0.091	-0.021	-0.125	-0.043	-0.124
Observations	147		147		146		146		117		117	
R-squared	0.271		0.76		0.241		0.764		0.348		0.582	
Number of Countries	12		12		12		12		11		11	

Note on Tables 8A-C: Table reports coefficients and clustered robust standard errors. South Korea could not be included because of missing information on Corporatism Structure. Israel was not included because of missing information on employment protection legislation. For all sectors and private sector estimations, Song et al. (2018) estimates were used; for public sector models, US Census estimates were used. All models control for yearly unemployment rates and labor force participation.

Table S9.1: Institutional Protection Scores

	Canada	France	Sweden	Norway	Japan	Korea	Hungary	USA	Netherlands	Germany	Slovenia	Czech Republic	Israel	Denmark
1993	-1.287	0.500	1.021	0.941	-0.671	0.068	-0.830	-1.607	0.922	0.921	0.928	-0.024	-0.439	0.583
1994	-1.287	0.478	0.881	1.015	-0.675	0.064	-0.831	-1.606	0.900	0.939	1.057	-0.025	-0.452	0.586
1995	-1.293	0.479	0.905	1.090	-0.683	0.059	-0.809	-1.608	0.903	0.918	1.187	-0.036	-0.510	0.579
1996	-1.292	0.501	0.845	1.190	-0.693	0.056	-0.689	-1.608	0.920	0.890	1.319	-0.133	-0.577	0.583
1997	-1.312	0.501	0.784	1.262	-0.718	0.144	-0.692	-1.609	0.881	0.788	1.371	-0.253	-0.602	0.585
1998	-1.315	0.504	0.730	1.181	-0.742	0.109	-0.707	-1.610	0.852	0.707	0.858	-0.358	-0.627	0.533
1999	-1.318	0.508	0.730	1.084	-0.766	0.050	-0.723	-1.609	0.805	0.695	0.887	-0.400	-0.651	0.517
2000	-1.316	0.489	0.731	0.941	-0.871	0.021	-0.738	-1.611	0.816	0.685	0.915	-0.396	-0.676	0.529
2001	-1.315	0.471	0.732	0.762	-0.879	-0.007	-0.733	-1.607	0.844	0.698	0.938	-0.399	-0.686	0.512
2002	-1.315	0.474	0.722	0.680	-0.901	-0.134	-0.674	-1.602	0.926	0.703	1.039	-0.322	-0.695	0.510
2003	-1.313	0.525	0.744	0.664	-0.894	-0.258	-0.628	-1.600	0.895	0.631	1.244	-0.275	-0.705	0.544
2004	-1.314	0.551	0.728	0.679	-0.887	-0.383	-0.537	-1.599	0.959	0.530	1.239	-0.281	-0.714	0.567
2005	-1.311	0.552	0.727	0.695	-0.888	-0.386	-0.498	-1.597	0.983	0.527	1.216	-0.186	-0.724	0.531
2006	-1.312	0.552	0.702	0.792	-0.893	-0.385	-0.459	-1.601	0.873	0.503	1.174	-0.150	-0.733	0.540
2007	-1.313	0.553	0.671	0.776	-0.959	-0.382	-0.435	-1.602	0.900	0.491	1.169	-0.189	-0.743	0.517
2008	-1.315	0.531	0.531	0.787	-0.958	-0.384	-0.435	-1.600	0.820	0.471	1.156	-0.181	-0.759	0.530
2009	-1.314	0.492	0.519	0.782	-0.956	-0.386	-0.434	-1.602	0.815	0.489	1.165	-0.177	-0.775	0.502
2010	-1.313	0.492	0.491	0.795	-0.957	-0.388	-0.473	-1.600	0.799	0.478	1.054	-0.077	-0.792	0.505

Table S9.2: Detlef Jahn's Corporatism Scale - Normalized

	Canada	France	Sweden	Norway	Japan	Korea	Hungary	USA	Netherlands	Germany	Slovenia	Czech Republic	Israel	Denmark
1993	-1.462	-0.105	1.013	1.181	-0.818	-0.242	-1.166	-1.596	1.265	0.896	-0.037	-0.252	-0.728	0.938
1994	-1.455	-0.149	1.045	1.331	-0.827	-0.242	-1.107	-1.593	1.302	0.894	0.221	-0.237	-0.728	0.937
1995	-1.450	-0.148	1.093	1.481	-0.842	-0.242	-0.989	-1.589	1.341	0.892	0.480	-0.285	-0.728	0.938
1996	-1.442	-0.103	0.973	1.660	-0.858	-0.242	-0.871	-1.585	1.384	0.891	0.744	-0.417	-0.728	0.939
1997	-1.432	-0.103	0.992	1.805	-0.845	-0.052	-0.875	-1.581	1.302	0.890	0.849	-0.601	-0.728	0.939
1998	-1.432	-0.104	0.885	1.643	-0.888	0.139	-0.879	-1.579	1.239	0.897	0.958	-0.741	-0.728	0.834
1999	-1.431	-0.104	0.904	1.450	-0.931	0.329	-0.883	-1.577	1.257	0.908	1.017	-0.851	-0.728	0.802
2000	-1.428	-0.148	0.906	1.224	-0.942	0.273	-0.888	-1.574	1.274	0.918	1.072	-0.810	-0.728	0.825
2001	-1.426	-0.192	0.908	0.944	-0.953	0.217	-0.851	-1.565	1.286	0.933	1.118	-0.707	-0.728	0.791
2002	-1.425	-0.191	0.906	0.783	-0.991	-0.029	-0.784	-1.555	1.374	0.955	1.320	-0.603	-0.728	0.787
2003	-1.419	-0.146	0.951	0.753	-0.974	-0.275	-0.744	-1.547	1.450	0.968	1.513	-0.545	-0.728	0.856
2004	-1.415	-0.101	0.918	0.784	-0.955	-0.521	-0.657	-1.540	1.526	0.942	1.504	-0.530	-0.728	0.902
2005	-1.412	-0.101	0.916	0.816	-0.953	-0.521	-0.518	-1.535	1.554	0.945	1.458	-0.515	-0.728	0.836
2006	-1.410	-0.100	0.884	0.934	-0.950	-0.521	-0.468	-1.538	1.552	0.914	1.418	-0.536	-0.728	0.858
2007	-1.410	-0.100	0.838	0.910	-0.947	-0.521	-0.446	-1.540	1.473	0.908	1.430	-0.515	-0.728	0.847
2008	-1.411	-0.145	0.761	0.938	-0.944	-0.521	-0.398	-1.541	1.317	0.872	1.448	-0.491	-0.728	0.867
2009	-1.411	-0.189	0.744	0.937	-0.943	-0.521	-0.348	-1.543	1.287	0.903	1.467	-0.425	-0.728	0.806
2010	-1.410	-0.189	0.698	0.966	-0.942	-0.521	-0.397	-1.541	1.180	0.903	1.377	-0.358	-0.728	0.800

Table S9.3: Adjusted Collective Bargaining Coverage - Normalized

	Canada	France	Sweden	Norway	Japan	Korea	Hungary	USA	Netherlands	Germany	Slovenia	Czechia	Israel	Denmark
1993	-0.586	1.218	1.236	0.477	-1.098	-1.330	-0.378	-1.306	0.862	0.799	1.435	0.279	0.427	0.873
1994	-0.608	1.218	1.236	0.477	-1.098	-1.355	-0.563	-1.313	0.833	0.799	1.435	0.224	0.378	0.890
1995	-0.656	1.218	1.236	0.477	-1.098	-1.385	-0.784	-1.337	0.804	0.799	1.435	0.303	0.143	0.906
1996	-0.679	1.218	1.236	0.477	-1.113	-1.401	-0.415	-1.351	0.775	0.630	1.435	0.117	-0.123	0.923
1997	-0.825	1.218	1.236	0.477	-1.127	-1.441	-0.424	-1.370	0.790	0.606	1.435	-0.053	-0.222	0.939
1998	-0.844	1.238	1.236	0.477	-1.142	-1.428	-0.504	-1.379	0.805	0.563	1.435	-0.263	-0.322	0.939
1999	-0.869	1.258	1.236	0.473	-1.156	-1.417	-0.583	-1.380	0.820	0.464	1.435	-0.180	-0.421	0.939
2000	-0.865	1.279	1.236	0.468	-1.171	-1.427	-0.662	-1.399	0.835	0.370	1.435	-0.283	-0.521	0.939
2001	-0.863	1.299	1.236	0.464	-1.185	-1.425	-0.743	-1.401	0.967	0.403	1.435	-0.610	-0.559	0.939
2002	-0.868	1.319	1.236	0.460	-1.198	-1.450	-0.587	-1.405	1.191	0.370	1.435	-0.459	-0.596	0.939
2003	-0.868	1.339	1.236	0.456	-1.212	-1.453	-0.431	-1.415	0.779	0.365	1.435	-0.350	-0.634	0.939
2004	-0.889	1.359	1.236	0.452	-1.226	-1.470	-0.612	-1.429	0.939	0.304	1.435	-0.434	-0.672	0.939
2005	-0.882	1.362	1.236	0.448	-1.240	-1.485	-0.794	-1.434	0.998	0.276	1.435	-0.489	-0.710	0.923
2006	-0.891	1.364	1.187	0.444	-1.273	-1.481	-0.715	-1.451	0.338	0.224	1.302	-0.209	-0.748	0.906
2007	-0.898	1.366	1.137	0.421	-1.280	-1.460	-0.636	-1.447	0.742	0.168	1.236	-0.205	-0.786	0.807
2008	-0.908	1.368	1.113	0.399	-1.286	-1.472	-0.778	-1.434	0.727	0.158	1.170	-0.224	-0.852	0.824
2009	-0.903	1.368	1.088	0.377	-1.276	-1.484	-0.921	-1.438	0.864	0.171	1.170	-0.402	-0.917	0.840
2010	-0.900	1.368	1.063	0.369	-1.286	-1.495	-1.008	-1.434	1.091	0.106	0.774	-0.178	-0.983	0.873

Table S9.4: EPL for Regular Contracts - Normalized

	Canada	France	Sweden	Norway	Japan	Korea	Hungary	USA	Netherlands	Germany	Slovenia	Czech Republic	Israel	Denmark
1993	-1.538	0.160	0.706	0.151	-0.604	0.991	-0.243	-2.332	1.036	0.450	2.144	1.313		-0.029
1994	-1.538	0.160	0.706	0.151	-0.604	0.991	-0.243	-2.332	0.824	0.564	2.144	1.313		-0.029
1995	-1.538	0.160	0.706	0.151	-0.604	0.991	-0.243	-2.332	0.754	0.564	2.144	1.313		-0.086
1996	-1.538	0.160	0.706	0.151	-0.604	0.991	-0.243	-2.332	0.754	0.564	2.144	1.313		-0.086
1997	-1.538	0.160	0.592	0.151	-0.604	0.991	-0.243	-2.332	0.754	0.564	2.144	1.313		-0.086
1998	-1.538	0.160	0.592	0.151	-0.604	0.194	-0.243	-2.332	0.754	0.564	1.068	1.313		-0.086
1999	-1.538	0.160	0.535	0.151	-0.604	0.194	-0.243	-2.332	0.810	0.564	1.068	1.313		-0.086
2000	-1.538	0.160	0.535	0.151	-0.604	0.194	-0.243	-2.332	0.810	0.564	1.068	1.313		-0.086
2001	-1.538	0.160	0.535	0.151	-0.604	0.194	-0.243	-2.332	0.810	0.564	1.068	1.313		-0.086
2002	-1.538	0.160	0.478	0.151	-0.604	0.194	-0.243	-2.332	0.810	0.564	1.068	1.313		-0.086
2003	-1.538	0.312	0.478	0.151	-0.604	0.194	-0.243	-2.332	0.810	0.564	1.068	1.313		-0.086
2004	-1.538	0.312	0.478	0.151	-0.604	0.194	-0.243	-2.332	0.810	0.564	1.068	1.313		-0.086
2005	-1.538	0.312	0.478	0.151	-0.604	0.194	-0.243	-2.332	0.810	0.564	1.068	1.313		-0.086
2006	-1.538	0.312	0.478	0.151	-0.604	0.194	-0.243	-2.332	0.810	0.564	1.068	1.313		-0.086
2007	-1.538	0.312	0.478	0.151	-1.002	0.194	-0.243	-2.332	0.810	0.564	1.068	1.010		-0.086
2008	-1.538	0.312	0.478	0.151	-1.002	0.194	-0.243	-2.332	0.810	0.564	0.531	1.010	-0.205	-0.086
2009	-1.538	0.213	0.478	0.151	-1.002	0.194	-0.243	-2.332	0.735	0.564	0.531	1.010	-0.205	-0.086
2010	-1.538	0.213	0.478	0.151	-1.002	0.194	-0.243	-2.332	0.735	0.564	0.531	1.010	-0.205	-0.086

Table S9.5: EPL for Temporary Contracts - Normalized

	Canada	France	Sweden	Norway	Japan	Korea	Hungary	USA	Netherlands	Germany	Slovenia	Czech Republic	Israel	Denmark
1993	-1.211	1.939	1.142	1.472	0.130	1.472	-0.861	-1.211	-0.161	1.589	2.102	-0.978		-0.157
1994	-1.211	1.939	0.208	1.472	0.130	1.472	-0.861	-1.211	-0.161	1.589	2.102	-0.978		-0.157
1995	-1.211	1.939	0.208	1.472	0.130	1.472	-0.861	-1.211	-0.161	1.472	2.102	-0.978		-0.157
1996	-1.211	1.939	0.208	1.531	0.130	1.472	-0.861	-1.211	-0.161	1.472	2.102	-0.978		-0.157
1997	-1.211	1.939	-0.103	1.531	-0.045	1.472	-0.861	-1.211	-0.161	0.889	2.102	-0.978		-0.157
1998	-1.211	1.939	-0.103	1.531	-0.045	1.472	-0.861	-1.211	-0.161	0.422	-0.231	-0.978		-0.157
1999	-1.211	1.939	-0.103	1.531	-0.045	0.539	-0.861	-1.211	-0.570	0.422	-0.231	-0.978		-0.157
2000	-1.211	1.939	-0.103	1.356	-0.628	0.539	-0.861	-1.211	-0.570	0.422	-0.231	-0.978		-0.157
2001	-1.211	1.939	-0.103	1.122	-0.628	0.539	-0.861	-1.211	-0.570	0.422	-0.231	-0.978		-0.157
2002	-1.211	1.939	-0.103	1.122	-0.628	0.539	-0.861	-1.211	-0.570	0.422	-0.231	-0.978		-0.157
2003	-1.211	1.939	-0.103	1.122	-0.628	0.539	-0.861	-1.211	-0.570	-0.045	0.422	-0.978		-0.157
2004	-1.211	1.939	-0.103	1.122	-0.628	0.539	-0.395	-1.211	-0.570	-0.511	0.422	-0.978		-0.157
2005	-1.211	1.939	-0.103	1.122	-0.628	0.539	-0.395	-1.211	-0.570	-0.511	0.422	-0.395		-0.157
2006	-1.211	1.939	-0.103	1.356	-0.628	0.539	-0.395	-1.211	-0.570	-0.511	0.422	-0.395		-0.157
2007	-1.211	1.939	-0.103	1.356	-0.628	0.539	-0.395	-1.211	-0.570	-0.511	0.422	-0.395		-0.157
2008	-1.211	1.939	-0.686	1.356	-0.628	0.539	-0.395	-1.211	-0.570	-0.511	0.889	-0.395	-0.623	-0.157
2009	-1.211	1.939	-0.686	1.356	-0.628	0.539	-0.395	-1.211	-0.570	-0.511	0.889	-0.395	-0.623	-0.157
2010	-1.211	1.939	-0.686	1.356	-0.628	0.539	-0.395	-1.211	-0.570	-0.511	0.889	-0.220	-0.623	-0.157

Table S9.6: Detlef Jahn's Corporatism Scores

	Canada	France	Sweden	Norway	Japan	Korea	Hungary	USA	Netherlands	Germany	Slovenia	Czech Republic	Israel	Denmark
1993	-1.608	-0.142	1.066	1.247	-0.911	-0.290	-1.288	-1.753	1.337	0.940	-0.068	-0.301	-0.815	0.984
1994	-1.600	-0.189	1.100	1.409	-0.921	-0.290	-1.224	-1.749	1.378	0.937	0.210	-0.284	-0.815	0.984
1995	-1.595	-0.189	1.152	1.571	-0.938	-0.290	-1.097	-1.744	1.420	0.935	0.490	-0.336	-0.815	0.985
1996	-1.586	-0.140	1.022	1.765	-0.955	-0.290	-0.969	-1.740	1.466	0.934	0.775	-0.479	-0.815	0.986
1997	-1.575	-0.140	1.043	1.921	-0.941	-0.084	-0.973	-1.736	1.378	0.933	0.888	-0.678	-0.815	0.986
1998	-1.575	-0.140	0.928	1.746	-0.987	0.121	-0.978	-1.734	1.310	0.941	1.007	-0.829	-0.815	0.872
1999	-1.574	-0.140	0.948	1.538	-1.034	0.327	-0.982	-1.731	1.330	0.952	1.070	-0.948	-0.815	0.837
2000	-1.571	-0.188	0.950	1.294	-1.045	0.267	-0.987	-1.729	1.347	0.963	1.130	-0.903	-0.815	0.863
2001	-1.568	-0.235	0.952	0.991	-1.057	0.206	-0.947	-1.718	1.360	0.980	1.179	-0.792	-0.815	0.826
2002	-1.568	-0.235	0.950	0.817	-1.099	-0.059	-0.875	-1.708	1.456	1.003	1.397	-0.680	-0.815	0.822
2003	-1.562	-0.186	0.999	0.785	-1.081	-0.325	-0.832	-1.700	1.538	1.017	1.606	-0.617	-0.815	0.896
2004	-1.557	-0.138	0.964	0.818	-1.060	-0.591	-0.738	-1.691	1.620	0.989	1.596	-0.601	-0.815	0.946
2005	-1.553	-0.137	0.961	0.853	-1.058	-0.591	-0.588	-1.687	1.650	0.993	1.546	-0.585	-0.815	0.875
2006	-1.552	-0.137	0.926	0.981	-1.055	-0.591	-0.534	-1.689	1.648	0.959	1.503	-0.608	-0.815	0.898
2007	-1.552	-0.137	0.876	0.954	-1.052	-0.591	-0.510	-1.692	1.563	0.952	1.516	-0.585	-0.815	0.886
2008	-1.552	-0.185	0.794	0.985	-1.048	-0.591	-0.458	-1.693	1.394	0.914	1.536	-0.559	-0.815	0.908
2009	-1.553	-0.233	0.776	0.983	-1.047	-0.591	-0.405	-1.695	1.362	0.947	1.556	-0.487	-0.815	0.842
2010	-1.552	-0.233	0.725	1.015	-1.046	-0.591	-0.457	-1.693	1.246	0.947	1.459	-0.415	-0.815	0.836

Table S9.7: Adjusted Collective Bargaining Coverage

	Canada	France	Sweden	Norway	Japan	Korea	Hungary	USA	Netherlands	Germany	Slovenia	Czechia	Israel	Denmark
1993	38.82	93.44	94.00	71.00	23.30	16.28	45.10	17.00	82.67	80.75	100.00	65.00	69.50	83.00
1994	38.14	93.44	94.00	71.00	23.30	15.51	39.50	16.79	81.79	80.75	100.00	63.33	68.00	83.50
1995	36.70	93.44	94.00	71.00	23.30	14.60	32.80	16.06	80.90	80.75	100.00	65.73	60.88	84.00
1996	36.00	93.44	94.00	71.00	22.86	14.13	44.00	15.65	80.02	75.65	100.00	60.11	52.84	84.50
1997	31.57	93.44	94.00	71.00	22.42	12.92	43.70	15.08	80.47	74.90	100.00	54.94	49.83	85.00
1998	30.99	94.05	94.00	71.00	21.98	13.30	41.30	14.81	80.92	73.60	100.00	48.59	46.81	85.00
1999	30.24	94.66	94.00	70.87	21.54	13.64	38.90	14.75	81.38	70.60	100.00	51.12	43.80	85.00
2000	30.35	95.28	94.00	70.74	21.10	13.33	36.52	14.18	81.83	67.75	100.00	47.98	40.79	85.00
2001	30.41	95.89	94.00	70.61	20.68	13.40	34.05	14.11	85.84	68.75	100.00	38.08	39.64	85.00
2002	30.27	96.50	94.00	70.48	20.26	12.65	38.78	13.99	92.62	67.75	100.00	42.65	38.49	85.00
2003	30.27	97.11	94.00	70.36	19.84	12.55	43.52	13.70	80.14	67.60	100.00	45.96	37.35	85.00
2004	29.63	97.72	94.00	70.24	19.42	12.04	38.01	13.28	84.99	65.75	100.00	43.42	36.20	85.00
2005	29.84	97.79	94.00	70.12	19.00	11.57	32.51	13.14	86.79	64.90	100.00	41.75	35.05	84.50
2006	29.57	97.86	92.50	70.00	18.00	11.70	34.90	12.61	66.79	63.35	96.00	50.23	33.90	84.00
2007	29.36	97.93	91.00	69.32	17.80	12.33	37.29	12.73	79.03	61.65	94.00	50.35	32.76	81.00
2008	29.05	98.00	90.25	68.64	17.60	11.99	32.98	13.14	78.59	61.35	92.00	49.76	30.76	81.50
2009	29.20	98.00	89.50	67.96	17.90	11.63	28.68	13.01	82.73	61.74	92.00	44.39	28.77	82.00
2010	29.30	98.00	88.75	67.72	17.60	11.29	26.03	13.13	89.59	59.76	80.00	51.17	26.78	83.00

Table S9.8: EPL for Regular Contracts

	Canada	France	Sweden	Norway	Japan	Korea	Hungary	USA	Netherlands	Germany	Slovenia	Czech Republic	Israel	Denmark
1993	0.921	2.341	2.798	2.333	1.702	3.036	2.004	0.257	3.073	2.583	4.000	3.306		2.183
1994	0.921	2.341	2.798	2.333	1.702	3.036	2.004	0.257	2.897	2.679	4.000	3.306		2.183
1995	0.921	2.341	2.798	2.333	1.702	3.036	2.004	0.257	2.837	2.679	4.000	3.306		2.135
1996	0.921	2.341	2.798	2.333	1.702	3.036	2.004	0.257	2.837	2.679	4.000	3.306		2.135
1997	0.921	2.341	2.702	2.333	1.702	3.036	2.004	0.257	2.837	2.679	4.000	3.306		2.135
1998	0.921	2.341	2.702	2.333	1.702	2.369	2.004	0.257	2.837	2.679	3.100	3.306		2.135
1999	0.921	2.341	2.655	2.333	1.702	2.369	2.004	0.257	2.885	2.679	3.100	3.306		2.135
2000	0.921	2.341	2.655	2.333	1.702	2.369	2.004	0.257	2.885	2.679	3.100	3.306		2.135
2001	0.921	2.341	2.655	2.333	1.702	2.369	2.004	0.257	2.885	2.679	3.100	3.306		2.135
2002	0.921	2.341	2.607	2.333	1.702	2.369	2.004	0.257	2.885	2.679	3.100	3.306		2.135
2003	0.921	2.468	2.607	2.333	1.702	2.369	2.004	0.257	2.885	2.679	3.100	3.306		2.135
2004	0.921	2.468	2.607	2.333	1.702	2.369	2.004	0.257	2.885	2.679	3.100	3.306		2.135
2005	0.921	2.468	2.607	2.333	1.702	2.369	2.004	0.257	2.885	2.679	3.100	3.306		2.135
2006	0.921	2.468	2.607	2.333	1.702	2.369	2.004	0.257	2.885	2.679	3.100	3.306		2.135
2007	0.921	2.468	2.607	2.333	1.369	2.369	2.004	0.257	2.885	2.679	3.100	3.052		2.135
2008	0.921	2.468	2.607	2.333	1.369	2.369	2.004	0.257	2.885	2.679	2.651	3.052	2.0357144	2.135
2009	0.921	2.385	2.607	2.333	1.369	2.369	2.004	0.257	2.821	2.679	2.651	3.052	2.0357144	2.135
2010	0.921	2.385	2.607	2.333	1.369	2.369	2.004	0.257	2.821	2.679	2.651	3.052	2.0357144	2.135

Table S9.9: EPL of Temporary Contracts

	Canada	France	Sweden	Norway	Japan	Korea	Hungary	USA	Netherlands	Germany	Slovenia	Czech Republic	Israel	Denmark
1993	0.25	3.625	2.7708335	3.125	1.6875	3.125	0.625	0.25	1.375	3.25	3.8	0.5		1.38
1994	0.25	3.625	1.7708334	3.125	1.6875	3.125	0.625	0.25	1.375	3.25	3.8	0.5		1.38
1995	0.25	3.625	1.7708334	3.125	1.6875	3.125	0.625	0.25	1.375	3.125	3.8	0.5		1.38
1996	0.25	3.625	1.7708334	3.1875	1.6875	3.125	0.625	0.25	1.375	3.125	3.8	0.5		1.38
1997	0.25	3.625	1.4375	3.1875	1.5	3.125	0.625	0.25	1.375	2.5	3.8	0.5		1.38
1998	0.25	3.625	1.4375	3.1875	1.5	3.125	0.625	0.25	1.375	2	1.3	0.5		1.38
1999	0.25	3.625	1.4375	3.1875	1.5	2.125	0.625	0.25	0.9375	2	1.3	0.5		1.38
2000	0.25	3.625	1.4375	3	0.875	2.125	0.625	0.25	0.9375	2	1.3	0.5		1.38
2001	0.25	3.625	1.4375	2.75	0.875	2.125	0.625	0.25	0.9375	2	1.3	0.5		1.38
2002	0.25	3.625	1.4375	2.75	0.875	2.125	0.625	0.25	0.9375	2	1.3	0.5		1.38
2003	0.25	3.625	1.4375	2.75	0.875	2.125	0.625	0.25	0.9375	1.5	2	0.5		1.38
2004	0.25	3.625	1.4375	2.75	0.875	2.125	1.125	0.25	0.9375	1	2	0.5		1.38
2005	0.25	3.625	1.4375	2.75	0.875	2.125	1.125	0.25	0.9375	1	2	1.125		1.38
2006	0.25	3.625	1.4375	3	0.875	2.125	1.125	0.25	0.9375	1	2	1.125		1.38
2007	0.25	3.625	1.4375	3	0.875	2.125	1.125	0.25	0.9375	1	2	1.125		1.38
2008	0.25	3.625	0.8125	3	0.875	2.125	1.125	0.25	0.9375	1	2.5	1.125	0.88	1.38
2009	0.25	3.625	0.8125	3	0.875	2.125	1.125	0.25	0.9375	1	2.5	1.125	0.88	1.38
2010	0.25	3.625	0.8125	3	0.875	2.125	1.125	0.25	0.9375	1	2.5	1.3125	0.88	1.38

Appendix 4: Alternative coding of marginal job estimates for Canada and the US

The US and Canada were the two countries where our decision to remove marginal jobs had the greatest impact. In the Census data for the US, this removed close to 15% of all jobs in a given year. For Canada, roughly 27% of all jobs were removed each year. As

such, our analyses understate the actual levels of job level inequality in both countries. Because a substantial amount of jobs were removed from these two countries, it is important to note that the trends we have shown in the main text are in general robust to the removal of marginal jobs. The only exception is that between-workplace inequality increases in Canada when fewer jobs are dropped, particularly in the last two years of the available data. The below tables show the inequality levels and trends for the US and Canada following various stages of marginal job removal (i.e. removing no jobs, removing the bottom 5% of jobs, etc.)

Table S10.1: US and Canadian Sensitivity Checks - Total Variance

	Canada				US - Census Bureau			
	0% jobs dropped	5% jobs dropped	10% jobs dropped	Main Sample	0% jobs dropped	5% jobs dropped	10% jobs dropped	Main Sample
1993	3.055	2.047	1.582	0.798				
1994	3.159	2.122	1.643	0.800				
1995	3.145	2.129	1.650	0.795				
1996	3.199	2.150	1.661	0.791				
1997	3.320	2.269	1.760	0.808				
1998	3.409	2.323	1.799	0.821				
1999	3.504	2.401	1.861	0.824				
2000	3.588	2.465	1.922	0.846				
2001	3.523	2.437	1.896	0.850				
2002	3.468	2.387	1.854	0.861				
2003	3.530	2.432	1.880	0.867				
2004	3.463	2.395	1.861	0.873				
2005	3.476	2.396	1.862	0.878	2.266	1.373	1.034	0.903
2006	3.460	2.391	1.864	0.878	2.253	1.381	1.044	0.923
2007	3.606	2.490	1.921	0.878	2.285	1.381	1.041	0.889
2008	3.493	2.402	1.853	0.857	2.291	1.368	1.026	0.851
2009	3.387	2.258	1.724	0.822	2.301	1.371	1.023	0.809
2010	3.249	2.175	1.668	0.810	2.326	1.388	1.040	0.831
2011	3.341	2.221	1.700	0.809	2.310	1.382	1.037	0.846
2012	3.322	2.223	1.693	0.799	2.298	1.379	1.037	0.859
2013	3.354	2.228	1.702	0.807	2.264	1.369	1.032	0.866
Change	0.298	0.181	0.120	0.009	-0.002	-0.004	-0.002	-0.037
% Change	0.098	0.088	0.076	0.012	-0.001	-0.003	-0.002	-0.041

Table S10.2: US and Canadian Sensitivity Checks - Between-workplace Variance

	Canada				US - Census Bureau			
	0% jobs dropped	5% jobs dropped	10% jobs dropped	Main Sample	0% jobs dropped	5% jobs dropped	10% jobs dropped	Main Sample
1993	1.030	0.720	0.565	0.285				
1994	1.055	0.747	0.590	0.285				
1995	1.038	0.753	0.596	0.284				
1996	1.023	0.749	0.587	0.280				
1997	1.114	0.787	0.620	0.281				
1998	1.169	0.817	0.642	0.285				
1999	1.172	0.839	0.661	0.286				
2000	1.166	0.841	0.668	0.286				
2001	1.164	0.849	0.673	0.292				
2002	1.181	0.858	0.671	0.299				
2003	1.197	0.874	0.684	0.303				
2004	1.192	0.862	0.675	0.305				
2005	1.200	0.861	0.672	0.301	0.884	0.541	0.398	0.341
2006	1.191	0.850	0.663	0.295	0.893	0.547	0.403	0.351
2007	1.201	0.864	0.678	0.294	0.909	0.550	0.405	0.338
2008	1.198	0.851	0.663	0.286	0.935	0.552	0.405	0.329
2009	1.163	0.816	0.622	0.284	0.946	0.553	0.406	0.315
2010	1.141	0.796	0.608	0.281	0.973	0.571	0.422	0.331
2011	1.128	0.793	0.606	0.278	0.969	0.571	0.425	0.341
2012	1.156	0.817	0.622	0.277	0.961	0.572	0.427	0.349
2013	1.171	0.829	0.633	0.284	0.939	0.571	0.427	0.353
Change	0.140	0.109	0.068	-0.002	0.055	0.030	0.030	0.012
% Change	0.136	0.152	0.120	-0.005	0.062	0.056	0.074	0.036

Table S10.3: US and Canadian Sensitivity Checks - Within-workplace Variance

	Canada				US - Census Bureau			
	0% jobs dropped	5% jobs dropped	10% jobs dropped	Main Sample	0% jobs dropped	5% jobs dropped	10% jobs dropped	Main Sample
1993	2.025	1.327	1.017	0.513				
1994	2.104	1.375	1.053	0.515				
1995	2.107	1.375	1.054	0.511				
1996	2.176	1.401	1.075	0.511				
1997	2.205	1.482	1.140	0.528				
1998	2.241	1.506	1.157	0.536				
1999	2.332	1.562	1.200	0.537				
2000	2.422	1.623	1.253	0.560				
2001	2.359	1.589	1.222	0.558				
2002	2.286	1.530	1.183	0.561				
2003	2.333	1.558	1.196	0.564				
2004	2.271	1.533	1.186	0.568				
2005	2.275	1.535	1.190	0.576	1.382	0.832	0.637	0.562
2006	2.269	1.541	1.201	0.582	1.360	0.834	0.641	0.573
2007	2.404	1.626	1.243	0.585	1.377	0.831	0.636	0.550
2008	2.295	1.551	1.190	0.570	1.356	0.816	0.620	0.522
2009	2.224	1.443	1.103	0.538	1.355	0.819	0.617	0.494
2010	2.108	1.379	1.059	0.529	1.353	0.818	0.618	0.501
2011	2.213	1.428	1.093	0.530	1.341	0.811	0.612	0.505
2012	2.166	1.406	1.071	0.521	1.336	0.806	0.610	0.510
2013	2.183	1.399	1.069	0.524	1.326	0.797	0.605	0.512
Change	0.158	0.071	0.052	0.011	-0.056	-0.035	-0.031	-0.049
% Change	0.078	0.054	0.051	0.021	-0.041	-0.042	-0.049	-0.088

Table S10.4: US and Canadian Sensitivity Checks - Between-workplace Proportion

	Canada				US - Census Bureau			
	0% jobs dropped	5% jobs dropped	10% jobs dropped	Main Sample	0% jobs dropped	5% jobs dropped	10% jobs dropped	Main Sample
1993	0.337	0.352	0.357	0.357				
1994	0.334	0.352	0.359	0.356				
1995	0.330	0.354	0.361	0.357				
1996	0.320	0.348	0.353	0.354				
1997	0.336	0.347	0.352	0.347				
1998	0.343	0.352	0.357	0.347				
1999	0.334	0.349	0.355	0.348				
2000	0.325	0.341	0.348	0.338				
2001	0.330	0.348	0.355	0.343				
2002	0.341	0.359	0.362	0.348				
2003	0.339	0.359	0.364	0.349				
2004	0.344	0.360	0.363	0.349				
2005	0.345	0.359	0.361	0.343	0.390	0.394	0.385	0.378
2006	0.344	0.355	0.356	0.337	0.396	0.396	0.386	0.380
2007	0.333	0.347	0.353	0.334	0.398	0.398	0.389	0.381
2008	0.343	0.354	0.358	0.334	0.408	0.404	0.395	0.386
2009	0.343	0.361	0.361	0.345	0.411	0.403	0.397	0.389
2010	0.351	0.366	0.365	0.347	0.418	0.411	0.406	0.398
2011	0.338	0.357	0.357	0.344	0.419	0.413	0.409	0.404
2012	0.348	0.367	0.367	0.347	0.418	0.415	0.412	0.407
2013	0.349	0.372	0.372	0.351	0.415	0.417	0.414	0.408
Change	0.012	0.021	0.015	-0.006	0.024	0.023	0.029	0.030

Appendix 5. Stata code for statistical estimates in Table 1.

```
*** country variable
gen country_new = .
replace country_new = 1 if country == "Canada"
replace country_new = 2 if country == "Czechia"
replace country_new = 3 if country == "Denmark"
replace country_new = 4 if country == "France"
replace country_new = 5 if country == "Germany"
replace country_new = 6 if country == "Hungary"
replace country_new = 7 if country == "Israel"
replace country_new = 8 if country == "Japan"
replace country_new = 9 if country == "Netherlands"
replace country_new = 10 if country == "Norway"
replace country_new = 11 if country == "Slovenia"
replace country_new = 12 if country == "Korea"
replace country_new = 13 if country == "Sweden"
replace country_new = 14 if country == "USA_Song"
replace country_new = 15 if country == "USA_Census"
```

```
/* change and lag variables */
sort country_new year
xtset country_new year
gen d_betw = D.betw_prop
gen d_betw_priv = D.betw_prop_priv
gen d_betw_public = D.betw_prop_public


gen d_union = D.union_density
gen d_bargain = D.collect_bargain
gen d_corp = D.corporatism
gen d_regular = D.reg_ep
gen d_temp = D.temp_ep


gen d_inst = D.inst_prot_score


gen d_betw_var = D.betw_variance
gen d_within_var = D.within_variance
gen d_tot_variance = D.tot_variance


gen d_betw_var_priv = D.betw_var_priv
gen d_within_var_priv = D.within_var_priv
gen d_tot_var_priv = D.tot_var_priv


gen d_betw_var_public = D.betw_var_public
gen d_within_var_public = D.within_var_public
gen d_tot_var_public = D.tot_var_public


gen lag_betw_prop = L.betw_prop
gen lag_betw_prop_priv = L.betw_prop_priv
gen lag_betw_prop_public = L.betw_prop_public


gen lag_union = L.union_density
gen lag_bargain = L.collect_bargain
gen lag_corp = L.corporatism
gen lag_regular = L.reg_ep
gen lag_temp = L.temp_ep


gen lag_inst = L.inst_prot_score


gen lag_betw_var = L.betw_variance
gen lag_within_var = L.within_variance
gen lag_tot_var = L.tot_variance
gen lag_betw_var_priv = L.betw_var_priv
```

```
gen lag_within_var_priv = L.within_var_priv
gen lag_tot_var_priv = L.tot_var_priv

gen lag_betw_var_public = L.betw_var_public
gen lag_within_var_public = L.within_var_public
gen lag_tot_var_public = L.tot_var_public

/* BETWEEN/WITHIN PAPER ESTIMATES */
drop if country_new == 7 /* drop israel */

*total population - between proportion
xtset country_new year
xtreg d_betw lag_betw_prop d_inst lag_inst unemp lf_partic if country_new!=15, fe vce(cluster
country_new)
predict deltayhat
estimate store ECMS
xtreg betw_prop deltayhat d_inst lag_inst unemp lf_partic if country_new!=15, fe vce(cluster
country_new)
estimate store ECML
esttab ECMS ECML, star(+ 0.10 * .05 ** .01 *** .001) ar2 se
drop _est_ECML _est_ECMS deltayhat

*private sector - between proportion
xtset country_new year
xtreg d_betw_priv lag_betw_prop_priv d_inst lag_inst unemp lf_partic if country_new!=15, fe
vce(cluster country_new)
predict deltayhat
estimate store ECMS
xtreg betw_prop_priv deltayhat d_inst lag_inst unemp lf_partic if country_new!=15, fe
vce(cluster country_new)
estimate store ECML
esttab ECMS ECML, star(+ 0.10 * .05 ** .01 *** .001) ar2 se
drop _est_ECML _est_ECMS deltayhat

*public sector - between proportion
xtset country_new year
xtreg d_betw_public lag_betw_prop_public d_inst lag_inst unemp lf_partic if country_new!=14,
fe vce(cluster country_new)
predict deltayhat
estimate store ECMS
xtreg betw_prop_public deltayhat d_inst lag_inst unemp lf_partic if country_new!=14, fe
vce(cluster country_new)
estimate store ECML
esttab ECMS ECML, star(+ 0.10 * .05 ** .01 *** .001) ar2 se
drop _est_ECML _est_ECMS deltayhat
```

```
*total population - between variance
xtset country_new year
xtreg d_betw_var lag_betw_var d_inst lag_inst unemp lf_partic if country_new!=15, fe
vce(cluster country_new)
predict deltayhat
estimate store ECMS
xtreg betw_variance deltayhat d_inst lag_inst unemp lf_partic if country_new!=15, fe
vce(cluster country_new)
estimate store ECML
esttab ECMS ECML, star(+ 0.10 * .05 ** .01 *** .001) ar2 se
drop _est_ECML _est_ECMS deltayhat

*private sector - between variance
xtset country_new year
xtreg d_betw_var_priv lag_betw_var_priv d_inst lag_inst unemp lf_partic if country_new!=15,
fe vce(cluster country_new)
predict deltayhat
estimate store ECMS
xtreg betw_var_priv deltayhat d_inst lag_inst unemp lf_partic if country_new!=15, fe vce(cluster
country_new)
estimate store ECML
esttab ECMS ECML, star(+ 0.10 * .05 ** .01 *** .001) ar2 se
drop _est_ECML _est_ECMS deltayhat

*public sector - between variance
xtset country_new year
xtreg d_betw_var_public lag_betw_var_public d_inst lag_inst unemp lf_partic if
country_new!=14, fe vce(cluster country_new)
predict deltayhat
estimate store ECMS
xtreg betw_var_public deltayhat d_inst lag_inst unemp lf_partic if country_new!=14, fe
vce(cluster country_new)
estimate store ECML
esttab ECMS ECML, star(+ 0.10 * .05 ** .01 *** .001) ar2 se
drop _est_ECML _est_ECMS deltayhat

*all sectors - within variance
xtset country_new year
xtreg d_within_var lag_within_var d_inst lag_inst unemp lf_partic if country_new!=15, fe
vce(cluster country_new)
predict deltayhat
estimate store ECMS
xtreg within_variance deltayhat d_inst lag_inst unemp lf_partic if country_new!=15, fe
vce(cluster country_new)
estimate store ECML
```

```
esttab ECMS ECML, star(+ 0.10 * .05 ** .01 *** .001) ar2 se
drop _est_ECML _est_ECMS deltayhat

*private sectors - within variance
xtset country_new year
xtreg d_within_var_priv lag_within_var_priv d_inst lag_inst unemp lf_partic if
country_new!=15, fe vce(cluster country_new)
predict deltayhat
estimate store ECMS
xtreg within_var_priv deltayhat d_inst lag_inst unemp lf_partic if country_new!=15, fe
vce(cluster country_new)
estimate store ECML
esttab ECMS ECML, star(+ 0.10 * .05 ** .01 *** .001) ar2 se
drop _est_ECML _est_ECMS deltayhat

*public sectors - within variance
xtset country_new year
xtreg d_within_var_public lag_within_var_public d_inst lag_inst unemp lf_partic if
country_new!=14, fe vce(cluster country_new)
predict deltayhat
estimate store ECMS
xtreg within_var_public deltayhat d_inst lag_inst unemp lf_partic if country_new!=14, fe
vce(cluster country_new)
estimate store ECML
esttab ECMS ECML, star(+ 0.10 * .05 ** .01 *** .001) ar2 se
drop _est_ECML _est_ECMS deltayhat
```