

Online Appendix: Spillover, Efficiency and Equity Effects of Regional Firm Subsidies

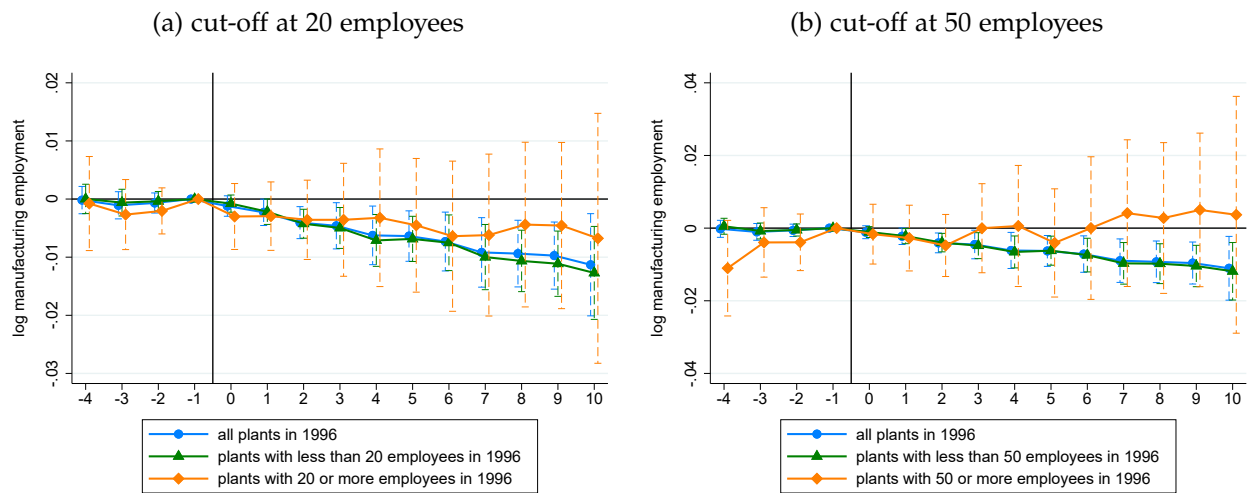
Sebastian Siegloch

Nils Wehrhöfer

Tobias Etzel

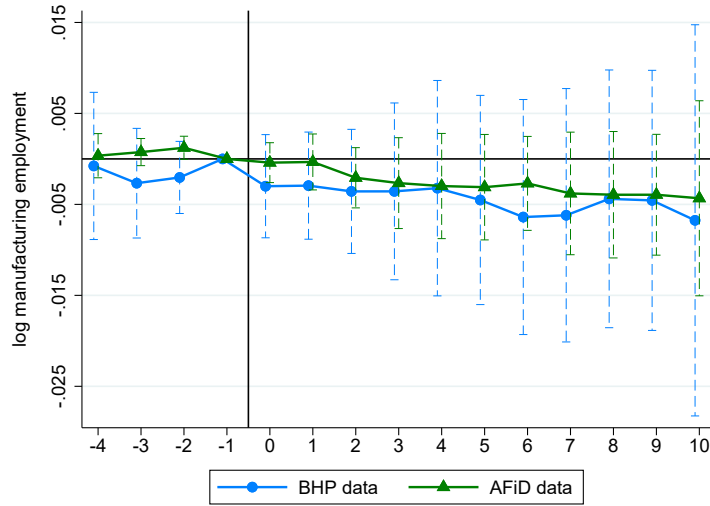
A Additional Results

Figure A.1: Event study estimates: manufacturing employment by plant size



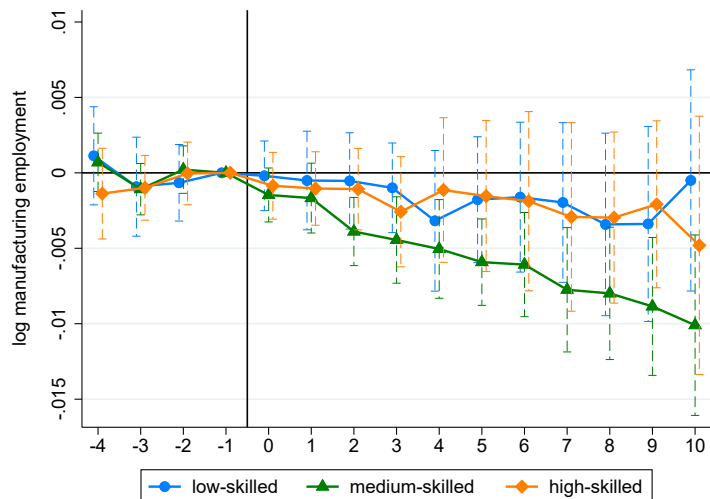
Source: BHP Notes: This figure plots coefficients along with 95% confidence intervals of regressing log manufacturing employment on leads and lags of a change in the maximum subsidy rate for plants with less than 20 (50) employees in 1996 and plants with 20 (50) or more employees in 1996 as well as for all plants in 1996 with (initial) plant size \times state \times year fixed effects. The sample includes the 55 counties closest to cutoffs ($M=30$). Standard errors are clustered at the local labor market level. See Appendix Tables D.4 and D.5 for the point estimates.

Figure A.2: Event study estimates: manufacturing employment in large plants comparing the BHP and AFiD data



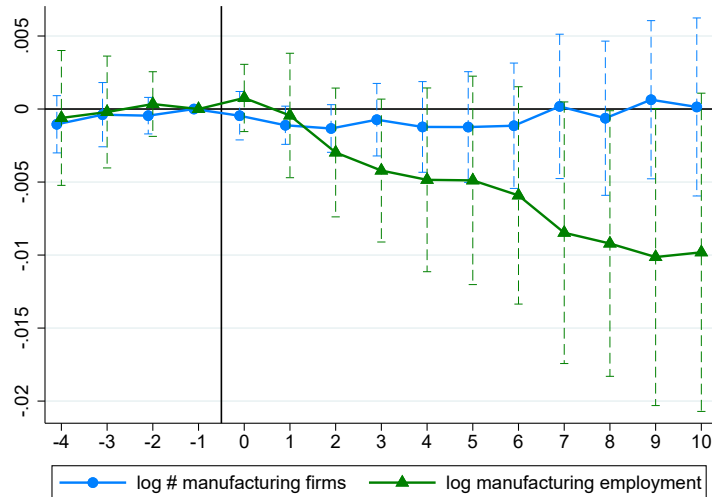
Source: BHP, AFiD Notes: This figure plots coefficients along with 95% confidence intervals of regressing log employment of (a) plants in the AFiD data all of which have 20 or employees and (b) plants in the BHP data which had 20 or more employees in 1996 on leads and lags of a change in the maximum subsidy rate as in equation (7). The sample includes the 55 counties closest to cutoffs ($M=30$). Standard errors are clustered at the local labor market level. See Appendix Table D.6 for the point estimates.

Figure A.3: Event study estimates: manufacturing employment by skill



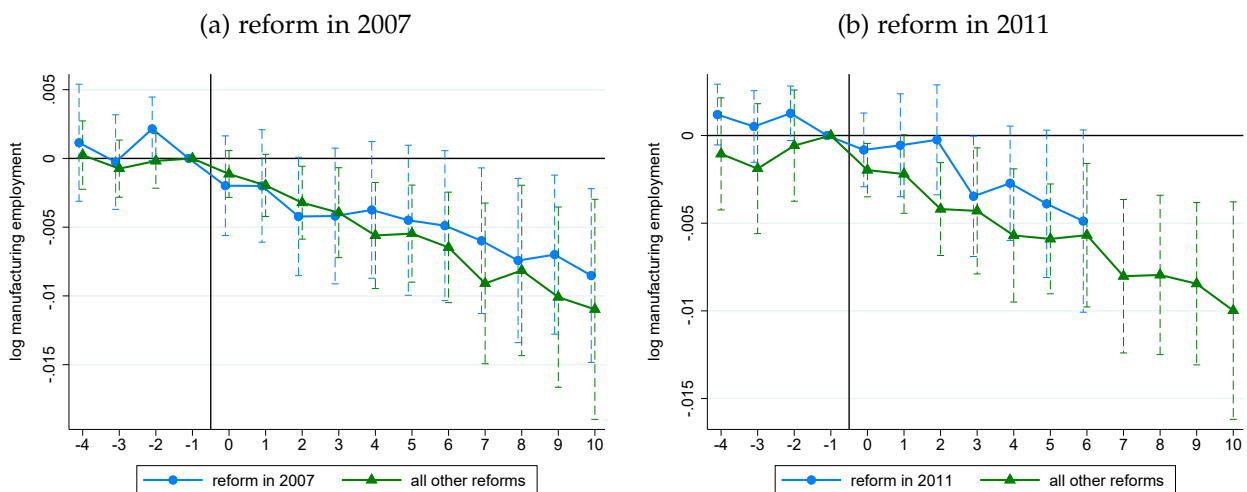
Source: BHP Notes: This figure plots coefficients along with 95% confidence intervals of regressing log manufacturing employment by skill on leads and lags of a change in the maximum subsidy rate as in equation (7). The sample includes the 55 counties closest to cutoffs ($M=30$). Standard errors are clustered at the local labor market level. See Appendix Table D.7 for the point estimates.

Figure A.4: Event study estimates: number of manufacturing plants and county-level manufacturing employment



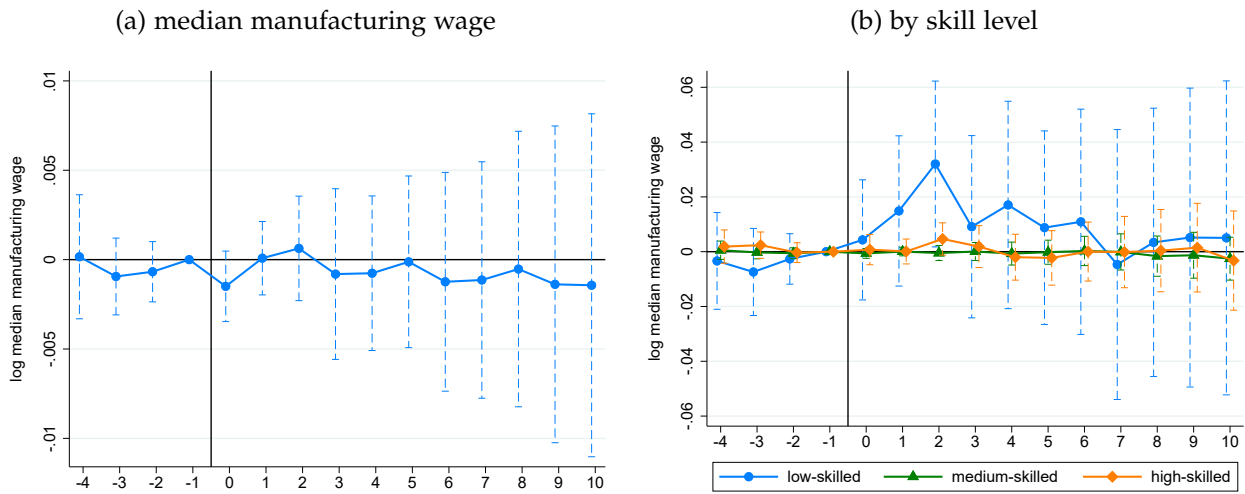
Source: BHP Notes: This figure plots coefficients along with 95% confidence intervals of regressing the log number of manufacturing plants and log manufacturing employment at the county level on leads and lags of a change in the maximum subsidy rate at the county level estimated in first differences. The sample includes the 55 counties closest to cutoffs ($M=30$). Standard errors are clustered at the local labor market level. See Appendix Table D.9 for the point estimates.

Figure A.5: Event study estimates: manufacturing employment by reform year



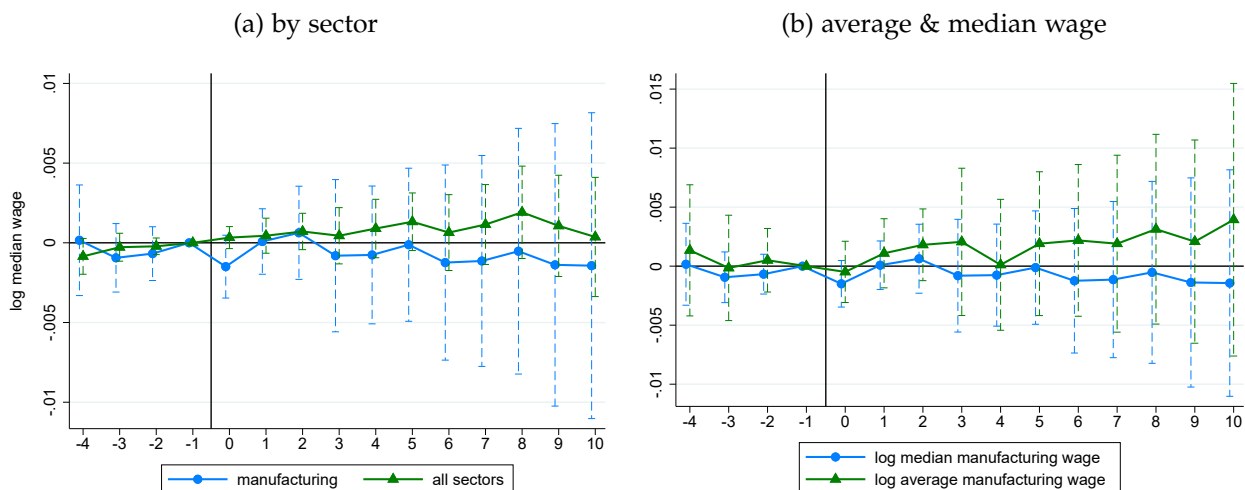
Source: BHP Notes: This figure plots coefficients along with 95% confidence intervals of regressing log manufacturing employment on leads and lags of a change in the maximum subsidy rate as in equation (7) interacted with dummies for the reform in 2007 (Panel a) and the reform in 2011 (Panel b). The sample includes the 55 counties closest to cutoffs ($M=30$). Standard errors are clustered at the local labor market level. See Appendix Tables D.10 and D.11 for the point estimates.

Figure A.6: Event study estimates: median manufacturing wages by skill level



Source: BHP, SIAB Notes: This figure plots coefficients along with 95% confidence intervals of regressing log median manufacturing wages (Panel a) and log median manufacturing wages by skill level (Panel b) on leads and lags of a change in the maximum subsidy rate at the county level estimated in first differences. The sample includes the 55 counties closest to cutoffs ($M=30$). Standard errors are clustered at the local labor market level. See Appendix Tables D.12 and D.13 for the point estimates.

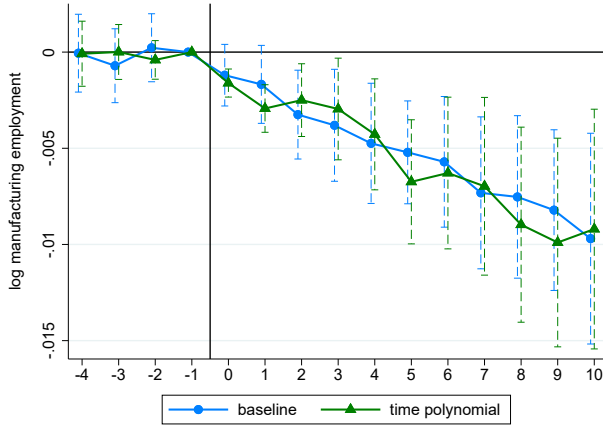
Figure A.7: Event study estimates: median wages by sector and average wages



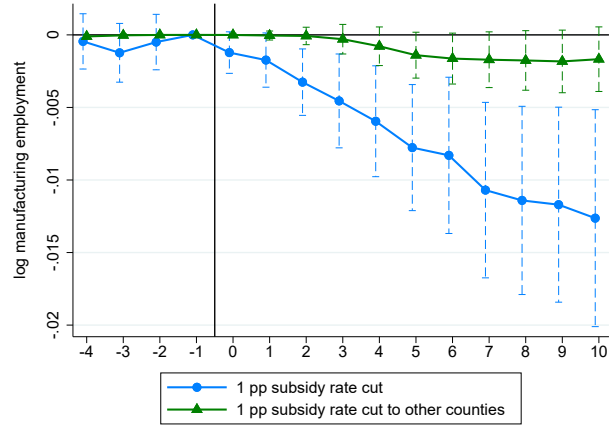
Source: BHP, SIAB Notes: This figure plots coefficients along with 95% confidence intervals of regressing changes in log manufacturing wages by sector (Panel a) and log average wages (Panel b) on leads and lags of a change in the maximum subsidy rate at the county level. The sample includes the 55 counties closest to cutoffs ($M=30$). Standard errors are clustered at the local labor market level. See Appendix Table D.12 for the point estimates.

Figure A.8: Event study estimates: spillover test of Bruhn (2018)

(a) time polynomials instead of time fixed effects

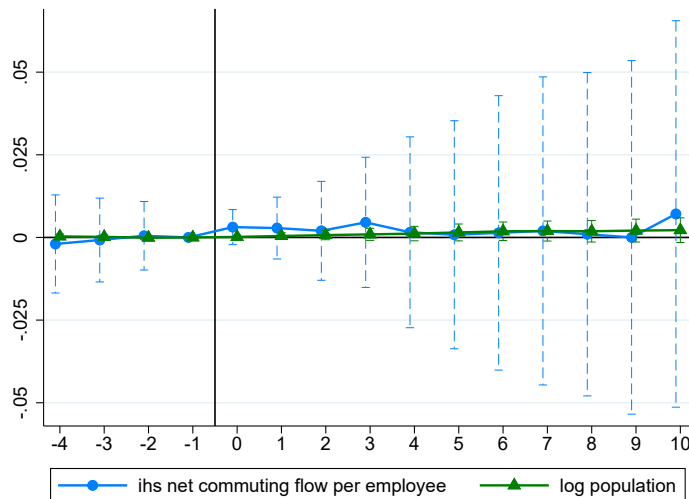


(b) spillover to other counties



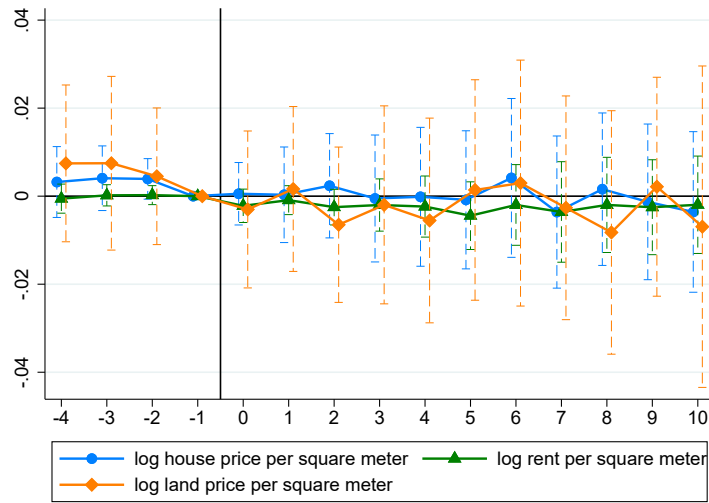
Source: BHP Notes: Panel (a) of this figure plots coefficients along with 95% confidence intervals of regressing log manufacturing employment on leads and lags of a change in the maximum subsidy rate of the county using a fourth-order time polynomial to control for aggregate trends. Panel (b) of this figure plots coefficients along with 95% confidence intervals of regressing log manufacturing employment on leads and lags of a change in the maximum subsidy rate of the county itself and of the change in the sum of the maximum subsidy rate of all other counties using a fourth-order time polynomial to control for aggregate trends. The sample includes the 55 counties closest to cutoffs ($M=30$). Standard errors are clustered at the local labor market level. See Appendix Table D.15 for the point estimates.

Figure A.9: Event study estimates: population and commuting flows



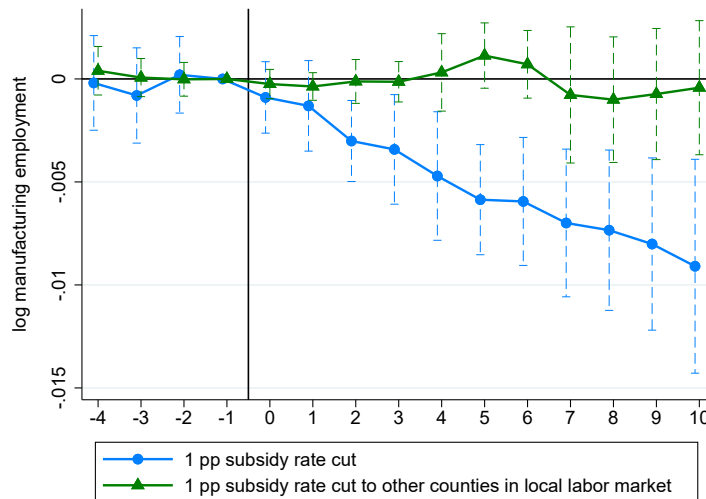
Source: BHP, Statistical Offices of German States, Federal Office for Building and Regional Planning Notes: This figure plots coefficients along with 95% confidence intervals of regressing log population and the inverse hyperbolic sine of the net commuting flow per employee on leads and lags of a change in the maximum subsidy rate at the county level estimated in first differences. The sample includes the 55 counties closest to cutoffs ($M=30$). Standard errors are clustered at the local labor market level. See Appendix Table D.19 for the point estimates.

Figure A.10: Event study estimates: house price, rent, and land price per square meter



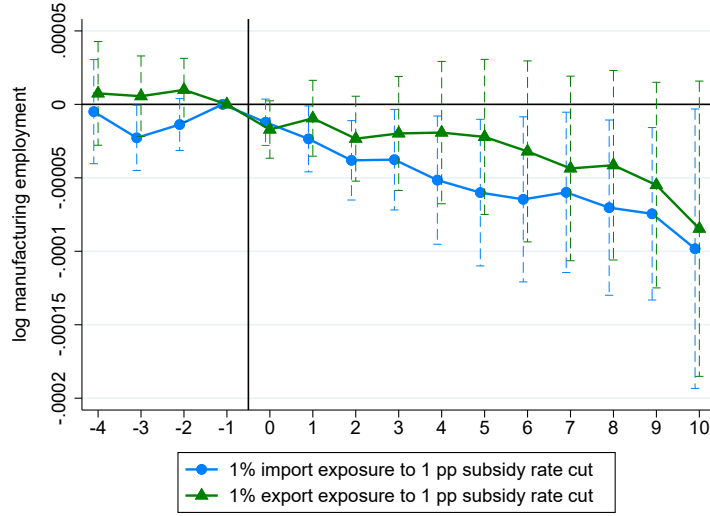
Source: BHP, Ahlfeldt, Heblich and Seidel (2023), Statistical Offices of German States Notes: This figure plots coefficients along with 95% confidence intervals of regressing the log house price per square meter and the log rent per square meter on leads and lags of a change in the maximum subsidy rate at the county level estimated in first differences. The sample includes the 55 counties closest to cutoffs ($M=30$). Standard errors are clustered at the local labor market level. See Appendix Table D.16 for the point estimates.

Figure A.11: Event study estimates: treatment of other counties in the local labor market



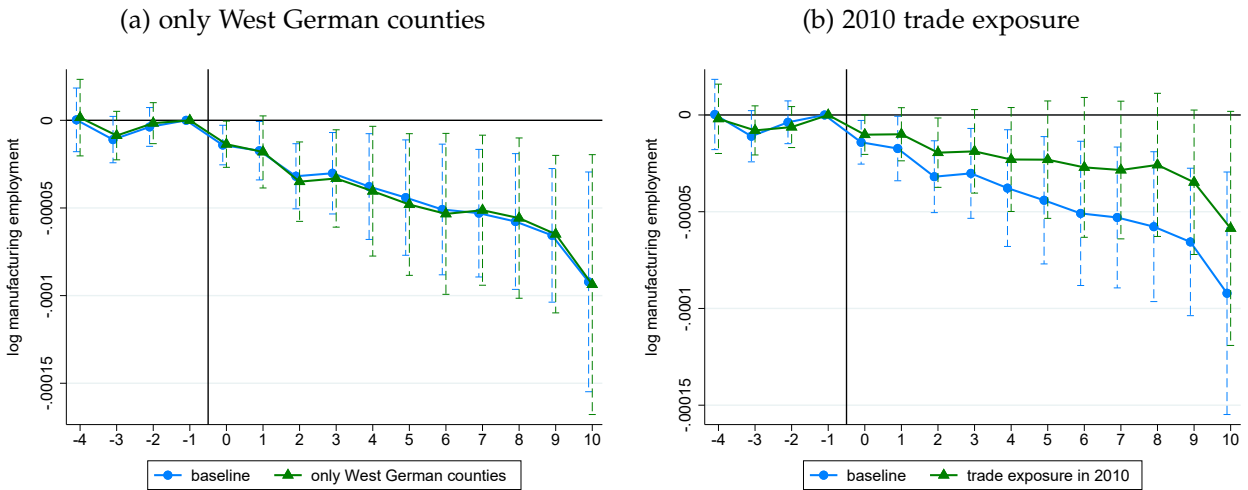
Source: BHP. Notes: This figure plots coefficients along with 95% confidence intervals of regressing log manufacturing employment on leads and lags of a change in the maximum subsidy rate of the county itself and of the change in the maximum subsidy rate of the other counties in the same local labor market. The sample includes the 55 counties closest to cutoffs ($M=30$). Standard errors are clustered at the local labor market level. See Appendix Table D.18 for the point estimates.

Figure A.12: Event study estimates: trade spillover by imports and exports



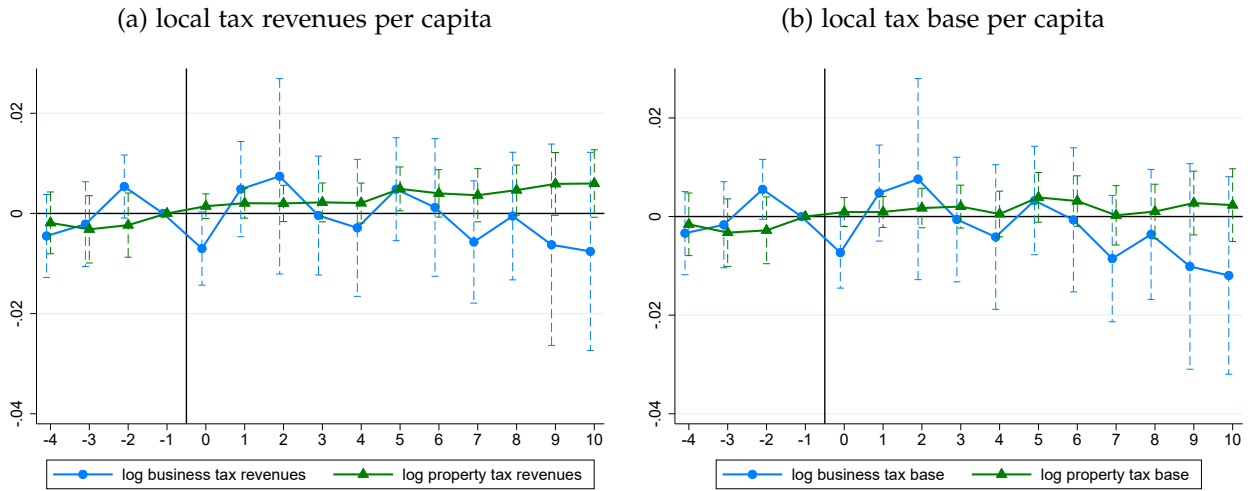
Source: BHP, Federal Ministry of Transport and Digital Infrastructure Notes: This figure plots coefficients along with 95% confidence intervals of the import and export exposure to subsidy cuts as in equation (8) in the baseline regression using log manufacturing employment at the plant level as the outcome. The sample includes all German counties. Standard errors are clustered at the local labor market level. See Appendix Table D.22 for the point estimates.

Figure A.13: Event study estimates: trade spillover using only West Germany and 2010 trade exposure



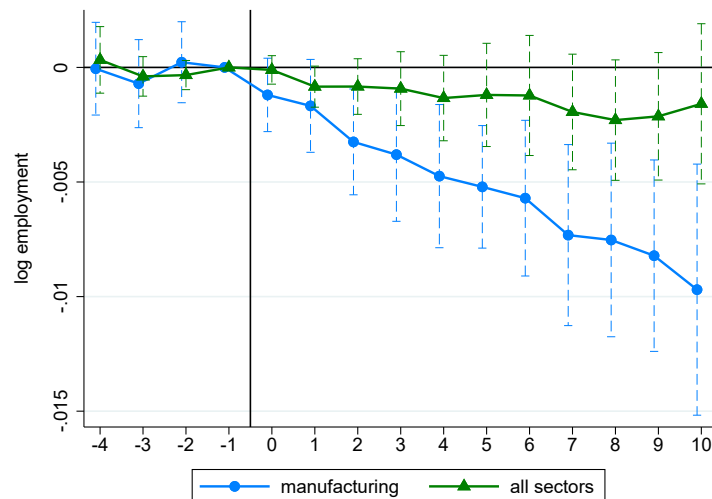
Source: BHP, Federal Ministry of Transport and Digital Infrastructure Notes: Panel (a) plots coefficients along with 95% confidence intervals of the trade exposure to subsidy cuts as in equation (8) in the baseline regression using log manufacturing employment at the plant level as the outcome. The sample includes only West German counties. Standard errors are clustered at the local labor market level. See Appendix Table D.20 for the point estimates. Panel (b) plots coefficients along with 95% confidence intervals of the trade exposure to subsidy cuts as in equation (8), using the 2010 trade exposure instead of the 2004 trade exposure, in the baseline regression using log manufacturing employment at the plant level as the outcome. The sample includes all German counties. Standard errors are clustered at the local labor market level. See Appendix Tables D.20 and D.21 for the point estimates.

Figure A.14: Event study estimates: local tax revenues and tax bases



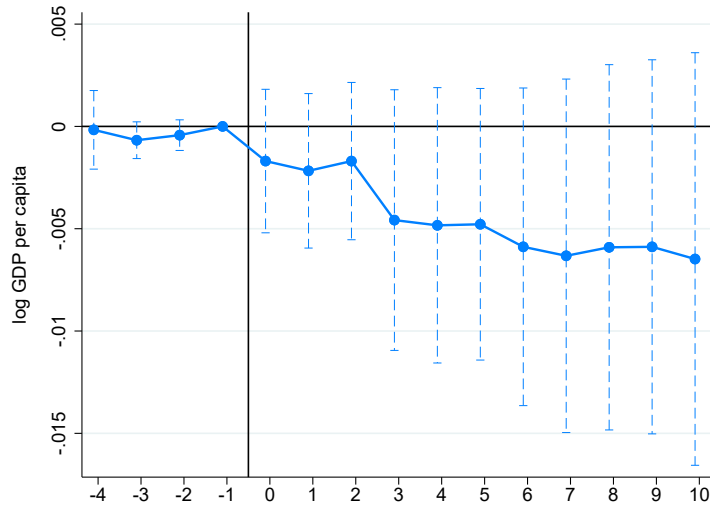
Source: BHP, Statistical Offices of German States Notes: This figure plots coefficients along with 95% confidence intervals of regressing the log local business and property tax revenues per capita (Panel a) and the log local business property tax base per capita (Panel b) on leads and lags of a change in the maximum subsidy rate at the county level estimated in first differences. The sample includes the 55 counties closest to cutoffs ($M=30$). Standard errors are clustered at the local labor market level. See Appendix Tables D.24 and D.25 for the point estimates.

Figure A.15: Event study estimates: total employment



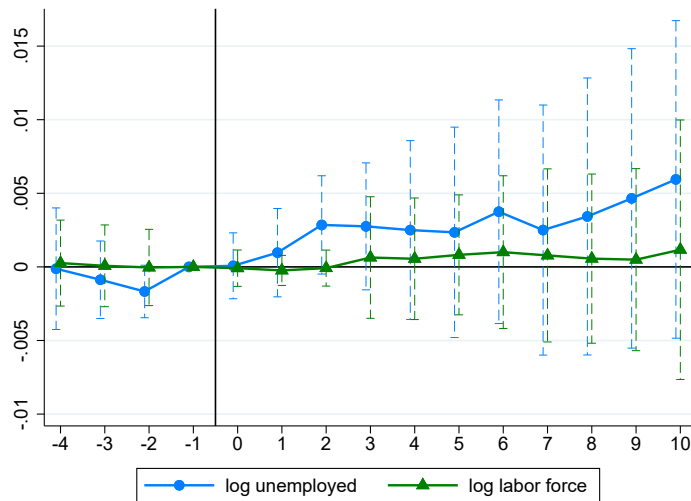
Source: BHP Notes: This figure plots coefficients along with 95% confidence intervals of regressing log total employment on leads and lags of a change in the maximum subsidy rate as in equation (7). The sample includes the 55 counties closest to cutoffs ($M=30$). Standard errors are clustered at the local labor market level. See Appendix Table D.14 for the point estimates.

Figure A.16: Event study estimates: GDP per capita



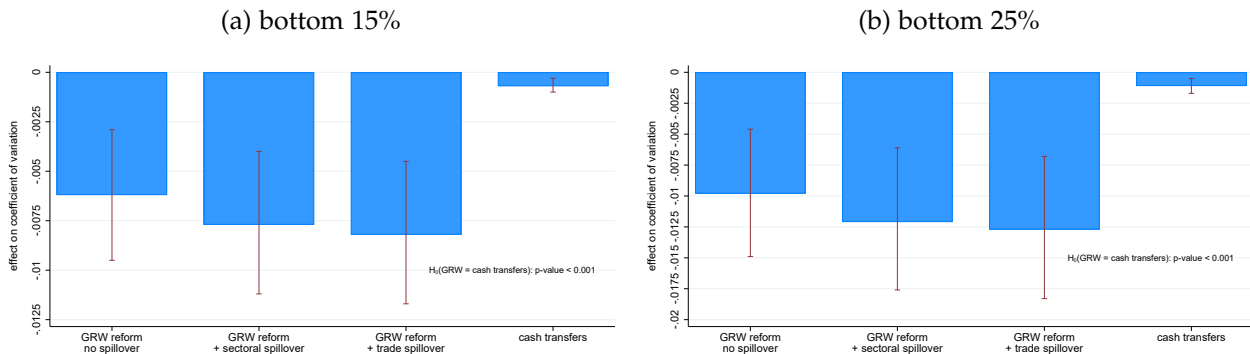
Source: BHP, Statistical Offices of German States Notes: This figure plots coefficients along with 95% confidence intervals of regressing log GDP per capita on leads and lags of a change in the maximum subsidy rate at the county level estimated in first differences. The sample includes the 55 counties closest to cutoffs ($M=30$). Standard errors are clustered at the local labor market level. See Appendix Table D.26 for the point estimates.

Figure A.17: Event study estimates: unemployed and labor force



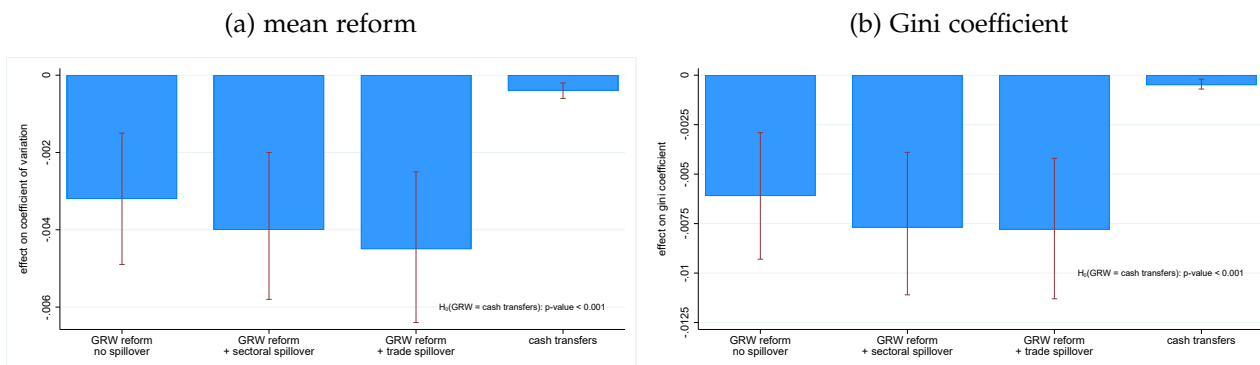
Source: BHP, Statistical Offices of German States Notes: This figure plots coefficients along with 95% confidence intervals of regressing log unemployed and log labor force on leads and lags of a change in the maximum subsidy rate at the county level estimated in first differences. The sample includes the 55 counties closest to cutoffs ($M=30$). Standard errors are clustered at the local labor market level. See Appendix Table D.27 for the point estimates.

Figure A.18: Counterfactual regional inequality: bottom 15% and bottom 25%



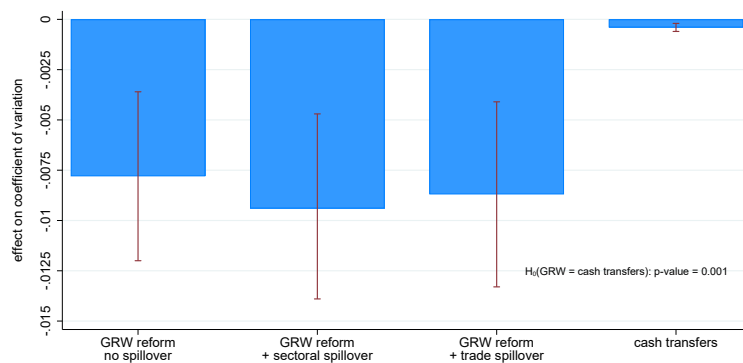
Source: BHP, SIAB, Federal Office of Economics and Export Control, Federal Ministry of Transport and Digital Infrastructure, Statistical Offices of German States Notes: The first bar displays the effect of an increase in the GRW subsidy back to 1996 levels for counties in the bottom 15% (Panel a) or the in the bottom 25% (Panel b) of the labor income distribution on regional inequality within East Germany without accounting for any spillover. The second and third bars add trade and sectoral spillover, respectively. The fourth bar displays the effect of a revenue-neutral policy that pays a fixed cash transfer to every unemployed person in East Germany. The p-value refers to a test of whether the effect of the GRW policy including all spillover is significantly different from the effect of cash transfers. Berlin is excluded from East Germany. Confidence intervals are based on 999 bootstrap draws.

Figure A.19: Counterfactual regional inequality: Gini coefficient and mean reform



Source: BHP, SIAB, Federal Office of Economics and Export Control, Federal Ministry of Transport and Digital Infrastructure, Statistical Offices of German States Notes: The first bar displays the effect of an increase in the GRW subsidy back to 1996 levels for counties in the bottom 20% of the labor income distribution on regional inequality within (East) Germany without accounting for any spillover. The second and third bars add trade and sectoral spillover, respectively. The fourth bar displays the effect of a revenue-neutral policy that pays a fixed cash transfer to every unemployed person in East Germany. Panel (a) shows results for a 9 percentage point increase in the subsidy rate, which corresponds to the mean reform in the data, and panel (b) uses the Gini coefficient as an alternative measure of regional inequality. The p-value refers to a test of whether the effect of the GRW policy including all spillover is significantly different from the effect of cash transfers. Berlin is excluded from East Germany. Confidence intervals are based on 999 bootstrap draws.

Figure A.20: Counterfactual regional inequality: all German counties



Source: BHP, SIAB, Federal Office of Economics and Export Control, Federal Ministry of Transport and Digital Infrastructure, Statistical Offices of German States Notes: The first bar displays the effect of an increase in the GRW subsidy back to 1996 levels for counties in the bottom 20% of the labor income distribution on regional inequality within Germany without accounting for any spillover. The second and third bars add trade and sectoral spillover, respectively. The fourth bar displays the effect of a revenue-neutral policy that pays a fixed cash transfer to every unemployed person in Germany. The p-value refers to a test of whether the effect of the GRW policy including all spillover is significantly different from the effect of cash transfers. Confidence intervals are based on 999 bootstrap draws.

B Data and Institutions

B.1 Data

Table B.1: Definition of variables and data sources

	year	description	source
<i>plant level</i>			
employees: manufacturing	1996 - 2016	Number of manufacturing employees at the plant level for manufacturing plants with 20 or more employees located in East Germany.	Forschungsdatenzentren der Statistischen Ämter des Bundes und der Länder (2019)
employees: multi-plant manufacturing firms in all of Germany	1996 - 2016	Number of manufacturing employees at the plant level for manufacturing plants with 20 or more employees that were part of a German multi-plant firm in 1996 that had at least one plant in East Germany.	Forschungsdatenzentren der Statistischen Ämter des Bundes und der Länder (2019)
investment	1996 - 2016	Investment normalized to 2010 € on the plant-level for manufacturing plants with 20 or more employees located in East Germany.	Forschungsdatenzentren der Statistischen Ämter des Bundes und der Länder (2019)
employees: manufacturing	1996 - 2017	Number of manufacturing employees at the plant level located in East Germany.	Institut für Arbeitsmarkt- und Berufsforschung (2018)
employees: small manufacturing plants	1996 - 2017	Number of manufacturing employees at the plant level in plants that had less than 20 employees in 1996 located in East Germany.	Institut für Arbeitsmarkt- und Berufsforschung (2018)
employees: large manufacturing plants	1996 - 2017	Number of manufacturing employees at the plant level in plants that had 20 or more employees in 1996 located in East Germany.	Institut für Arbeitsmarkt- und Berufsforschung (2018)
employees: low-skill manufacturing	1996 - 2017	Number of manufacturing employees with a lower secondary, intermediate secondary, or upper secondary school leaving certificate, but no vocational qualifications at the plant level located in East Germany.	Institut für Arbeitsmarkt- und Berufsforschung (2018)
employees: medium-skill manufacturing	1996 - 2017	Number of manufacturing employees with a lower secondary, intermediate secondary, or upper secondary school leaving certificate and a vocational qualification at the plant level located in East Germany.	Institut für Arbeitsmarkt- und Berufsforschung (2018)
employees: high-skill manufacturing	1996 - 2017	Number of manufacturing employees with a degree from a university of applied sciences or a university at the plant level located in East Germany.	Institut für Arbeitsmarkt- und Berufsforschung (2018)
employees: retail	1996 - 2017	Number of retail employees at the plant level located in East Germany.	Institut für Arbeitsmarkt- und Berufsforschung (2018)
employees: construction	1996 - 2017	Number of construction employees in at the plant level located in East Germany.	Institut für Arbeitsmarkt- und Berufsforschung (2018)
employees: all sectors	1996 - 2017	Number of employees at the plant level located in East Germany.	Institut für Arbeitsmarkt- und Berufsforschung (2018)
employees: manufacturing in all of Germany	1996 - 2017	Number of employees at the plant level located both in East and West Germany.	Institut für Arbeitsmarkt- und Berufsforschung (2018)
share of large plants receiving the GRW	1996 - 2017	The share of manufacturing plants with 20 or more employees located in East Germany that report that they received a GRW subsidy using the cross-sectional weights. This variable is only available from 1997 to 2003, in 2005, 2007, and 2009. We interpolate and linearly extrapolate the data to cover our sample period.	Institut für Arbeitsmarkt- und Berufsforschung (2019)
<i>county level</i>			
employees: manufacturing	1996 - 2017	Number of manufacturing employees at the county level in East Germany.	Institut für Arbeitsmarkt- und Berufsforschung (2018)
plants: manufacturing	1996 - 2017	Number of manufacturing plants at the county level in East Germany.	Institut für Arbeitsmarkt- und Berufsforschung (2018)
GRW subsidies	1996 - 2016	Subsidies paid out normalized to 2010 € at the county level in East Germany.	Bundesamt für Wirtschaft und Ausfuhrkontrolle (2018)
GRW subsidized investment	1996 - 2016	Amount of investment that is subsidized by GRW funds normalized to 2010 € at the county level in East Germany.	Bundesamt für Wirtschaft und Ausfuhrkontrolle (2018)
GRW infrastructure grants	1996 - 2016	Amount of GRW infrastructure grants normalized to 2010 € at the county level in East Germany.	Bundesamt für Wirtschaft und Ausfuhrkontrolle (2018)
median manufacturing wage	1996 - 2014	Median yearly wage in 2010 € of manufacturing workers at the county level in East Germany. We weight all observations with the duration of the employment spell within the year and drop all apprentices, social service workers, working students, and interns.	Institut für Arbeitsmarkt- und Berufsforschung (2016)
mean manufacturing wage	1996 - 2014	Mean yearly wage in 2010 € of manufacturing workers at the county level in East Germany using the wage imputation procedure of Dauth and Eppelsheimer (2020). We weight all observations with the duration of the employment spell within the year and drop all apprentices, social service workers, working students, and interns.	Institut für Arbeitsmarkt- und Berufsforschung (2016)

continued

Table B.1 continued

	year	description	source
median manufacturing wage: low-skill	1996 - 2014	Median yearly wage in 2010 € of manufacturing workers with a lower secondary, intermediate secondary, or upper secondary school leaving certificate, but no vocational qualifications at the county level in East Germany. We weight all observations with the duration of the employment spell within the year and drop all apprentices, social service workers, working students, and interns.	Institut für Arbeitsmarkt- und Berufsforschung (2016)
median manufacturing wage: medium-skill	1996 - 2014	Median yearly wage in 2010 € of manufacturing workers with a lower secondary, intermediate secondary, or upper secondary school leaving certificate and a vocational qualification at the county level in East Germany. We weight all observations with the duration of the employment spell within the year and drop all apprentices, social service workers, working students, and interns.	Institut für Arbeitsmarkt- und Berufsforschung (2016)
median manufacturing wage: high-skill	1996 - 2014	Median yearly wage in 2010 € of manufacturing workers with a degree from a university of applied sciences or a university at the county level in East Germany. We weight all observations with the duration of the employment spell within the year and drop all apprentices, social service workers, working students, and interns.	Institut für Arbeitsmarkt- und Berufsforschung (2016)
median wage	1996 - 2014	Median yearly wage in 2010 € of workers at the county level in East Germany. We weight all observations with the duration of the employment spell within the year and drop all apprentices, social service workers, working students, and interns.	Institut für Arbeitsmarkt- und Berufsforschung (2016)
unemployed population	1996 - 2014	Number of unemployed at the county level in East Germany.	Statistische Landesämter (2018b)
labor force	1996 - 2017	Population at the county level in East Germany.	Statistische Landesämter (2018a)
GDP per capita	1996 - 2017	Labor force at the county level in East Germany.	Statistische Landesämter (2018b)
		GDP per capita normalized to 2010 € at the county level in East Germany.	Statistische Landesämter (2018f)
local business tax multiplier	1996 - 2017	Average local business tax multiplier weighted with the 1995 population at the county level in East Germany.	Statistische Landesämter (2018a,d)
local property tax multiplier	1996 - 2017	Average local property tax multiplier weighted with the 1995 population at the county level in East Germany.	Statistische Landesämter (2018a,d)
local business tax revenues per capita	1996 - 2017	Local business tax revenues per capita at the county level in East Germany normalized to 2010 €.	Statistische Landesämter (2018a,d)
local property tax revenues per capita	1996 - 2017	Local property tax revenues per capita at the county level in East Germany normalized to 2010 €.	Statistische Landesämter (2018a,d)
local business tax base per capita	1996 - 2017	Local business tax base per capita at the county level in East Germany normalized to 2010 €.	Statistische Landesämter (2018a,d)
local property tax base per capita	1996 - 2017	Local property tax base per capita at the county level in East Germany normalized to 2010 €.	Statistische Landesämter (2018a,d)
net commuting flow per employee	1998 - 2017	Net number of commuters normalized with the number of employees at the county level in East Germany.	Bundesamt für Bauwesen und Raumordnung (2018)
land price per square meter	1996 - 2017	Land price per square meter normalized to 2010 € at the county level in East Germany. Three county-year observations are missing to due small cell sizes.	Statistische Landesämter (2018c)
house price per square meter	2007 - 2017	House price per square meter normalized to 2010 € at the county level in East Germany computed based on data from the online platform <i>Immobilien Scout24</i> .	Ahlfeldt, Heblich and Seidel (2023)
rent per square meter	2007 - 2017	Rent per square meter normalized to 2010 € at the county level in East Germany computed based on data from the online platform <i>Immobilien Scout24</i> .	Ahlfeldt, Heblich and Seidel (2023)
trade flows	2004, 2010	Import and export flows between all German counties as well as foreign countries measured in tons per year.	Bundesministerium für Digitales und Verkehr (2007, 2014)

continued

Table B.1 continued

	year	description	source
municipal cost of average reform	1996 - 2017	First, we compute the number of jobs lost due to the direct and indirect effects of an average reform, which corresponds roughly to a 8-percentage-point subsidy cut in an average East German county. Next, we multiply with the median East German wage within the respective sector and calculate the lost earnings. Last, we apply the average income tax rate paid on median incomes in Germany over our sample period taken from Blömer et al. (2021) and multiply it by the share of revenues municipalities are entitled to (15%). This calculation yields lost tax revenues of about €647,000 per county. Second, we compute the increase in the number of unemployed due to the reform and multiply it by the average cost per unemployed paid by the municipalities using data from the Institute for Employment Research (IAB) for our sample period. This yields an additional €1,223,000 of expenses per county. A third negative revenue shock is likely to occur due to decreasing firm profits. Here, we calculate a €634,000 loss of revenues according to our estimates. Overall, the decreased revenues and the increase in spending add up to about €2.5 million per county. To put this number in context, we compute the average deficit at the county level in East Germany over our sample period. Since most municipalities in East Germany switched their accounting system from cash accounting to accrual accounting at different points in our sample period (Christofzik, 2019), it is hard to establish a consistent time series. We use data at the state level until the switch happens and then extrapolate the data until the end of our sample period. We compute that the shock is equivalent to 37% of the average county-level deficit.	Institut für Arbeitsmarkt- und Berufsforschung (2016, 2018), Statistische Landesämter (2018b,d,e), Weber, Hausner and Engelhard (2017a,b, 2019), Blömer et al. (2021)
<i>local labor market level</i>			
employees: manufacturing	1996 - 2017	Number of manufacturing employees at the local labor market level in East Germany.	Institut für Arbeitsmarkt- und Berufsforschung (2018)
<i>aggregate level</i>			
unemployment benefits	1996 - 2014	Average unemployment benefits in 2010 € received at the household level in East and West Germany. We linearly extrapolate the data backward before 2005.	Bundesagentur für Arbeit (2018a,b)
CPI	1996 - 2017	German and US consumer price index.	Statistisches Bundesamt (2018), Federal Reserve Economic Data (2018a)
Euro to Dollar exchange rate	1996 - 2017	Average yearly exchange rate between the Euro and the US Dollar from 2002 to 2017 and between the Deutsche Mark and the US Dollar multiplied by the official exchange rate between the Deutsche Mark and Euro of 1.95583 from 1996 to 2001	Federal Reserve Economic Data (2018b, 2002)

Notes: This table provides details on the definition and sources for all variables used.

Table B.2: Descriptive statistics

variable	mean	sd	N	sample period
<i>plant level (AFiD)</i>				
investment (in million €)	0.91	7.12	124988	1996 - 2016
employees: manufacturing plants	84.57	142.81	124559	1996 - 2016
employees: multi-plant manufacturing firms (Germany)	238.91	746.02	26400	1996 - 2016
<i>plant level (BHP)</i>				
employees: manufacturing	21.82	87.53	407694	1996 - 2017
employees: small manufacturing plants	5.48	4.65	323114	1996 - 2017
employees: large manufacturing plants	84.24	178.70	84580	1996 - 2017
employees: low-skill manufacturing	1.52	8.59	407694	1996 - 2017
employees: medium-skill manufacturing	17.42	68.81	407694	1996 - 2017
employees: high-skill manufacturing	2.67	17.65	407694	1996 - 2017
employees: manufacturing (Germany)	30.27	208.96	2589757	1996 - 2017
employees: retail	7.82	21.87	897327	1996 - 2017
employees: construction	8.78	21.87	560518	1996 - 2017
employees: all sectors	11.70	60.00	4463572	1996 - 2017
<i>county level</i>				
employees: manufacturing	5319.71	3850.82	1672	1996 - 2017
plants: manufacturing	243.84	159.68	1672	1996 - 2017
population	173891.30	96066.54	1672	1996 - 2017
local business tax multiplier	357.06	45.30	1672	1996 - 2017
local property tax multiplier	375.26	61.06	1672	1996 - 2017
local business tax revenues per capita	61.44	35.16	1672	1996 - 2017
local property tax: revenues per capita	24.53	2.90	1672	1996 - 2017
local business tax base per capita	426.51	297.45	1672	1996 - 2017
local property tax base per capita	191.24	36.27	1672	1996 - 2017
labor force	87131.02	52498.05	1672	1996 - 2017
GDP per capita	17577.49	3321.09	1672	1996 - 2017
land price per square meter	38.22	34.86	1669	1996 - 2017
GRW subsidies (in million €)	18.39	27.54	1596	1996 - 2016
GRW subsidised investment (in million €)	83.90	140.60	1596	1996 - 2016
GRW infrastructure grants (in million €)	6.54	12.35	1596	1996 - 2016
net commuting flow per 100 employees unemployed	-13.43	21.20	1520	1997 - 2017
median manufacturing wage	13833.10	8588.68	1444	1996 - 2014
mean manufacturing wage	22740.73	3615.68	1444	1996 - 2014
median manufacturing wage: low-skill	25858.43	5151.87	1444	1996 - 2014
median manufacturing wage: medium-skill	17759.15	6926.09	1424	1996 - 2014
median manufacturing wage: high-skill	23110.78	3279.39	1444	1996 - 2014
median wage	40920.04	7647.21	1444	1996 - 2014
house price per square meter	20448.70	1733.84	1444	1996 - 2014
rent per square meter	1180.54	449.23	836	2007 - 2017
	5.28	1.02	836	2007 - 2017
<i>local labor market level</i>				
employees: manufacturing	7628.27	5457.74	1166	1996 - 2017

Notes: There are 76 counties and 53 local labor markets in East Germany (excluding Berlin) according to the 2017 administrative definitions. All variables only refer to East Germany unless specified otherwise. All monetary variables are expressed in 2010 €. For sources and definitions see Table B.1.

B.2 Institutions

Indicator formulas The following formulas describe the indicator used to evaluate the economic performance of commuting zone r across regimes

$$\begin{aligned}
 indicator_r^{1997} &= \left(\frac{wage_r^{1995}}{wage_{East}^{1995}} \right)^{0.40} \times \left(2 - \frac{unemp_r^{1995}}{unemp_{East}^{1995}} \right)^{0.50} \times \left(\frac{infr_r^{1995}}{infr_{East}^{1995}} \right)^{0.10} \\
 indicator_r^{2000} &= \left(\frac{wage_r^{1997}}{wage_{East}^{97}} \right)^{0.40} \times \left(2 - \frac{unemp_r^{1996-1998}}{unemp_{East}^{1996-1998}} \right)^{0.40} \times \left(\frac{infr_r^{1999}}{infr_{East}^{1999}} \right)^{0.10} \times \left(\frac{empforecast_r}{empforecast_{East}} \right)^{0.10} \\
 indicator_r^{2007} &= \left(\frac{wage_r^{2003}}{wage_{Ger}^{03}} \right)^{0.40} \times \left(2 - \frac{unemp_r^{2002-2005}}{unemp_{Ger}^{2002-2005}} \right)^{0.50} \times \left(\frac{infr_r^{2005}}{infr_{Ger}^{2005}} \right)^{0.05} \times \left(\frac{empforecast_r}{empforecast_{Ger}} \right)^{0.05}
 \end{aligned}$$

where $infr_r^t$ measures the quality of a region r 's infrastructure, $wage_r^t$ represents per-capita earnings, $unemp_r^t$ the unemployment rate, and $empforecast_r^t$ is an employment rate projection assessed at time t . The infrastructure sub-indicator is based on measures of accessibility of airports and larger cities by car or train, the traveling time for trucks to the next trans-shipment center, the share of employees in applied research institutes, the share of apprenticeship training position, the share of employees in technical occupations, the share of high school graduates, the capacity of inter-company training centers and population density. For 1997 and 2000, each component is normalized by their respective East German average. Starting in 2007, normalization is with respect to the German average. Note, that the unemployment rate always enters negatively. All components are calculated such that if a region resembles the (East) German average, it gets a value of one.

Construction of cutoff samples Tables B.3 and B.4 illustrate the indicator rankings and cutoffs for the years 1997 and 2000, respectively. We do not use the rankings of the 2007 reform since all East German counties were treated. When counties merge, we take the average of the individual counties' indicators.

Table B.3: Counties around the cutoff (year 1997)

county	indicator	priority group
...		
Mittelsachsen	99.725	high
Gotha	99.757	low
Zwickau	99.767	high
Magdeburg	99.801	high
Jerichower Land	99.801	high
Boerde	99.801	high
Ludwigslust-Parchim	99.868	low
Salzlandkreis	99.902	low
Rostock	99.904	high
Chemnitz	99.914	high
Spree-Neiße	99.926	high
KS Cottbus	99.926	high
Dahme-Spreewald	99.926	low
Halle (Saale)	100.003	low
Landkreis Leipzig	100.069	low
Nordsachsen	100.069	low
Schwerin	100.096	low
Weimarer Land	100.162	low
Weimar	100.162	low
Sömmerda	100.173	low
Erfurt	100.173	low
Meissen	100.326	low
Saale-Holzland-Kreis	100.442	low
Jena	100.442	low
Leipzig	100.476	low
Dresden	101.073	low

Source: Federal Ministry for Economic Affairs.

Table B.4: Counties around the cutoff (year 2000)

county	indicator	priority group
...		
Hildburghausen	99.724	high
Suhl	99.724	high
Eichsfeld	99.728	high
Gotha	99.742	low
Vogtlandkreis	99.752	high
Jerichower Land	99.765	high
Cottbus	99.774	high
Spree-Neiße	99.774	high
Dahme-Spreewald	99.774	low
Bautzen	99.813	low
Saale-Orla-Kreis	99.854	high
Teltow-Fläming	99.856	low
Zwickau	99.884	low
Rostock	99.902	high
Nordwestmecklenburg	99.951	high
Chemnitz	100.008	low
Ludwigslust-Parchim	100.034	low
Boerde	100.070	low
Magdeburg	100.070	low
Nordsachsen	100.083	low
Weimar	100.144	low
Weimarer Land	100.144	low
Wartburgkreis	100.151	low
Eisenach	100.151	low
Halle (Saale)	100.169	low
Saechsische Schweiz-Osterzgebirge	100.177	low
Sonneberg	100.181	low
Erfurt	100.246	low
Sömmerda	100.246	low
Jena	100.256	low
Saale-Holzland-Kreis	100.256	low
Landkreis Leipzig	100.377	low
Schwerin	100.388	low
Meissen	100.444	low
Potsdam-Mittelmark	100.496	low
Leipzig	100.563	low
Dresden	101.117	low

Source: Federal Ministry for Economic Affairs.

Table B.5: Automatically eligible and non-eligible industries for GRW subsidies

Industries that are excluded from GRW subsidies
Agriculture, forestry, and fishing
Mining
Energy and water supply
Construction
Retail except for mail order
Transportation and warehousing
Hospitals
Industries that are automatically eligible for GRW subsidies
Manufacture of chemical products
Manufacture of plastic products
Manufacture of rubber products
Manufacture of ceramic products
Manufacture of concrete products
Manufacture of concrete products
Manufacture of cement products
Manufacture of glass products
Manufacture of signs
Manufacture of iron and steel products
Manufacture of non-ferrous metals
Casting of steel and iron
Casting of non-ferrous metals
Manufacture of machinery and technical devices
Manufacture of office machines and data processing equipment
Manufacture of vehicles
Manufacture of boats
Manufacture of electronics and electric technology
Manufacture of precision-engineered, optical, and surgical products
Manufacture of clocks
Manufacture of sheet metal products
Manufacture of toys, jewelry, musical instruments and sports equipment
Manufacture of timber products
Manufacture of forms, tools and models
Manufacture of pulp, groundwood, paper cardboard
Manufacture of print products
Manufacture of leather products
Manufacture of shoes
Manufacture of textiles
Manufacture of clothing
Manufacture of upholstery
Production of food for sale outside of the county
Production of animal feed
Mail order
Import and export wholesale
Data processing
Administration of industry firms or supra-regional service firms
Organizing congresses
Publishers
Research and experimental development for industry firms
Legal, accounting, book-keeping and auditing activities
Market research and public opinion polling
Business and management consultancy
Laboratory services for industry firms
Logistics
Tourism

C Sensitivity Checks

Improving Comparability. First, our baseline specification improves the comparability of treatment and control group counties by focusing on the jurisdictions that are close to the eligibility cut-off that determines treatment status. Our preferred specification uses 55 counties around the cut-off per regime. This is clearly an arbitrary choice trading off comparability and statistical power. Appendix Figure C.1a presents results for different cut-off samples including the full sample. The magnitude of the employment effect is hardly affected as we vary the number of counties around the cutoff.

Controlling for Observables. Next, we add control variables that pick up local business cycle fluctuations (and consequently affected treatment status via the eligibility indicator). We control for log GDP per capita and the unemployment rate lagged by one year. This specification tries to account for remaining differences in past economic performance and thereby purifies our estimates from potential bias. Reassuringly, estimates are hardly affected and as expected, if anything, slightly more negative, as demonstrated in Appendix Figure C.1b. Importantly, we do not find significant pre-trends when using log GDP per capita or unemployment as an outcome (see Appendix Figures A.16 and A.17). We also add 3-digit industry times year fixed effects to test whether our results are driven by differential industry trends. As Appendix Figure C.2 shows, this hardly changes our results.

Heterogeneous Treatment Effects. When treatment effects are homogeneous across cohorts, applying an event study with multiple treatments of different intensities produces unbiased estimates of the treatment effect (Schmidheiny and Siegloch, 2023). However, there has been a recent, important literature emphasizing that (static and dynamic) difference-in-difference designs with differential treatment timing estimated with a two-way fixed effect model can be severely biased in the presence of heterogeneous treatment effects (de Chaisemartin and D’Haultfoeuille, 2020, Callaway and Sant’Anna, 2021, Sun and Abraham, 2021, Goodman-Bacon, 2021, Borusyak, Jaravel and Spiess, 2023). Several new estimators have been proposed to get unbiased estimates when treatment effects are not homogeneous. However, these estimators are not valid for environments with multiple events for the same unit. To test for potential biases due to heterogeneous treatment effects, we cut our sample in 2006 to have a set-up with a maximum of one treatment per county and retain a group of never-treated units (see Table 1).¹ We apply the estimators developed in de Chaisemartin and D’Haultfoeuille (2022) and Sun and Abraham (2021) to our basic dummy variable specification described in equation (2). Notice that the two estimators use different control groups since Sun and Abraham (2021) only allow comparisons to never-treated units, whereas de Chaisemartin and D’Haultfoeuille (2022) are also using not-yet-treated units as controls. We find that our estimates are unlikely to be driven by heterogeneous treatment effects. To ensure comparability across specifications, we also estimate equation (2) as a standard event study on the same sample. We plot the resulting estimates and their standard errors in Appendix Figure C.3. The effects are very close both in size and pattern to our baseline event study estimates. We conclude that heterogeneous treatment effects are unlikely to drive our results.

¹ We drop the county Salzlandkreis from the sample because it is the only county not receiving the same treatment as all other counties over the sample period.

Sensitivity to Modeling Choices. Last, we provide a set of checks that assess the sensitivity of our findings to the modeling choices we make in our baseline specification. First, we test whether implementing a standard event study design using a discrete treatment indicator following equation (2) yields similar results. As Appendix Figure C.4a shows, results are very similar when comparing our baseline model and the dummy-variable specification scaled by the average cut. This implies that the effect we measure has a linear relationship to the subsidy rate. Second, we use investment weights instead of employment weights as discussed in Section III.A. This yields very similar, but slightly smaller estimates (see Appendix Figure C.4b) which is to be expected since the investment data does not cover establishments with less than 20 employees, which are driving our results. Third, recall that due to changes in county border definitions, in some counties only a subset of municipalities receives a decrease in the maximum rate, effectively reducing treatment intensity. Dropping these few partially treated counties yields larger effects, suggesting that our baseline estimate is conservative (see Appendix Figure C.5). Fourth, we vary the number of lags of our event window between nine and eleven years. As Appendix Figure C.6a shows, the effects tend to level off after ten years. Also, when increasing the number of leads included in the model up to seven, the maximum length of the GRW funding periods, the pre-trend remains flat (see Appendix Figure C.6b). Even when pre-trends are insignificant, the post-treatment estimates still might be biased (Roth, 2022). We linearly extrapolate our pre-trends and show that these can not explain our results (see Appendix Figure C.8). Furthermore, there is also no evidence for anticipatory behavior in terms of subsidies paid out and subsidized investment (see Appendix Figures C.7a and C.7b). Fifth, our results are also robust when estimated in first differences (see Appendix Figure C.9a) or when dropping the county fixed effects (see Appendix Figure C.9b). Last, we conduct several robustness checks regarding inference. Clustering additionally at the plant level or the higher local labor market level as well as allowing for spatial correlation hardly changes standard errors (see Appendix Table C.11).

Sensitivity to Other Subsidy Programs. In this section, we discuss whether other subsidy programs might confound the employment effect of the GRW investment subsidies. First, the GRW consists not only of investment subsidies but also includes infrastructure grants. However, these grants are applied equally to all counties that are eligible for the GRW, which includes all East German counties in our time period. Therefore, our time fixed effects should effectively control for these infrastructure grants. Nevertheless, we test whether a reduction in the subsidy rate causes a change in the infrastructure grants. As Appendix Figure C.10 shows, there is no relationship between the subsidy rate and the infrastructure grants.

Next, we discuss several other important subsidy programs targeted at East German manufacturing plants. In particular, we consider the investment tax credit program (*Investitionszulagengesetz*), the special depreciation allowance (*Fördergebietgesetz*), and the EU structural funds. The special depreciation allowance was introduced in 1991 for all East German plants and was abolished in 1998. It allowed plants to shift the depreciation of investment to earlier periods, thereby deferring the tax burden to future periods (Eichfelder and Schneider, 2014). Since this program never discriminated between regions within East Germany, it is fully captured by our year fixed effects.

The investment tax credit program was in place for East German plants from 1991 to 2013.

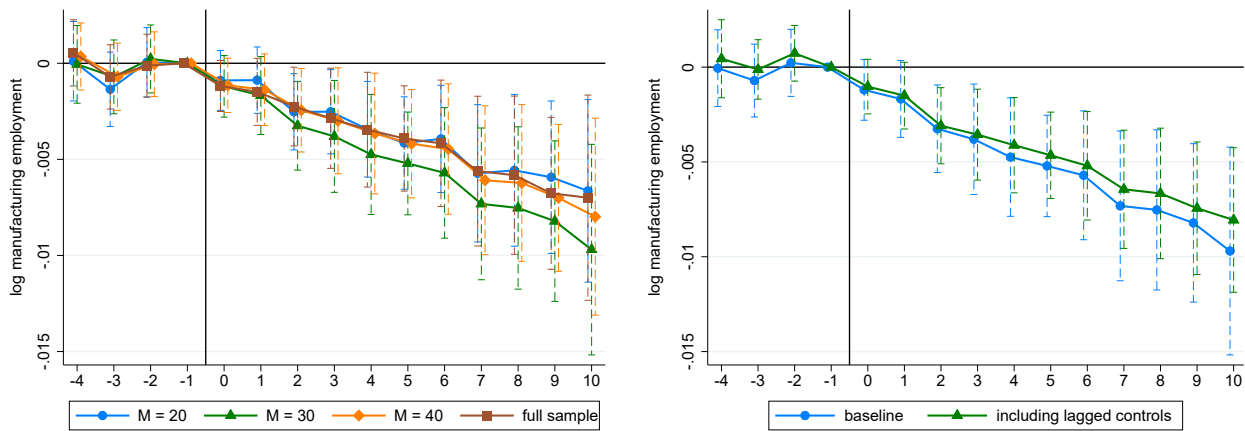
Before 1999, it granted tax credits of 10% on equipment investment for manufacturing plants with up to 250 employees and 5% for plants with more employees. The tax credits for plants with up to 250 employees were increased to 20% in 1999 and 25% in 2000, whereas tax credits for larger plants were increased to 10% in 1999 and 12.5% in 2000 (Lerche, 2019). There was some minor special differentiation of the policy. First, counties at the Polish and Czech border were granted slightly higher tax credits between 2001 and 2009. These include the counties of Barnim, Bautzen, Chemnitz, Cottbus, Dresden, Erzgebirgskreis, Frankfurt (Oder), Greiz, Görlitz, Meißen, Mittelsachsen, Märkisch-Oderland, Oder-Spree, Saale-Orla-Kreis, Spree-Neiße, Sächsische Schweiz-Osterzgebirge, Uckermark, Vogtlandkreis, Vorpommern-Greifswald, Vorpommern-Rügen and Zwickau. Second, counties located around Berlin received lower rates throughout the whole period. These include the counties of Barnim, Dahme-Spreewald, Havelland, Märkisch-Oderland, Oberhavel, Oder-Spree, Potsdam, Potsdam-Mittelmark and Teltow-Fläming. We test whether the investment tax credit program confounds our effects by modifying equation (7) as follows. First, we include a dummy for plants with up to 250 employees, that were eligible for the increased tax credit, interacted with year dummies to capture the differential treatment of plants over time. Second, we allow these effects to be different in both border regions and the local labor market of Berlin by fully interacting with the respective dummies.

The EU cohesion funds aim at fostering regional convergence across the European Union. More specifically, it provides grants to disadvantaged regions, whose eligibility is determined at the NUTS2 level, whereas the variation of the GRW is determined at the county level, which corresponds to the lower NUTS3 level. As the NUTS2 level mostly corresponds to the state level in East Germany, the only exception being Saxony, most of the variation in the cohesion funds is already absorbed by our state x year fixed effects. NUTS2 regions become eligible by having a GDP per capita level below 75% of the EU average (Becker, Egger and Ehrlich, 2010). There was little differentiation within East Germany for most of our sample period. Using data from Lang, Redeker and Bischof (2023), we create a dummy for receiving EU structural funds in the respective funding period and include it as a control variable in our regression.

As Appendix Figure C.11 shows, our results do not change when we control for the investment tax credit program, the EU cohesion fund, or both of them at the same time. These results underline that our baseline results are not driven by other policies enacted over the sample period.

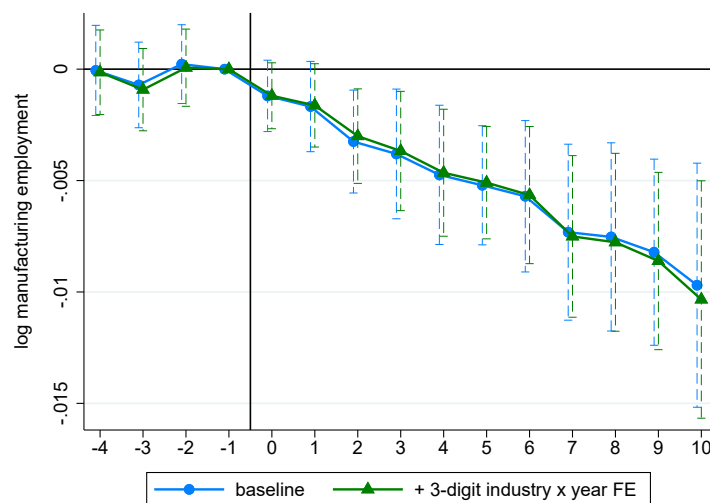
Figure C.1: Event study estimates: manufacturing employment by the cutoff sample and with lagged controls

(a) manufacturing employment by the cutoff sample (b) manufacturing employment with lagged controls



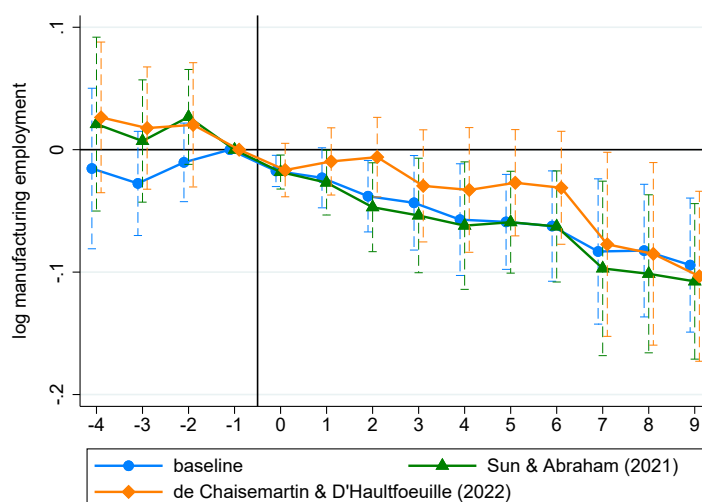
Source: BHP Notes: This figure plots coefficients along with 95% confidence intervals of regressing log manufacturing employment on leads and lags of a change in the maximum subsidy rate using different samples (Panel a) and including control variables (Panel b) as in equation (7). The sample includes the 55 counties closest to cutoffs ($M=30$). Standard errors are clustered at the local labor market level. See Appendix Tables C.1 and C.2 for the point estimates.

Figure C.2: Event study estimates: manufacturing employment with 3-digit industry x year fixed effects



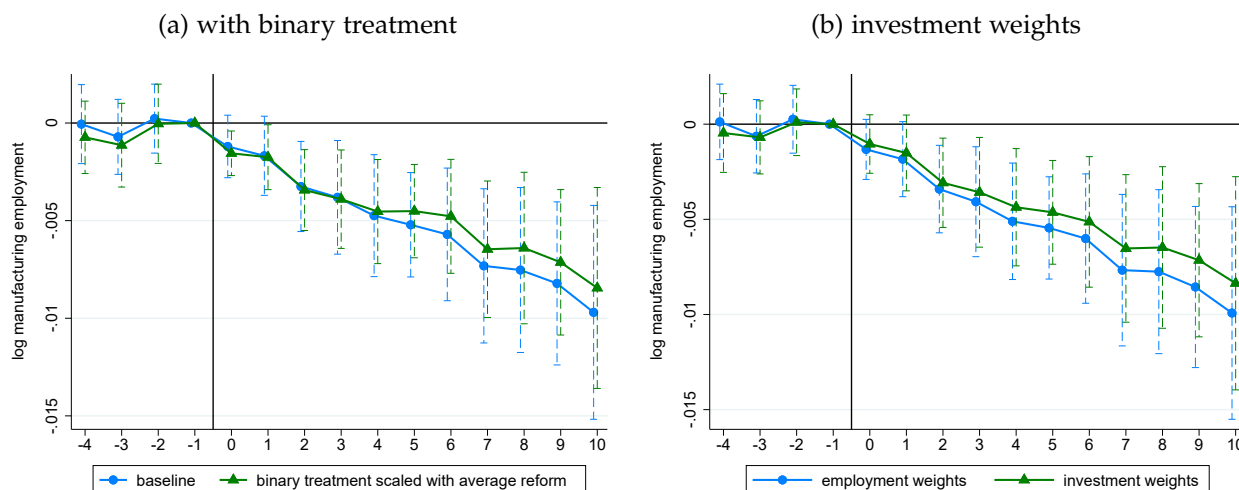
Source: BHP Notes: This figure plots coefficients along with 95% confidence intervals of regressing log manufacturing employment on leads and lags of a change in the maximum subsidy rate as in equation (7) including 3-digit industry x year fixed effects. Standard errors are clustered at the local labor market level. The sample includes the 55 counties closest to cutoffs ($M=30$). See Appendix Table C.2 for the point estimates.

Figure C.3: Event study estimates: heterogeneous treatment effects



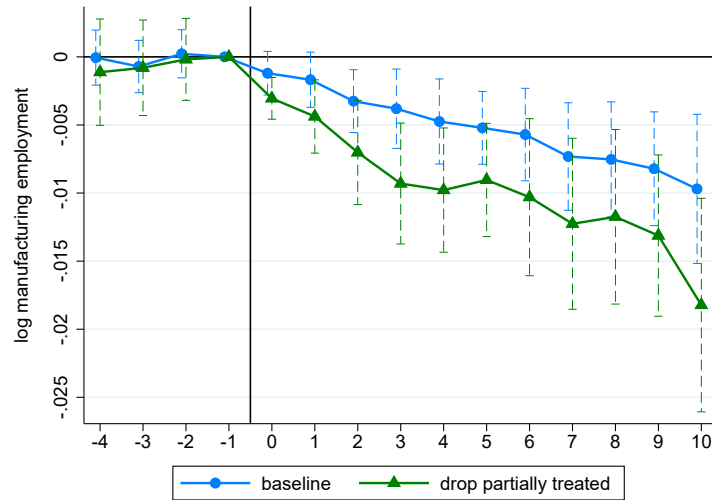
Source: BHP Notes: This figure plots coefficients along with 95% confidence intervals of the methods developed in de Chaisemartin and D'Haultfoeuille (2022) and Sun and Abraham (2021) used on equation (2) with manufacturing employment as the outcome. We limit the sample to the years 1995 to 2006, apply the baseline sample restriction ($M=30$), and drop the Salzlandkreis since it was treated both in 1997 and 2000 for all estimations since in that case we only have one treatment per unit and retain never-treated units. We implement the estimator from Sun and Abraham (2021) using the Stata command `eventstudyinteract`. The estimator from de Chaisemartin and D'Haultfoeuille (2022) is implemented using the Stata command `did_multipleGT` and we obtain standard errors through 99 bootstrap iterations. Standard errors are clustered at the local labor market level. See Appendix Table C.3 for the point estimates.

Figure C.4: Event study estimates: manufacturing employment with binary treatment and investment weights



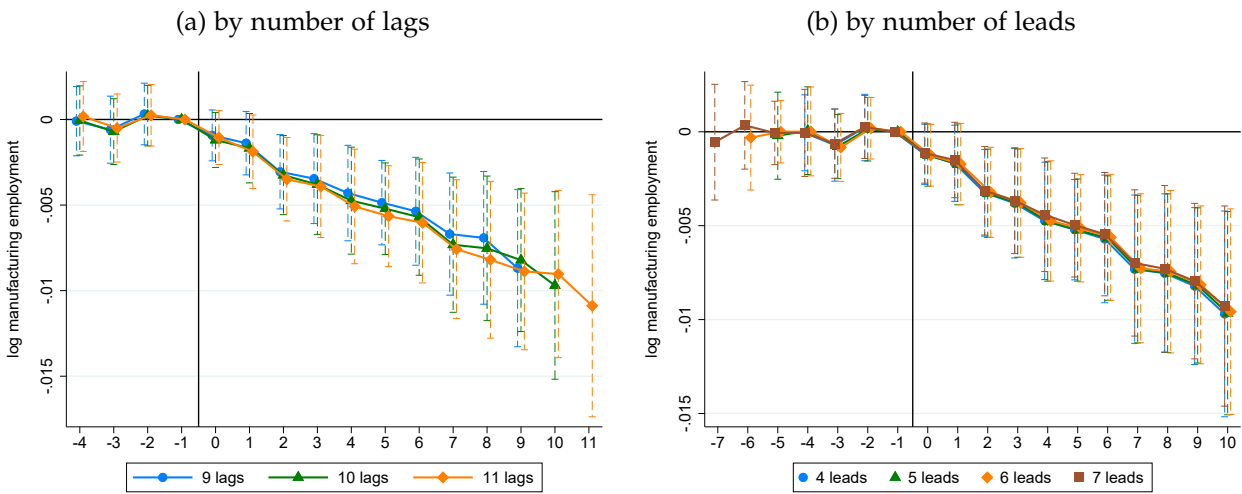
Source: BHP, AFiD Notes: This figure plots coefficients along with 95% confidence intervals of regressing log manufacturing employment on leads and lags of a change in the maximum subsidy rate with a binary treatment definition as in equation (2) (Panel a) and with investment weighting (Panel b) as described in Section III.A. In Panel (a), the sample includes the 55 counties closest to cutoffs ($M=30$). In Panel (b) both the baseline and investment-weighted results are missing one county from the baseline sample for which we were not allowed to export the investment weights due to privacy reasons since there were too few observations in one size cell of the AFiD data. Standard errors are clustered at the local labor market level. See Appendix Tables C.4 and C.5 for the point estimates.

Figure C.5: Event study estimates: manufacturing employment with binary treatment and without partially treated



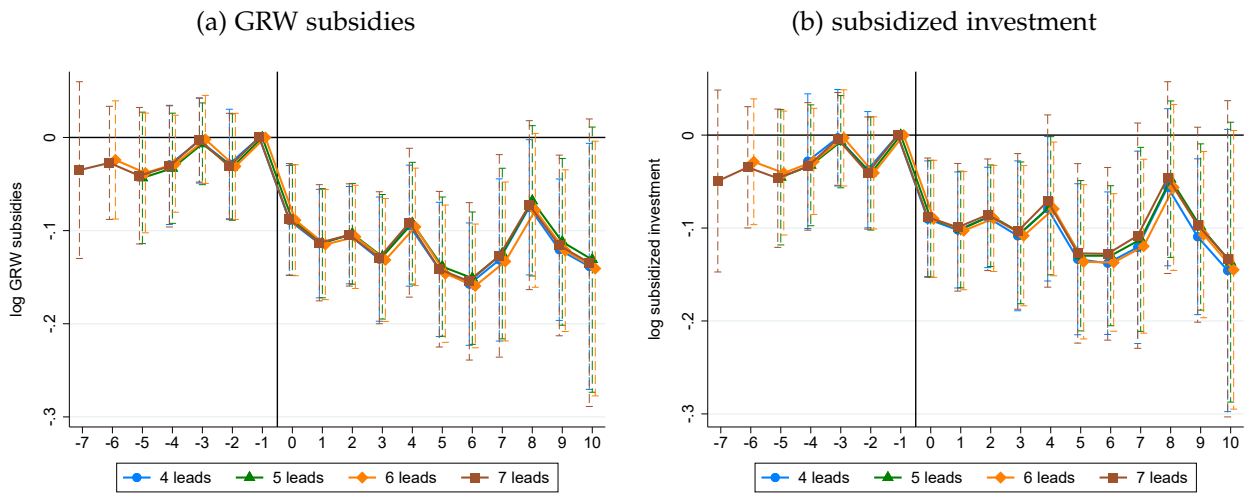
Source: BHP Notes: This figure plots coefficients along with 95% confidence intervals of regressing log manufacturing employment on leads and lags of a change in the maximum subsidy rate without the partially treated counties. The sample includes the 55 counties closest to cutoffs ($M=30$). Standard errors are clustered at the local labor market level. See Appendix Table C.2 for the point estimates.

Figure C.6: Event study estimates: manufacturing employment by the number of lags and leads



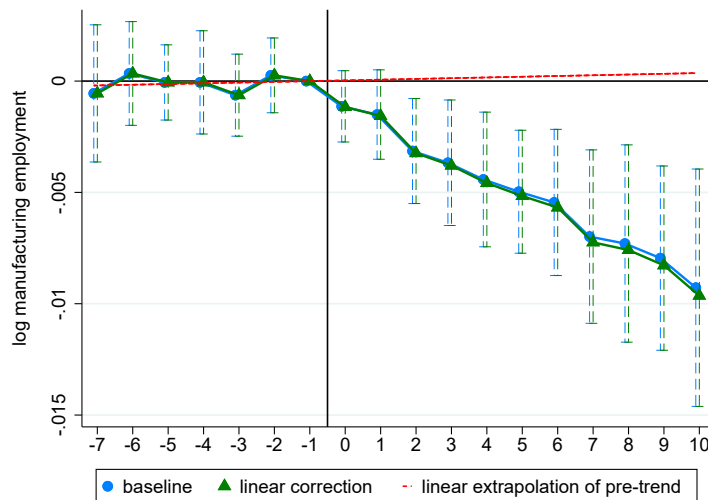
Source: BHP Notes: This figure plots coefficients along with 95% confidence intervals of regressing log manufacturing employment on leads and lags of a change in the maximum subsidy rate with different lag windows (Panel a) and different lead windows (Panel b) as in equation (7). The sample includes the 55 counties closest to cutoffs ($M=30$). Standard errors are clustered at the local labor market level. See Appendix Tables C.6 and C.7 for the point estimates.

Figure C.7: Event study estimates: GRW subsidies and subsidized investment by the number of lags and leads



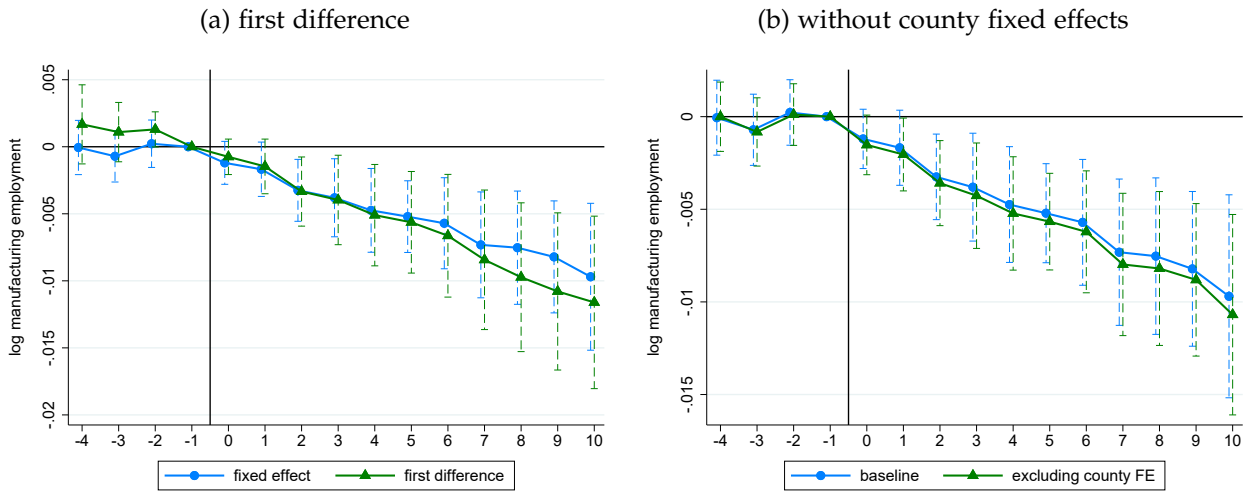
Source: BHP, Federal Office of Economics and Export Control Notes: This figure plots coefficients along 95% confidence intervals of regressing log GRW subsidies (Panel a) and log subsidized investment (Panel b) on leads and lags of a change in the maximum subsidy rate with different lead windows estimated in first differences. The sample includes the 55 counties closest to cutoffs ($M=30$). Standard errors are clustered at the local labor market level. See Appendix Tables C.8 and C.9 for the point estimates.

Figure C.8: Event study estimates: extrapolating pre-trends



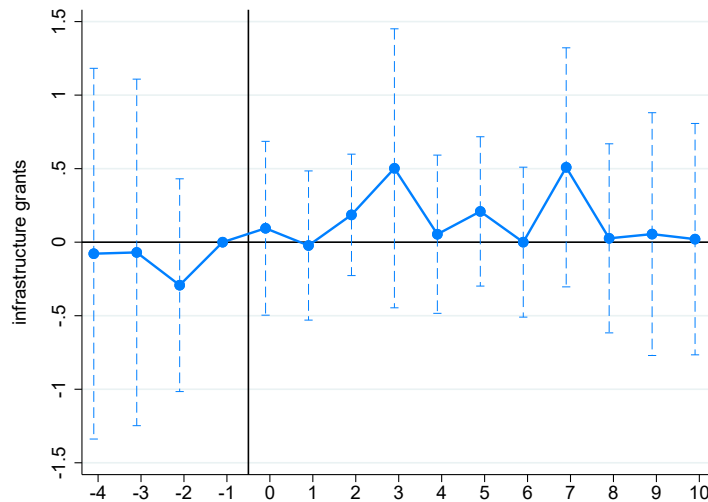
Source: BHP Notes: This figure plots coefficients along with 95% confidence intervals of regressing log manufacturing employment on leads and lags of a change in the maximum subsidy rate with eight leads. We estimate a linear model on the pre-trend and extrapolate it to the post-treatment time. The linear correction refers to the difference between the estimates and the linear extrapolation. The sample includes the 55 counties closest to cutoffs ($M=30$). Standard errors are clustered at the local labor market level.

Figure C.9: Event study estimates: manufacturing employment in first differences and without county fixed effects



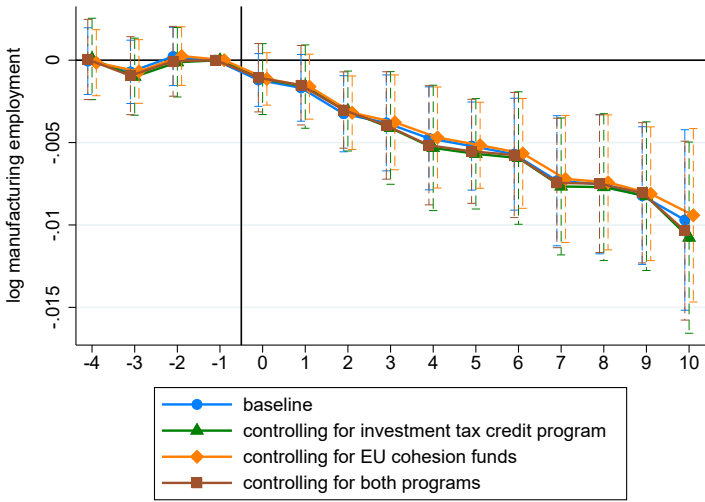
Source: BHP Notes: This figure plots coefficients along with 95% confidence intervals of regressing log manufacturing employment on leads and lags of a change in the maximum subsidy rate estimated in first differences (Panel a) and without county fixed effects (Panel b) as in equation (7). The sample includes the 55 counties closest to cutoffs ($M=30$). Standard errors are clustered at the local labor market level. See Appendix Tables C.10 and C.2 for the point estimates.

Figure C.10: Event study estimates: GRW infrastructure grants



Source: BHP, Federal Office of Economics and Export Control Notes: This figure plots coefficients along with 95% confidence intervals of regressing infrastructure grants paid to counties on leads and lags of a change in the maximum subsidy rate estimated in first differences. The sample includes the 55 counties closest to cutoffs ($M=30$). Standard errors are clustered at the local labor market level. See Appendix Table C.12 for the point estimates.

Figure C.11: Event study estimates: controlling for other policies



Source: BHP Notes: This figure plots coefficients along with 95% confidence intervals of regressing log manufacturing employment on leads and lags of a change in the maximum subsidy rate as in equation (7) including controls for other policies as described in Appendix C. Standard errors are clustered at the local labor market level. The sample includes the 55 counties closest to cutoffs (M=30). See Appendix Table C.13 for the point estimates.

Table C.1: Event study estimates: manufacturing employment by the cutoff sample

	(1)	(2)	(3)	(4)
	log manufacturing employment	log manufacturing employment	log manufacturing employment	log manufacturing employment
1 pp subsidy cut: year 4 before reform	0.000 (0.001)	-0.000 (0.001)	0.000 (0.001)	0.001 (0.001)
1 pp subsidy cut: year 3 before reform	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
1 pp subsidy cut: year 2 before reform	0.000 (0.001)	0.000 (0.001)	-0.000 (0.001)	-0.000 (0.001)
1 pp subsidy cut: year 0 after reform	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
1 pp subsidy cut: year 1 after reform	-0.001 (0.001)	-0.002 (0.001)	-0.001 (0.001)	-0.001 (0.001)
1 pp subsidy cut: year 2 after reform	-0.003 (0.001)	-0.003 (0.001)	-0.002 (0.001)	-0.002 (0.001)
1 pp subsidy cut: year 3 after reform	-0.003 (0.001)	-0.004 (0.001)	-0.003 (0.001)	-0.003 (0.001)
1 pp subsidy cut: year 4 after reform	-0.003 (0.001)	-0.005 (0.002)	-0.004 (0.002)	-0.003 (0.002)
1 pp subsidy cut: year 5 after reform	-0.004 (0.001)	-0.005 (0.001)	-0.004 (0.001)	-0.004 (0.001)
1 pp subsidy cut: year 6 after reform	-0.004 (0.001)	-0.006 (0.002)	-0.004 (0.002)	-0.004 (0.002)
1 pp subsidy cut: year 7 after reform	-0.006 (0.002)	-0.007 (0.002)	-0.006 (0.002)	-0.006 (0.002)
1 pp subsidy cut: year 8 after reform	-0.006 (0.002)	-0.008 (0.002)	-0.006 (0.002)	-0.006 (0.002)
1 pp subsidy cut: year 9 after reform	-0.006 (0.002)	-0.008 (0.002)	-0.007 (0.002)	-0.007 (0.002)
1 pp subsidy cut: year 10 after reform	-0.007 (0.002)	-0.010 (0.003)	-0.008 (0.003)	-0.007 (0.003)
sample restriction	M = 20	M = 30	M = 40	full sample
N	244169	312503	355601	401290

Notes: Standard errors in parentheses. See Appendix Figure C.1a for detailed information.

Table C.2: Event study estimates: manufacturing employment (robustness checks)

	(1)	(2)	(3)	(4)
	log manufacturing employment	log manufacturing employment	log manufacturing employment	log manufacturing employment
1 pp subsidy cut: year 4 before reform	-0.000 (0.001)	0.000 (0.001)	-0.001 (0.002)	-0.000 (0.001)
1 pp subsidy cut: year 3 before reform	-0.001 (0.001)	-0.000 (0.001)	-0.001 (0.002)	-0.001 (0.001)
1 pp subsidy cut: year 2 before reform	0.000 (0.001)	0.001 (0.001)	-0.000 (0.002)	0.000 (0.001)
1 pp subsidy cut: year 0 after reform	-0.001 (0.001)	-0.001 (0.001)	-0.003 (0.001)	-0.002 (0.001)
1 pp subsidy cut: year 1 after reform	-0.002 (0.001)	-0.002 (0.001)	-0.004 (0.001)	-0.002 (0.001)
1 pp subsidy cut: year 2 after reform	-0.003 (0.001)	-0.003 (0.001)	-0.007 (0.002)	-0.004 (0.001)
1 pp subsidy cut: year 3 after reform	-0.004 (0.001)	-0.004 (0.001)	-0.009 (0.002)	-0.004 (0.001)
1 pp subsidy cut: year 4 after reform	-0.005 (0.001)	-0.004 (0.001)	-0.010 (0.002)	-0.005 (0.002)
1 pp subsidy cut: year 5 after reform	-0.005 (0.001)	-0.005 (0.001)	-0.009 (0.002)	-0.006 (0.001)
1 pp subsidy cut: year 6 after reform	-0.006 (0.002)	-0.005 (0.001)	-0.010 (0.003)	-0.006 (0.002)
1 pp subsidy cut: year 7 after reform	-0.008 (0.002)	-0.006 (0.002)	-0.012 (0.003)	-0.008 (0.002)
1 pp subsidy cut: year 8 after reform	-0.008 (0.002)	-0.007 (0.002)	-0.012 (0.003)	-0.008 (0.002)
1 pp subsidy cut: year 9 after reform	-0.009 (0.002)	-0.007 (0.002)	-0.013 (0.003)	-0.009 (0.002)
1 pp subsidy cut: year 10 after reform	-0.010 (0.003)	-0.008 (0.002)	-0.018 (0.004)	-0.011 (0.003)
lagged control variables	yes			
3-digit industry x year FE		yes		
exclude partially treated counties			yes	
exclude county FE				yes
N	312503	312470	180020	312503

Notes: Standard errors in parentheses. See Appendix Figures C.1b, C.2, C.5, and C.9b for detailed information.

Table C.3: Heterogeneous treatment effects: Sun and Abraham (2021) & de Chaisemartin and D'Haultfoeuille (2022)

	(1) log manufacturing employment: baseline	(2) log manufacturing employment: de Chaisemartin and D'Haultfoeuille (2022)	(3) log manufacturing employment: Sun and Abraham (2021)
average subsidy cut: year 4 before reform	-0.015 (0.033)	0.026 (0.031)	0.021 (0.036)
average subsidy cut: year 3 before reform	-0.028 (0.022)	0.018 (0.025)	0.007 (0.027)
average subsidy cut: year 2 before reform	-0.010 (0.016)	0.020 (0.026)	0.018 (0.020)
average subsidy cut: year 0 after reform	-0.017 (0.007)	-0.017 (0.011)	-0.018 (0.007)
average subsidy cut: year 1 after reform	-0.023 (0.013)	-0.010 (0.014)	-0.027 (0.014)
average subsidy cut: year 2 after reform	-0.038 (0.015)	-0.006 (0.017)	-0.047 (0.019)
average subsidy cut: year 3 after reform	-0.043 (0.020)	-0.030 (0.023)	-0.054 (0.024)
average subsidy cut: year 4 after reform	-0.057 (0.023)	-0.033 (0.026)	-0.062 (0.027)
average subsidy cut: year 5 after reform	-0.059 (0.020)	-0.027 (0.022)	-0.059 (0.021)
average subsidy cut: year 6 after reform	-0.062 (0.023)	-0.031 (0.024)	-0.063 (0.023)
average subsidy cut: year 7 after reform	-0.083 (0.030)	-0.077 (0.038)	-0.097 (0.036)
average subsidy cut: year 8 after reform	-0.082 (0.028)	-0.085 (0.038)	-0.101 (0.033)
average subsidy cut: year 9 after reform	-0.094 (0.028)	-0.103 (0.035)	-0.108 (0.032)
N	161876	161876	161876

Notes: Standard errors in parentheses. See Appendix Figure C.3 for detailed information.

Table C.4: Event study estimates: manufacturing employment with binary treatment

	(1) log manufacturing employment
average subsidy cut: year 4 before reform	-0.006 (0.008)
average subsidy cut: year 3 before reform	-0.009 (0.009)
average subsidy cut: year 2 before reform	-0.000 (0.008)
average subsidy cut: year 0 after reform	-0.012 (0.005)
average subsidy cut: year 1 after reform	-0.014 (0.007)
average subsidy cut: year 2 after reform	-0.027 (0.008)
average subsidy cut: year 3 after reform	-0.031 (0.010)
average subsidy cut: year 4 after reform	-0.036 (0.011)
average subsidy cut: year 5 after reform	-0.036 (0.010)
average subsidy cut: year 6 after reform	-0.038 (0.012)
average subsidy cut: year 7 after reform	-0.051 (0.014)
average subsidy cut: year 8 after reform	-0.051 (0.016)
average subsidy cut: year 9 after reform	-0.057 (0.015)
average subsidy cut: year 10 after reform	-0.067 (0.021)
N	312503

Notes: Standard errors in parentheses. See Appendix Figure C.4a for detailed information.

Table C.5: Event study estimates: plant-level manufacturing employment: investment weights

	(1)	(2)
	log manufacturing employment	log manufacturing employment
1 pp subsidy cut: year 4 before reform	0.000 (0.001)	
1 pp subsidy cut: year 3 before reform	-0.001 (0.001)	
1 pp subsidy cut: year 2 before reform	0.000 (0.001)	
1 pp subsidy cut: year 0 after reform	-0.001 (0.001)	
1 pp subsidy cut: year 1 after reform	-0.002 (0.001)	
1 pp subsidy cut: year 2 after reform	-0.003 (0.001)	
1 pp subsidy cut: year 3 after reform	-0.004 (0.001)	
1 pp subsidy cut: year 4 after reform	-0.005 (0.002)	
1 pp subsidy cut: year 5 after reform	-0.005 (0.001)	
1 pp subsidy cut: year 6 after reform	-0.006 (0.002)	
1 pp subsidy cut: year 7 after reform	-0.008 (0.002)	
1 pp subsidy cut: year 8 after reform	-0.008 (0.002)	
1 pp subsidy cut: year 9 after reform	-0.009 (0.002)	
1 pp subsidy cut: year 10 after reform	-0.010 (0.003)	
1 pp subsidy cut (investment-weighted): year 4 before reform		-0.000 (0.001)
1 pp subsidy cut (investment-weighted): year 3 before reform		-0.001 (0.001)
1 pp subsidy cut (investment-weighted): year 2 before reform		0.000 (0.001)
1 pp subsidy cut (investment-weighted): year 0 after reform		-0.001 (0.001)
1 pp subsidy cut (investment-weighted): year 1 after reform		-0.002 (0.001)
1 pp subsidy cut (investment-weighted): year 2 after reform		-0.003 (0.001)
1 pp subsidy cut (investment-weighted): year 3 after reform		-0.004 (0.001)
1 pp subsidy cut (investment-weighted): year 4 after reform		-0.004 (0.002)
1 pp subsidy cut (investment-weighted): year 5 after reform		-0.005 (0.001)
1 pp subsidy cut (investment-weighted): year 6 after reform		-0.005 (0.002)
1 pp subsidy cut (investment-weighted): year 7 after reform		-0.007 (0.002)
1 pp subsidy cut (investment-weighted): year 8 after reform		-0.006 (0.002)
1 pp subsidy cut (investment-weighted): year 9 after reform		-0.007 (0.002)
1 pp subsidy cut (investment-weighted): year 10 after reform		-0.008 (0.003)
N	309288	309288

Table C.6: Event study estimates: manufacturing employment by lags

	(1)	(2)	(3)
	log manufacturing employment	log manufacturing employment	log manufacturing employment
1 pp subsidy cut: year 4 before reform	-0.000 (0.001)	-0.000 (0.001)	0.000 (0.001)
1 pp subsidy cut: year 3 before reform	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
1 pp subsidy cut: year 2 before reform	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)
1 pp subsidy cut: year 0 after reform	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
1 pp subsidy cut: year 1 after reform	-0.001 (0.001)	-0.002 (0.001)	-0.002 (0.001)
1 pp subsidy cut: year 2 after reform	-0.003 (0.001)	-0.003 (0.001)	-0.003 (0.001)
1 pp subsidy cut: year 3 after reform	-0.003 (0.002)	-0.004 (0.002)	-0.004 (0.002)
1 pp subsidy cut: year 4 after reform	-0.004 (0.002)	-0.005 (0.002)	-0.005 (0.002)
1 pp subsidy cut: year 5 after reform	-0.005 (0.001)	-0.005 (0.001)	-0.006 (0.002)
1 pp subsidy cut: year 6 after reform	-0.005 (0.002)	-0.006 (0.002)	-0.006 (0.002)
1 pp subsidy cut: year 7 after reform	-0.007 (0.002)	-0.007 (0.002)	-0.008 (0.002)
1 pp subsidy cut: year 8 after reform	-0.007 (0.002)	-0.008 (0.002)	-0.008 (0.003)
1 pp subsidy cut: year 9 after reform	-0.009 (0.003)	-0.008 (0.002)	-0.009 (0.003)
1 pp subsidy cut: year 10 after reform		-0.010 (0.003)	-0.009 (0.003)
1 pp subsidy cut: year 11 after reform			-0.011 (0.004)
N	312503	312503	312503

Notes: Standard errors in parentheses. See Appendix Figure C.6a for detailed information.

Table C.7: Event study estimates: manufacturing employment by leads

	(1)	(2)	(3)
	log manufacturing employment	log manufacturing employment	log manufacturing employment
1 pp subsidy cut: year 7 before reform			-0.001 (0.001)
1 pp subsidy cut: year 6 before reform		-0.000 (0.001)	0.000 (0.001)
1 pp subsidy cut: year 5 before reform	-0.000 (0.001)	0.000 (0.001)	-0.000 (0.001)
1 pp subsidy cut: year 4 before reform	0.000 (0.001)	0.000 (0.001)	-0.000 (0.001)
1 pp subsidy cut: year 3 before reform	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
1 pp subsidy cut: year 2 before reform	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)
1 pp subsidy cut: year 0 after reform	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
1 pp subsidy cut: year 1 after reform	-0.002 (0.001)	-0.002 (0.001)	-0.002 (0.001)
1 pp subsidy cut: year 2 after reform	-0.003 (0.001)	-0.003 (0.001)	-0.003 (0.001)
1 pp subsidy cut: year 3 after reform	-0.004 (0.002)	-0.004 (0.002)	-0.004 (0.002)
1 pp subsidy cut: year 4 after reform	-0.005 (0.002)	-0.005 (0.002)	-0.004 (0.002)
1 pp subsidy cut: year 5 after reform	-0.005 (0.002)	-0.005 (0.002)	-0.005 (0.001)
1 pp subsidy cut: year 6 after reform	-0.006 (0.002)	-0.006 (0.002)	-0.005 (0.002)
1 pp subsidy cut: year 7 after reform	-0.007 (0.002)	-0.007 (0.002)	-0.007 (0.002)
1 pp subsidy cut: year 8 after reform	-0.008 (0.002)	-0.007 (0.002)	-0.007 (0.002)
1 pp subsidy cut: year 9 after reform	-0.008 (0.002)	-0.008 (0.002)	-0.008 (0.002)
1 pp subsidy cut: year 10 after reform	-0.010 (0.003)	-0.010 (0.003)	-0.009 (0.003)
N	312503	312503	312503

Notes: Standard errors in parentheses. See Appendix Figure C.6b for detailed information.

Table C.8: Event study estimates: GRW subsidies by leads

	(1)	(2)	(3)
	log GRW subsidies	log GRW subsidies	log GRW subsidies
1 pp subsidy cut: year 7 before reform			-0.035 (0.048)
1 pp subsidy cut: year 6 before reform		-0.024 (0.032)	-0.027 (0.031)
1 pp subsidy cut: year 5 before reform	-0.043 (0.036)	-0.038 (0.033)	-0.041 (0.037)
1 pp subsidy cut: year 4 before reform	-0.033 (0.030)	-0.028 (0.027)	-0.031 (0.033)
1 pp subsidy cut: year 3 before reform	-0.007 (0.022)	-0.002 (0.024)	-0.003 (0.023)
1 pp subsidy cut: year 2 before reform	-0.032 (0.029)	-0.031 (0.029)	-0.031 (0.029)
1 pp subsidy cut: year 0 after reform	-0.089 (0.030)	-0.089 (0.030)	-0.088 (0.031)
1 pp subsidy cut: year 1 after reform	-0.114 (0.030)	-0.115 (0.030)	-0.113 (0.032)
1 pp subsidy cut: year 2 after reform	-0.103 (0.028)	-0.107 (0.028)	-0.105 (0.028)
1 pp subsidy cut: year 3 after reform	-0.128 (0.034)	-0.132 (0.034)	-0.129 (0.036)
1 pp subsidy cut: year 4 after reform	-0.092 (0.033)	-0.096 (0.032)	-0.092 (0.041)
1 pp subsidy cut: year 5 after reform	-0.139 (0.038)	-0.146 (0.038)	-0.141 (0.043)
1 pp subsidy cut: year 6 after reform	-0.151 (0.036)	-0.159 (0.034)	-0.154 (0.043)
1 pp subsidy cut: year 7 after reform	-0.125 (0.047)	-0.133 (0.044)	-0.127 (0.055)
1 pp subsidy cut: year 8 after reform	-0.068 (0.041)	-0.078 (0.042)	-0.073 (0.046)
1 pp subsidy cut: year 9 after reform	-0.112 (0.046)	-0.122 (0.044)	-0.116 (0.049)
1 pp subsidy cut: year 10 after reform	-0.131 (0.073)	-0.141 (0.070)	-0.134 (0.079)
N	1141	1141	1141

Notes: Standard errors in parentheses. See Appendix Figure C.7a for detailed information.

Table C.9: Event study estimates: subsidized investment by leads

	(1)	(2)	(3)
	log subsidized investment	log subsidized investment	log subsidized investment
1 pp subsidy cut: year 7 before reform			-0.049 (0.050)
1 pp subsidy cut: year 6 before reform		-0.029 (0.035)	-0.035 (0.033)
1 pp subsidy cut: year 5 before reform	-0.045 (0.037)	-0.041 (0.034)	-0.046 (0.038)
1 pp subsidy cut: year 4 before reform	-0.032 (0.033)	-0.028 (0.029)	-0.034 (0.035)
1 pp subsidy cut: year 3 before reform	-0.007 (0.025)	-0.003 (0.026)	-0.004 (0.025)
1 pp subsidy cut: year 2 before reform	-0.041 (0.031)	-0.041 (0.031)	-0.041 (0.031)
1 pp subsidy cut: year 0 after reform	-0.090 (0.032)	-0.090 (0.032)	-0.088 (0.033)
1 pp subsidy cut: year 1 after reform	-0.102 (0.032)	-0.103 (0.032)	-0.099 (0.035)
1 pp subsidy cut: year 2 after reform	-0.087 (0.028)	-0.090 (0.029)	-0.086 (0.031)
1 pp subsidy cut: year 3 after reform	-0.105 (0.039)	-0.108 (0.038)	-0.104 (0.043)
1 pp subsidy cut: year 4 after reform	-0.076 (0.038)	-0.079 (0.037)	-0.071 (0.047)
1 pp subsidy cut: year 5 after reform	-0.130 (0.041)	-0.136 (0.042)	-0.127 (0.049)
1 pp subsidy cut: year 6 after reform	-0.130 (0.038)	-0.137 (0.038)	-0.128 (0.047)
1 pp subsidy cut: year 7 after reform	-0.112 (0.051)	-0.120 (0.048)	-0.108 (0.062)
1 pp subsidy cut: year 8 after reform	-0.047 (0.043)	-0.056 (0.046)	-0.046 (0.053)
1 pp subsidy cut: year 9 after reform	-0.099 (0.046)	-0.107 (0.046)	-0.096 (0.054)
1 pp subsidy cut: year 10 after reform	-0.137 (0.077)	-0.145 (0.076)	-0.133 (0.087)
N	1141	1141	1141

Notes: Standard errors in parentheses. See Appendix Figure C.7b for detailed information.

Table C.10: Event study estimates: manufacturing employment (first difference)

	(1)
	log manufacturing employment
1 pp subsidy cut: year 4 before reform	0.002 (0.002)
1 pp subsidy cut: year 3 before reform	0.001 (0.001)
1 pp subsidy cut: year 2 before reform	0.001 (0.001)
1 pp subsidy cut: year 0 after reform	-0.001 (0.001)
1 pp subsidy cut: year 1 after reform	-0.001 (0.001)
1 pp subsidy cut: year 2 after reform	-0.003 (0.001)
1 pp subsidy cut: year 3 after reform	-0.004 (0.002)
1 pp subsidy cut: year 4 after reform	-0.005 (0.002)
1 pp subsidy cut: year 5 after reform	-0.006 (0.002)
1 pp subsidy cut: year 6 after reform	-0.007 (0.002)
1 pp subsidy cut: year 7 after reform	-0.008 (0.003)
1 pp subsidy cut: year 8 after reform	-0.010 (0.003)
1 pp subsidy cut: year 9 after reform	-0.011 (0.003)
1 pp subsidy cut: year 10 after reform	-0.012 (0.003)
N	293534

Notes: Standard errors in parentheses. See Appendix Figure C.9a for detailed information.

Table C.11: Event study estimates: manufacturing employment (inference robustness)

	(1)	(2)	(3)
	log manufacturing employment	log manufacturing employment:	log manufacturing employment
1 pp subsidy cut: year 4 before reform	-0.0001 (0.0010)	-0.0001 (0.0010)	-0.0001 (0.0012)
1 pp subsidy cut: year 3 before reform	-0.0007 (0.0010)	-0.0007 (0.0009)	-0.0007 (0.0010)
1 pp subsidy cut: year 2 before reform	0.0002 (0.0008)	0.0002 (0.0009)	0.0002 (0.0008)
1 pp subsidy cut: year 0 after reform	-0.0012 (0.0009)	-0.0012 (0.0008)	-0.0012 (0.0011)
1 pp subsidy cut: year 1 after reform	-0.0017 (0.0011)	-0.0017 (0.0010)	-0.0017 (0.0011)
1 pp subsidy cut: year 2 after reform	-0.0033 (0.0013)	-0.0033 (0.0011)	-0.0033 (0.0010)
1 pp subsidy cut: year 3 after reform	-0.0038 (0.0016)	-0.0038 (0.0014)	-0.0038 (0.0013)
1 pp subsidy cut: year 4 after reform	-0.0047 (0.0017)	-0.0047 (0.0015)	-0.0047 (0.0016)
1 pp subsidy cut: year 5 after reform	-0.0052 (0.0015)	-0.0052 (0.0013)	-0.0052 (0.0016)
1 pp subsidy cut: year 6 after reform	-0.0057 (0.0019)	-0.0057 (0.0017)	-0.0057 (0.0017)
1 pp subsidy cut: year 7 after reform	-0.0073 (0.0022)	-0.0073 (0.0019)	-0.0073 (0.0020)
1 pp subsidy cut: year 8 after reform	-0.0075 (0.0023)	-0.0075 (0.0021)	-0.0075 (0.0021)
1 pp subsidy cut: year 9 after reform	-0.0082 (0.0024)	-0.0082 (0.0020)	-0.0082 (0.0022)
1 pp subsidy cut: year 10 after reform	-0.0097 (0.0031)	-0.0097 (0.0027)	-0.0097 (0.0029)
standard errors	cluster at county level	cluster at local labor market and plant level	spatial correlation adjustment
N	312503	312503	312503

Notes: In column (1), standard errors are clustered at the county and plant level, while in column (2) standard errors are clustered at the local labor market and plant level. In column (3), standard errors are adjusted for spatial dependence as in Conley (1999). Spatial autocorrelation is assumed to linearly decrease up to a cutoff of 100 kilometers.

Table C.12: Event study estimates: GRW infrastructure grants

	(1)
	GRW infrastructure grants
1 pp subsidy cut: year 4 before reform	-0.078 (0.643)
1 pp subsidy cut: year 3 before reform	-0.070 (0.601)
1 pp subsidy cut: year 2 before reform	-0.292 (0.369)
1 pp subsidy cut: year 0 after reform	0.095 (0.302)
1 pp subsidy cut: year 1 after reform	-0.023 (0.259)
1 pp subsidy cut: year 2 after reform	0.186 (0.211)
1 pp subsidy cut: year 3 after reform	0.502 (0.484)
1 pp subsidy cut: year 4 after reform	0.054 (0.274)
1 pp subsidy cut: year 5 after reform	0.209 (0.259)
1 pp subsidy cut: year 6 after reform	0.000 (0.260)
1 pp subsidy cut: year 7 after reform	0.509 (0.415)
1 pp subsidy cut: year 8 after reform	0.026 (0.328)
1 pp subsidy cut: year 9 after reform	0.055 (0.421)
1 pp subsidy cut: year 10 after reform	0.021 (0.401)
N	1155

Notes: Standard errors in parentheses. See Figure C.10 for detailed information.

Table C.13: Event study estimates: controlling for other programs

	(1)	(2)	(3)
	log manufacturing employment	log manufacturing employment	log manufacturing employment
1 pp subsidy cut: year 4 before reform	0.000 (0.001)	-0.000 (0.001)	0.000 (0.001)
1 pp subsidy cut: year 3 before reform	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
1 pp subsidy cut: year 2 before reform	-0.000 (0.001)	0.000 (0.001)	-0.000 (0.001)
1 pp subsidy cut: year 0 after reform	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
1 pp subsidy cut: year 1 after reform	-0.002 (0.001)	-0.002 (0.001)	-0.002 (0.001)
1 pp subsidy cut: year 2 after reform	-0.003 (0.001)	-0.003 (0.001)	-0.003 (0.001)
1 pp subsidy cut: year 3 after reform	-0.004 (0.002)	-0.004 (0.001)	-0.004 (0.002)
1 pp subsidy cut: year 4 after reform	-0.005 (0.002)	-0.005 (0.002)	-0.005 (0.002)
1 pp subsidy cut: year 5 after reform	-0.006 (0.002)	-0.005 (0.001)	-0.006 (0.002)
1 pp subsidy cut: year 6 after reform	-0.006 (0.002)	-0.006 (0.002)	-0.006 (0.002)
1 pp subsidy cut: year 7 after reform	-0.008 (0.002)	-0.007 (0.002)	-0.007 (0.002)
1 pp subsidy cut: year 8 after reform	-0.008 (0.002)	-0.007 (0.002)	-0.007 (0.002)
1 pp subsidy cut: year 9 after reform	-0.008 (0.002)	-0.008 (0.002)	-0.008 (0.002)
1 pp subsidy cut: year 10 after reform	-0.011 (0.003)	-0.009 (0.003)	-0.010 (0.003)
investment tax credit program controls	yes		yes
EU structural funds controls		yes	yes
N	312503	312503	312503

Notes: Standard errors in parentheses. See Figure C.11 for detailed information.

D Additional Tables

Table D.1: Event study estimates: GRW subsidies and subsidized investment

	(1) log GRW subsidies	(2) log subsidized investment
1 pp subsidy cut: year 4 before reform	-0.029 (0.033)	-0.028 (0.037)
1 pp subsidy cut: year 3 before reform	-0.003 (0.023)	-0.003 (0.027)
1 pp subsidy cut: year 2 before reform	-0.028 (0.030)	-0.037 (0.032)
1 pp subsidy cut: year 0 after reform	-0.089 (0.030)	-0.090 (0.032)
1 pp subsidy cut: year 1 after reform	-0.114 (0.030)	-0.102 (0.032)
1 pp subsidy cut: year 2 after reform	-0.105 (0.027)	-0.089 (0.028)
1 pp subsidy cut: year 3 after reform	-0.131 (0.034)	-0.108 (0.041)
1 pp subsidy cut: year 4 after reform	-0.095 (0.033)	-0.079 (0.040)
1 pp subsidy cut: year 5 after reform	-0.142 (0.037)	-0.134 (0.041)
1 pp subsidy cut: year 6 after reform	-0.157 (0.034)	-0.138 (0.039)
1 pp subsidy cut: year 7 after reform	-0.131 (0.044)	-0.121 (0.053)
1 pp subsidy cut: year 8 after reform	-0.075 (0.037)	-0.056 (0.043)
1 pp subsidy cut: year 9 after reform	-0.120 (0.039)	-0.109 (0.043)
1 pp subsidy cut: year 10 after reform	-0.138 (0.067)	-0.146 (0.077)
N	1141	1141

Notes: Standard errors in parentheses. See Figure 2 for detailed information.

Table D.2: Event study estimates: investment

	(1) log (investment + 1)
1 pp subsidy cut: year 4 before reform	0.012 (0.011)
1 pp subsidy cut: year 3 before reform	-0.008 (0.012)
1 pp subsidy cut: year 2 before reform	-0.001 (0.010)
1 pp subsidy cut: year 0 after reform	-0.017 (0.007)
1 pp subsidy cut: year 1 after reform	-0.019 (0.008)
1 pp subsidy cut: year 2 after reform	-0.023 (0.009)
1 pp subsidy cut: year 3 after reform	-0.026 (0.012)
1 pp subsidy cut: year 4 after reform	-0.026 (0.012)
1 pp subsidy cut: year 5 after reform	-0.025 (0.013)
1 pp subsidy cut: year 6 after reform	-0.044 (0.015)
1 pp subsidy cut: year 7 after reform	-0.053 (0.018)
1 pp subsidy cut: year 8 after reform	-0.046 (0.018)
1 pp subsidy cut: year 9 after reform	-0.021 (0.017)
1 pp subsidy cut: year 10 after reform	-0.040 (0.024)
N	96913

Notes: Standard errors in parentheses. See Figure 2 for detailed information.

Table D.3: Event study estimates: plant-level manufacturing employment

	(1)
	log manufacturing employment
1 pp subsidy cut: year 4 before reform	-0.000 (0.001)
1 pp subsidy cut: year 3 before reform	-0.001 (0.001)
1 pp subsidy cut: year 2 before reform	0.000 (0.001)
1 pp subsidy cut: year 0 after reform	-0.001 (0.001)
1 pp subsidy cut: year 1 after reform	-0.002 (0.001)
1 pp subsidy cut: year 2 after reform	-0.003 (0.001)
1 pp subsidy cut: year 3 after reform	-0.004 (0.001)
1 pp subsidy cut: year 4 after reform	-0.005 (0.002)
1 pp subsidy cut: year 5 after reform	-0.005 (0.001)
1 pp subsidy cut: year 6 after reform	-0.006 (0.002)
1 pp subsidy cut: year 7 after reform	-0.007 (0.002)
1 pp subsidy cut: year 8 after reform	-0.008 (0.002)
1 pp subsidy cut: year 9 after reform	-0.008 (0.002)
1 pp subsidy cut: year 10 after reform	-0.010 (0.003)
N	312503

Notes: Standard errors in parentheses. See Figure 3 for detailed information.

Table D.4: Event study estimates: manufacturing employment by plants size at 20 employees

	(1) log manufacturing employment	(2) log manufacturing employment
1 pp subsidy cut: year 4 before reform	-0.000 (0.001)	
1 pp subsidy cut: year 3 before reform	-0.001 (0.001)	
1 pp subsidy cut: year 2 before reform	-0.001 (0.001)	
1 pp subsidy cut: year 0 after reform	-0.001 (0.001)	
1 pp subsidy cut: year 1 after reform	-0.002 (0.001)	
1 pp subsidy cut: year 2 after reform	-0.004 (0.001)	
1 pp subsidy cut: year 3 after reform	-0.005 (0.002)	
1 pp subsidy cut: year 4 after reform	-0.006 (0.003)	
1 pp subsidy cut: year 5 after reform	-0.006 (0.002)	
1 pp subsidy cut: year 6 after reform	-0.007 (0.003)	
1 pp subsidy cut: year 7 after reform	-0.009 (0.003)	
1 pp subsidy cut: year 8 after reform	-0.009 (0.003)	
1 pp subsidy cut: year 9 after reform	-0.010 (0.003)	
1 pp subsidy cut: year 10 after reform	-0.011 (0.004)	
1 pp subsidy cut for plants with less than 20 employees: year 4 before reform		0.000 (0.001)
1 pp subsidy cut for plants with less than 20 employees: year 3 before reform		-0.001 (0.001)
1 pp subsidy cut for plants with less than 20 employees: year 2 before reform		-0.000 (0.001)
1 pp subsidy cut for plants with less than 20 employees: year 0 after reform		-0.001 (0.001)
1 pp subsidy cut for plants with less than 20 employees: year 1 after reform		-0.002 (0.001)
1 pp subsidy cut for plants with less than 20 employees: year 2 after reform		-0.004 (0.001)
1 pp subsidy cut for plants with less than 20 employees: year 3 after reform		-0.005 (0.002)
1 pp subsidy cut for plants with less than 20 employees: year 4 after reform		-0.007 (0.002)
1 pp subsidy cut for plants with less than 20 employees: year 5 after reform		-0.007 (0.002)
1 pp subsidy cut for plants with less than 20 employees: year 6 after reform		-0.008 (0.002)
1 pp subsidy cut for plants with less than 20 employees: year 7 after reform		-0.010 (0.003)
1 pp subsidy cut for plants with less than 20 employees: year 8 after reform		-0.011 (0.003)
1 pp subsidy cut for plants with less than 20 employees: year 9 after reform		-0.011 (0.003)
1 pp subsidy cut for plants with less than 20 employees: year 10 after reform		-0.013 (0.004)
1 pp subsidy cut for plants with 20 or more employees: year 4 before reform		-0.001 (0.004)
1 pp subsidy cut for plants with 20 or more employees: year 3 before reform		-0.003 (0.003)
1 pp subsidy cut for plants with 20 or more employees: year 2 before reform		-0.002 (0.002)
1 pp subsidy cut for plants with 20 or more employees: year 0 after reform		-0.003 (0.003)
1 pp subsidy cut for plants with 20 or more employees: year 1 after reform		-0.003 (0.003)
1 pp subsidy cut for plants with 20 or more employees: year 2 after reform		-0.004 (0.003)
1 pp subsidy cut for plants with 20 or more employees: year 3 after reform		-0.004 (0.005)
1 pp subsidy cut for plants with 20 or more employees: year 4 after reform		-0.003 (0.006)
1 pp subsidy cut for plants with 20 or more employees: year 5 after reform		-0.005 (0.006)
1 pp subsidy cut for plants with 20 or more employees: year 6 after reform		-0.006 (0.007)
1 pp subsidy cut for plants with 20 or more employees: year 7 after reform		-0.006 (0.007)
1 pp subsidy cut for plants with 20 or more employees: year 8 after reform		-0.004 (0.007)
1 pp subsidy cut for plants with 20 or more employees: year 9 after reform		-0.005 (0.007)
1 pp subsidy cut for plants with 20 or more employees: year 10 after reform		-0.007 (0.011)
N	192063	192063

Notes: Standard errors in parentheses. See Appendix Figure A.1a for detailed information.

Table D.5: Event study estimates: manufacturing employment by plants size at 50 employees

	(1) log manufacturing employment	(2) log manufacturing employment
1 pp subsidy cut: year 4 before reform	-0.000 (0.001)	
1 pp subsidy cut: year 3 before reform	-0.001 (0.001)	
1 pp subsidy cut: year 2 before reform	-0.001 (0.001)	
1 pp subsidy cut: year 0 after reform	-0.001 (0.001)	
1 pp subsidy cut: year 1 after reform	-0.002 (0.001)	
1 pp subsidy cut: year 2 after reform	-0.004 (0.001)	
1 pp subsidy cut: year 3 after reform	-0.005 (0.002)	
1 pp subsidy cut: year 4 after reform	-0.006 (0.003)	
1 pp subsidy cut: year 5 after reform	-0.006 (0.002)	
1 pp subsidy cut: year 6 after reform	-0.007 (0.003)	
1 pp subsidy cut: year 7 after reform	-0.009 (0.003)	
1 pp subsidy cut: year 8 after reform	-0.009 (0.003)	
1 pp subsidy cut: year 9 after reform	-0.010 (0.003)	
1 pp subsidy cut: year 10 after reform	-0.011 (0.004)	
1 pp subsidy cut for plants with less than 50 employees: year 4 before reform		0.001 (0.001)
1 pp subsidy cut for plants with less than 50 employees: year 3 before reform		-0.001 (0.001)
1 pp subsidy cut for plants with less than 50 employees: year 2 before reform		-0.001 (0.001)
1 pp subsidy cut for plants with less than 50 employees: year 0 after reform		-0.001 (0.001)
1 pp subsidy cut for plants with less than 50 employees: year 1 after reform		-0.002 (0.001)
1 pp subsidy cut for plants with less than 50 employees: year 2 after reform		-0.004 (0.001)
1 pp subsidy cut for plants with less than 50 employees: year 3 after reform		-0.005 (0.002)
1 pp subsidy cut for plants with less than 50 employees: year 4 after reform		-0.007 (0.002)
1 pp subsidy cut for plants with less than 50 employees: year 5 after reform		-0.006 (0.002)
1 pp subsidy cut for plants with less than 50 employees: year 6 after reform		-0.007 (0.002)
1 pp subsidy cut for plants with less than 50 employees: year 7 after reform		-0.010 (0.003)
1 pp subsidy cut for plants with less than 50 employees: year 8 after reform		-0.010 (0.003)
1 pp subsidy cut for plants with less than 50 employees: year 9 after reform		-0.010 (0.003)
1 pp subsidy cut for plants with less than 50 employees: year 10 after reform		-0.012 (0.004)
1 pp subsidy cut for plants with 50 or more employees: year 4 before reform		-0.011 (0.007)
1 pp subsidy cut for plants with 50 or more employees: year 3 before reform		-0.004 (0.005)
1 pp subsidy cut for plants with 50 or more employees: year 2 before reform		-0.004 (0.004)
1 pp subsidy cut for plants with 50 or more employees: year 0 after reform		-0.002 (0.004)
1 pp subsidy cut for plants with 50 or more employees: year 1 after reform		-0.003 (0.005)
1 pp subsidy cut for plants with 50 or more employees: year 2 after reform		-0.005 (0.004)
1 pp subsidy cut for plants with 50 or more employees: year 3 after reform		-0.000 (0.006)
1 pp subsidy cut for plants with 50 or more employees: year 4 after reform		0.001 (0.009)
1 pp subsidy cut for plants with 50 or more employees: year 5 after reform		-0.004 (0.008)
1 pp subsidy cut for plants with 50 or more employees: year 6 after reform		0.000 (0.010)
1 pp subsidy cut for plants with 50 or more employees: year 7 after reform		0.004 (0.010)
1 pp subsidy cut for plants with 50 or more employees: year 8 after reform		0.003 (0.011)
1 pp subsidy cut for plants with 50 or more employees: year 9 after reform		0.005 (0.011)
1 pp subsidy cut for plants with 50 or more employees: year 10 after reform		0.004 (0.017)
N	192063	192063

Notes: Standard errors in parentheses. See Appendix Figure A.1b for detailed information.

Table D.6: Event study estimates: manufacturing employment in large plants

	(1)
	log manufacturing employment
1 pp subsidy cut: year 4 before reform	0.000 (0.001)
1 pp subsidy cut: year 3 before reform	0.001 (0.001)
1 pp subsidy cut: year 2 before reform	0.001 (0.001)
1 pp subsidy cut: year 0 after reform	-0.000 (0.001)
1 pp subsidy cut: year 1 after reform	-0.000 (0.002)
1 pp subsidy cut: year 2 after reform	-0.002 (0.002)
1 pp subsidy cut: year 3 after reform	-0.003 (0.003)
1 pp subsidy cut: year 4 after reform	-0.003 (0.003)
1 pp subsidy cut: year 5 after reform	-0.003 (0.003)
1 pp subsidy cut: year 6 after reform	-0.003 (0.003)
1 pp subsidy cut: year 7 after reform	-0.004 (0.003)
1 pp subsidy cut: year 8 after reform	-0.004 (0.004)
1 pp subsidy cut: year 9 after reform	-0.004 (0.003)
1 pp subsidy cut: year 10 after reform	-0.004 (0.005)
N	96672

Notes: Standard errors in parentheses. See Figure A.2 for detailed information.

Table D.7: Event study estimates: manufacturing employment by skill

	(1) log manufacturing employment: low-skill	(2) log manufacturing employment: medium-skill	(3) log manufacturing employment: high-skill
1 pp subsidy cut: year 4 before reform	0.001 (0.002)	0.001 (0.001)	-0.001 (0.002)
1 pp subsidy cut: year 3 before reform	-0.001 (0.002)	-0.001 (0.001)	-0.001 (0.001)
1 pp subsidy cut: year 2 before reform	-0.001 (0.001)	0.000 (0.001)	-0.000 (0.001)
1 pp subsidy cut: year 0 after reform	-0.000 (0.001)	-0.001 (0.001)	-0.001 (0.001)
1 pp subsidy cut: year 1 after reform	-0.001 (0.002)	-0.002 (0.001)	-0.001 (0.001)
1 pp subsidy cut: year 2 after reform	-0.001 (0.002)	-0.004 (0.001)	-0.001 (0.001)
1 pp subsidy cut: year 3 after reform	-0.001 (0.002)	-0.004 (0.001)	-0.003 (0.002)
1 pp subsidy cut: year 4 after reform	-0.003 (0.002)	-0.005 (0.002)	-0.001 (0.002)
1 pp subsidy cut: year 5 after reform	-0.002 (0.002)	-0.006 (0.001)	-0.002 (0.003)
1 pp subsidy cut: year 6 after reform	-0.002 (0.003)	-0.006 (0.002)	-0.002 (0.003)
1 pp subsidy cut: year 7 after reform	-0.002 (0.003)	-0.008 (0.002)	-0.003 (0.003)
1 pp subsidy cut: year 8 after reform	-0.003 (0.003)	-0.008 (0.002)	-0.003 (0.003)
1 pp subsidy cut: year 9 after reform	-0.003 (0.003)	-0.009 (0.002)	-0.002 (0.003)
1 pp subsidy cut: year 10 after reform	-0.001 (0.004)	-0.010 (0.003)	-0.005 (0.004)
N	114771	299229	123354

Notes: Standard errors in parentheses. See Appendix Figure A.3 for detailed information.

Table D.8: Event study estimates: manufacturing employment (increases & decreases)

	(1) log manufacturing employment
1 pp subsidy cut: year 4 before reform	-0.000 (0.001)
1 pp subsidy cut: year 3 before reform	-0.001 (0.001)
1 pp subsidy cut: year 2 before reform	-0.000 (0.001)
1 pp subsidy cut: year 0 after reform	-0.001 (0.001)
1 pp subsidy cut: year 1 after reform	-0.002 (0.001)
1 pp subsidy cut: year 2 after reform	-0.003 (0.001)
1 pp subsidy cut: year 3 after reform	-0.004 (0.002)
1 pp subsidy cut: year 4 after reform	-0.005 (0.002)
1 pp subsidy cut: year 5 after reform	-0.005 (0.002)
1 pp subsidy cut: year 6 after reform	-0.006 (0.002)
1 pp subsidy cut: year 7 after reform	-0.009 (0.003)
1 pp subsidy cut: year 8 after reform	-0.009 (0.003)
1 pp subsidy cut: year 9 after reform	-0.010 (0.003)
1 pp subsidy cut: year 10 after reform	-0.013 (0.003)
1 pp subsidy increase: year 4 before reform	-0.003 (0.004)
1 pp subsidy increase: year 3 before reform	-0.003 (0.003)
1 pp subsidy increase: year 2 before reform	-0.004 (0.002)
1 pp subsidy increase: year 0 after reform	0.008 (0.003)
1 pp subsidy increase: year 1 after reform	0.006 (0.003)
1 pp subsidy increase: year 2 after reform	0.012 (0.004)
1 pp subsidy increase: year 3 after reform	0.008 (0.004)
1 pp subsidy increase: year 4 after reform	0.009 (0.006)
1 pp subsidy increase: year 5 after reform	0.009 (0.006)
1 pp subsidy increase: year 6 after reform	0.008 (0.005)
1 pp subsidy increase: year 7 after reform	0.011 (0.006)
1 pp subsidy increase: year 8 after reform	0.011 (0.005)
1 pp subsidy increase: year 9 after reform	0.010 (0.006)
1 pp subsidy increase: year 10 after reform	0.007 (0.005)
N	312503

Notes: Standard errors in parentheses. See Figure 4 for detailed information.

Table D.9: Event study estimates: number of manufacturing plants and county-level manufacturing employment

	(1) log number of manufacturing plants	(2) log manufacturing employment
1 pp subsidy cut: year 4 before reform	-0.001 (0.001)	-0.001 (0.002)
1 pp subsidy cut: year 3 before reform	-0.000 (0.001)	-0.000 (0.002)
1 pp subsidy cut: year 2 before reform	-0.000 (0.001)	0.000 (0.001)
1 pp subsidy cut: year 0 after reform	-0.000 (0.001)	0.001 (0.001)
1 pp subsidy cut: year 1 after reform	-0.001 (0.001)	-0.000 (0.002)
1 pp subsidy cut: year 2 after reform	-0.001 (0.001)	-0.003 (0.002)
1 pp subsidy cut: year 3 after reform	-0.001 (0.001)	-0.004 (0.002)
1 pp subsidy cut: year 4 after reform	-0.001 (0.002)	-0.005 (0.003)
1 pp subsidy cut: year 5 after reform	-0.001 (0.002)	-0.005 (0.004)
1 pp subsidy cut: year 6 after reform	-0.001 (0.002)	-0.006 (0.004)
1 pp subsidy cut: year 7 after reform	0.000 (0.003)	-0.008 (0.005)
1 pp subsidy cut: year 8 after reform	-0.001 (0.003)	-0.009 (0.005)
1 pp subsidy cut: year 9 after reform	0.001 (0.003)	-0.010 (0.005)
1 pp subsidy cut: year 10 after reform	0.000 (0.003)	-0.010 (0.006)
N	1210	1210

Notes: Standard errors in parentheses. See Appendix Figure A.4 for detailed information.

Table D.10: Event study estimates: manufacturing employment by reform year

	(1) log manufacturing employment
1 pp subsidy cut in the 2007 reform: year 4 before reform	0.001 (0.002)
1 pp subsidy cut in the 2007 reform: year 3 before reform	-0.000 (0.002)
1 pp subsidy cut in the 2007 reform: year 2 before reform	0.002 (0.001)
1 pp subsidy cut in the 2007 reform: year 0 after reform	-0.002 (0.002)
1 pp subsidy cut in the 2007 reform: year 1 after reform	-0.002 (0.002)
1 pp subsidy cut in the 2007 reform: year 2 after reform	-0.004 (0.002)
1 pp subsidy cut in the 2007 reform: year 3 after reform	-0.004 (0.003)
1 pp subsidy cut in the 2007 reform: year 4 after reform	-0.004 (0.003)
1 pp subsidy cut in the 2007 reform: year 5 after reform	-0.004 (0.003)
1 pp subsidy cut in the 2007 reform: year 6 after reform	-0.005 (0.003)
1 pp subsidy cut in the 2007 reform: year 7 after reform	-0.006 (0.003)
1 pp subsidy cut in the 2007 reform: year 8 after reform	-0.007 (0.003)
1 pp subsidy cut in the 2007 reform: year 9 after reform	-0.007 (0.003)
1 pp subsidy cut in the 2007 reform: year 10 after reform	-0.009 (0.003)
1 pp subsidy cut in all other reforms: year 4 before reform	0.000 (0.001)
1 pp subsidy cut in all other reforms: year 3 before reform	-0.001 (0.001)
1 pp subsidy cut in all other reforms: year 2 before reform	-0.000 (0.001)
1 pp subsidy cut in all other reforms: year 0 after reform	-0.001 (0.001)
1 pp subsidy cut in all other reforms: year 1 after reform	-0.002 (0.001)
1 pp subsidy cut in all other reforms: year 2 after reform	-0.003 (0.001)
1 pp subsidy cut in all other reforms: year 3 after reform	-0.004 (0.002)
1 pp subsidy cut in all other reforms: year 4 after reform	-0.006 (0.002)
1 pp subsidy cut in all other reforms: year 5 after reform	-0.005 (0.002)
1 pp subsidy cut in all other reforms: year 6 after reform	-0.006 (0.002)
1 pp subsidy cut in all other reforms: year 7 after reform	-0.009 (0.003)
1 pp subsidy cut in all other reforms: year 8 after reform	-0.008 (0.003)
1 pp subsidy cut in all other reforms: year 9 after reform	-0.010 (0.003)
1 pp subsidy cut in all other reforms: year 10 after reform	-0.011 (0.004)
N	312503

Notes: Standard errors in parentheses. See Appendix Figure A.5a for detailed information.

Table D.11: Event study estimates: manufacturing employment by reform year

	(1) log manufacturing employment
1 pp subsidy cut in the 2011 reform: year 4 before reform	0.001 (0.001)
1 pp subsidy cut in the 2011 reform: year 3 before reform	0.001 (0.001)
1 pp subsidy cut in the 2011 reform: year 2 before reform	0.001 (0.001)
1 pp subsidy cut in the 2011 reform: year 0 after reform	-0.001 (0.001)
1 pp subsidy cut in the 2011 reform: year 1 after reform	-0.001 (0.001)
1 pp subsidy cut in the 2011 reform: year 2 after reform	-0.000 (0.002)
1 pp subsidy cut in the 2011 reform: year 3 after reform	-0.003 (0.002)
1 pp subsidy cut in the 2011 reform: year 4 after reform	-0.003 (0.002)
1 pp subsidy cut in the 2011 reform: year 5 after reform	-0.004 (0.002)
1 pp subsidy cut in the 2011 reform: year 6 after reform	-0.005 (0.003)
1 pp subsidy cut in all other reforms: year 4 before reform	-0.001 (0.002)
1 pp subsidy cut in all other reforms: year 3 before reform	-0.002 (0.002)
1 pp subsidy cut in all other reforms: year 2 before reform	-0.001 (0.002)
1 pp subsidy cut in all other reforms: year 0 after reform	-0.002 (0.001)
1 pp subsidy cut in all other reforms: year 1 after reform	-0.002 (0.001)
1 pp subsidy cut in all other reforms: year 2 after reform	-0.004 (0.001)
1 pp subsidy cut in all other reforms: year 3 after reform	-0.004 (0.002)
1 pp subsidy cut in all other reforms: year 4 after reform	-0.006 (0.002)
1 pp subsidy cut in all other reforms: year 5 after reform	-0.006 (0.002)
1 pp subsidy cut in all other reforms: year 6 after reform	-0.006 (0.002)
1 pp subsidy cut in all other reforms: year 7 after reform	-0.008 (0.002)
1 pp subsidy cut in all other reforms: year 8 after reform	-0.008 (0.002)
1 pp subsidy cut in all other reforms: year 9 after reform	-0.008 (0.002)
1 pp subsidy cut in all other reforms: year 10 after reform	-0.010 (0.003)
N	312503

Notes: Standard errors in parentheses. See Appendix Figure A.5b for detailed information.

Table D.12: Event study estimates: wages

	(1) log median manufacturing wage	(2) log mean manufacturing wage	(3) log median wage
1 pp subsidy cut: year 4 before reform	0.000 (0.002)	0.001 (0.003)	-0.001 (0.001)
1 pp subsidy cut: year 3 before reform	-0.001 (0.001)	-0.000 (0.002)	-0.000 (0.000)
1 pp subsidy cut: year 2 before reform	-0.001 (0.001)	0.001 (0.001)	-0.000 (0.000)
1 pp subsidy cut: year 0 after reform	-0.001 (0.001)	-0.000 (0.001)	0.000 (0.000)
1 pp subsidy cut: year 1 after reform	0.000 (0.001)	0.001 (0.001)	0.000 (0.001)
1 pp subsidy cut: year 2 after reform	0.001 (0.001)	0.002 (0.002)	0.001 (0.001)
1 pp subsidy cut: year 3 after reform	-0.001 (0.002)	0.002 (0.003)	0.000 (0.001)
1 pp subsidy cut: year 4 after reform	-0.001 (0.002)	0.000 (0.003)	0.001 (0.001)
1 pp subsidy cut: year 5 after reform	-0.000 (0.002)	0.002 (0.003)	0.001 (0.001)
1 pp subsidy cut: year 6 after reform	-0.001 (0.003)	0.002 (0.003)	0.001 (0.001)
1 pp subsidy cut: year 7 after reform	-0.001 (0.003)	0.002 (0.004)	0.001 (0.001)
1 pp subsidy cut: year 8 after reform	-0.001 (0.004)	0.003 (0.004)	0.002 (0.001)
1 pp subsidy cut: year 9 after reform	-0.001 (0.005)	0.002 (0.004)	0.001 (0.002)
1 pp subsidy cut: year 10 after reform	-0.001 (0.005)	0.004 (0.006)	0.000 (0.002)
N	1045	1045	1045

Notes: Standard errors in parentheses. See Appendix Figures A.6a, A.7a, and A.7b for detailed information.

Table D.13: Event study estimates: manufacturing wages by skill

	(1) log median low-skilled manufacturing wage	(2) log median medium-skilled manufacturing wage	(3) log median high-skilled manufacturing wage
1 pp subsidy cut: year 4 before reform	-0.003 (0.009)	0.001 (0.002)	0.002 (0.003)
1 pp subsidy cut: year 3 before reform	-0.007 (0.008)	-0.000 (0.001)	0.002 (0.002)
1 pp subsidy cut: year 2 before reform	-0.003 (0.005)	-0.001 (0.001)	-0.000 (0.002)
1 pp subsidy cut: year 0 after reform	0.004 (0.011)	-0.001 (0.001)	0.001 (0.003)
1 pp subsidy cut: year 1 after reform	0.015 (0.014)	0.000 (0.001)	0.000 (0.002)
1 pp subsidy cut: year 2 after reform	0.032** (0.015)	-0.000 (0.001)	0.005 (0.003)
1 pp subsidy cut: year 3 after reform	0.009 (0.017)	0.000 (0.002)	0.002 (0.004)
1 pp subsidy cut: year 4 after reform	0.017 (0.019)	-0.001 (0.002)	-0.002 (0.004)
1 pp subsidy cut: year 5 after reform	0.009 (0.018)	-0.000 (0.002)	-0.002 (0.005)
1 pp subsidy cut: year 6 after reform	0.011 (0.021)	0.000 (0.003)	0.000 (0.005)
1 pp subsidy cut: year 7 after reform	-0.005 (0.025)	-0.000 (0.003)	-0.000 (0.007)
1 pp subsidy cut: year 8 after reform	0.003 (0.025)	-0.002 (0.004)	0.000 (0.008)
1 pp subsidy cut: year 9 after reform	0.005 (0.028)	-0.001 (0.004)	0.001 (0.008)
1 pp subsidy cut: year 10 after reform	0.005 (0.029)	-0.003 (0.004)	-0.003 (0.009)
N	1024	1045	1045

Notes: Standard errors in parentheses. See Appendix Figure A.6b for detailed information.

Table D.14: Event study estimates: employment by industry

	(1) log retail employment	(2) log construction employment	(3) log total employment
1 pp subsidy cut: year 4 before reform	-0.000 (0.001)	-0.001 (0.001)	0.000 (0.001)
1 pp subsidy cut: year 3 before reform	-0.001 (0.001)	-0.002 (0.001)	-0.000 (0.000)
1 pp subsidy cut: year 2 before reform	-0.001 (0.000)	-0.002 (0.001)	-0.000 (0.000)
1 pp subsidy cut: year 0 after reform	0.000 (0.001)	-0.001 (0.001)	-0.000 (0.000)
1 pp subsidy cut: year 1 after reform	-0.001 (0.001)	-0.003 (0.001)	-0.001 (0.000)
1 pp subsidy cut: year 2 after reform	-0.001 (0.001)	-0.002 (0.001)	-0.001 (0.001)
1 pp subsidy cut: year 3 after reform	-0.002 (0.001)	-0.002 (0.001)	-0.001 (0.001)
1 pp subsidy cut: year 4 after reform	-0.002 (0.001)	-0.004 (0.002)	-0.001 (0.001)
1 pp subsidy cut: year 5 after reform	-0.002 (0.001)	-0.004 (0.002)	-0.001 (0.001)
1 pp subsidy cut: year 6 after reform	-0.002 (0.002)	-0.004 (0.002)	-0.001 (0.001)
1 pp subsidy cut: year 7 after reform	-0.003 (0.002)	-0.004 (0.002)	-0.002 (0.001)
1 pp subsidy cut: year 8 after reform	-0.003 (0.002)	-0.005 (0.002)	-0.002 (0.001)
1 pp subsidy cut: year 9 after reform	-0.003 (0.002)	-0.004 (0.003)	-0.002 (0.001)
1 pp subsidy cut: year 10 after reform	-0.003 (0.002)	-0.005 (0.003)	-0.002 (0.002)
N	652099	409551	3252514

Notes: Standard errors in parentheses. See Figure 5a and Appendix Figure A.15 for detailed information.

Table D.15: Event study estimates: spillover test of Bruhn (2018)

	(1)	(2)
	log manufacturing employment	log manufacturing employment
1 pp subsidy cut: year 4 before reform	-0.000 (0.001)	-0.000 (0.001)
1 pp subsidy cut: year 3 before reform	0.000 (0.001)	-0.001 (0.001)
1 pp subsidy cut: year 2 before reform	-0.000 (0.001)	-0.000 (0.001)
1 pp subsidy cut: year 0 after reform	-0.002 (0.000)	-0.001 (0.001)
1 pp subsidy cut: year 1 after reform	-0.003 (0.001)	-0.002 (0.001)
1 pp subsidy cut: year 2 after reform	-0.002 (0.001)	-0.003 (0.001)
1 pp subsidy cut: year 3 after reform	-0.003 (0.001)	-0.005 (0.002)
1 pp subsidy cut: year 4 after reform	-0.004 (0.001)	-0.006 (0.002)
1 pp subsidy cut: year 5 after reform	-0.007 (0.002)	-0.008 (0.002)
1 pp subsidy cut: year 6 after reform	-0.006 (0.002)	-0.008 (0.003)
1 pp subsidy cut: year 7 after reform	-0.007 (0.002)	-0.011 (0.003)
1 pp subsidy cut: year 8 after reform	-0.009 (0.003)	-0.011 (0.003)
1 pp subsidy cut: year 9 after reform	-0.010 (0.003)	-0.012 (0.003)
1 pp subsidy cut: year 10 after reform	-0.009 (0.003)	-0.013 (0.004)
1 pp subsidy cut to other counties: year 4 before reform		-0.000 (0.000)
1 pp subsidy cut to other counties: year 3 before reform		-0.000 (0.000)
1 pp subsidy cut to other counties: year 2 before reform		-0.000 (0.000)
1 pp subsidy cut to other counties: year 0 after reform		-0.000 (0.000)
1 pp subsidy cut to other counties: year 1 after reform		-0.000 (0.000)
1 pp subsidy cut to other counties: year 2 after reform		-0.000 (0.000)
1 pp subsidy cut to other counties: year 3 after reform		-0.000 (0.001)
1 pp subsidy cut to other counties: year 4 after reform		-0.001 (0.001)
1 pp subsidy cut to other counties: year 5 after reform		-0.001 (0.001)
1 pp subsidy cut to other counties: year 6 after reform		-0.002 (0.001)
1 pp subsidy cut to other counties: year 7 after reform		-0.002 (0.001)
1 pp subsidy cut to other counties: year 8 after reform		-0.002 (0.001)
1 pp subsidy cut to other counties: year 9 after reform		-0.002 (0.001)
1 pp subsidy cut to other counties: year 10 after reform		-0.002 (0.001)
time polynomial	yes	yes
N	312503	312503

Notes: Standard errors in parentheses. See Appendix Figures A.8a and A.8b for detailed information.

Table D.16: Event study estimates: house price, land & rent per square meter

	(1) log land price per square meter	(2) log rent per square meter	(3) log house price per square meter
1 pp subsidy cut: year 4 before reform	0.007 (0.009)	-0.001 (0.002)	0.003 (0.004)
1 pp subsidy cut: year 3 before reform	0.007 (0.010)	0.000 (0.001)	0.004 (0.004)
1 pp subsidy cut: year 2 before reform	0.005 (0.008)	0.000 (0.001)	0.004 (0.002)
1 pp subsidy cut: year 0 after reform	-0.003 (0.009)	-0.002 (0.002)	0.001 (0.004)
1 pp subsidy cut: year 1 after reform	0.002 (0.010)	-0.001 (0.002)	0.000 (0.006)
1 pp subsidy cut: year 2 after reform	-0.006 (0.009)	-0.002 (0.002)	0.002 (0.006)
1 pp subsidy cut: year 3 after reform	-0.002 (0.011)	-0.002 (0.003)	-0.001 (0.007)
1 pp subsidy cut: year 4 after reform	-0.006 (0.012)	-0.002 (0.004)	-0.000 (0.008)
1 pp subsidy cut: year 5 after reform	0.001 (0.013)	-0.004 (0.004)	-0.001 (0.008)
1 pp subsidy cut: year 6 after reform	0.003 (0.014)	-0.002 (0.005)	0.004 (0.009)
1 pp subsidy cut: year 7 after reform	-0.003 (0.013)	-0.004 (0.006)	-0.004 (0.009)
1 pp subsidy cut: year 8 after reform	-0.008 (0.014)	-0.002 (0.006)	0.002 (0.009)
1 pp subsidy cut: year 9 after reform	0.002 (0.013)	-0.003 (0.006)	-0.001 (0.009)
1 pp subsidy cut: year 10 after reform	-0.007 (0.019)	-0.002 (0.006)	-0.004 (0.009)
N	1205	550	550

Notes: Standard errors in parentheses. See Appendix Figure A.10 for detailed information.

Table D.17: Event study estimates: manufacturing employment at the labor market level

	(1) log manufacturing employment
1 pp subsidy cut: year 4 before reform	-0.001 (0.003)
1 pp subsidy cut: year 3 before reform	-0.000 (0.002)
1 pp subsidy cut: year 2 before reform	0.000 (0.001)
1 pp subsidy cut: year 0 after reform	0.000 (0.001)
1 pp subsidy cut: year 1 after reform	-0.001 (0.002)
1 pp subsidy cut: year 2 after reform	-0.003 (0.002)
1 pp subsidy cut: year 3 after reform	-0.003 (0.003)
1 pp subsidy cut: year 4 after reform	-0.003 (0.003)
1 pp subsidy cut: year 5 after reform	-0.002 (0.004)
1 pp subsidy cut: year 6 after reform	-0.004 (0.004)
1 pp subsidy cut: year 7 after reform	-0.008 (0.005)
1 pp subsidy cut: year 8 after reform	-0.009 (0.005)
1 pp subsidy cut: year 9 after reform	-0.010 (0.005)
1 pp subsidy cut: year 10 after reform	-0.010 (0.006)
N	726

Notes: Standard errors in parentheses. See Figure 5b for detailed information.

Table D.18: Event study estimates: treatment of other counties in the local labor market

	(1) log manufacturing employment
1 pp subsidy cut: year 4 before reform	-0.000 (0.001)
1 pp subsidy cut: year 3 before reform	-0.001 (0.001)
1 pp subsidy cut: year 2 before reform	0.000 (0.001)
1 pp subsidy cut: year 0 after reform	-0.001 (0.001)
1 pp subsidy cut: year 1 after reform	-0.001 (0.001)
1 pp subsidy cut: year 2 after reform	-0.003 (0.001)
1 pp subsidy cut: year 3 after reform	-0.003 (0.001)
1 pp subsidy cut: year 4 after reform	-0.005 (0.002)
1 pp subsidy cut: year 5 after reform	-0.006 (0.001)
1 pp subsidy cut: year 6 after reform	-0.006 (0.002)
1 pp subsidy cut: year 7 after reform	-0.007 (0.002)
1 pp subsidy cut: year 8 after reform	-0.007 (0.002)
1 pp subsidy cut: year 9 after reform	-0.008 (0.002)
1 pp subsidy cut: year 10 after reform	-0.009 (0.003)
1 pp subsidy cut to neighbors: year 4 before reform	0.000 (0.001)
1 pp subsidy cut to neighbors: year 3 before reform	0.000 (0.000)
1 pp subsidy cut to neighbors: year 2 before reform	-0.000 (0.000)
1 pp subsidy cut to neighbors: year 0 after reform	-0.000 (0.000)
1 pp subsidy cut to neighbors: year 1 after reform	-0.000 (0.000)
1 pp subsidy cut to neighbors: year 2 after reform	-0.000 (0.001)
1 pp subsidy cut to neighbors: year 3 after reform	-0.000 (0.000)
1 pp subsidy cut to neighbors: year 4 after reform	0.000 (0.001)
1 pp subsidy cut to neighbors: year 5 after reform	0.001 (0.001)
1 pp subsidy cut to neighbors: year 6 after reform	0.001 (0.001)
1 pp subsidy cut to neighbors: year 7 after reform	-0.001 (0.002)
1 pp subsidy cut to neighbors: year 8 after reform	-0.001 (0.002)
1 pp subsidy cut to neighbors: year 9 after reform	-0.001 (0.002)
1 pp subsidy cut to neighbors: year 10 after reform	-0.000 (0.002)
N	312503

Notes: Standard errors in parentheses. See Appendix Figure A.11 for detailed information.

Table D.19: Event study estimates: net commuting flow per employee and population

	(1) ihs net commuting flow per employee	(2) log population
1 pp subsidy cut: year 4 before reform	-0.002 (0.008)	0.000 (0.000)
1 pp subsidy cut: year 3 before reform	-0.001 (0.006)	0.000 (0.000)
1 pp subsidy cut: year 2 before reform	0.001 (0.005)	-0.000 (0.000)
1 pp subsidy cut: year 0 after reform	0.003 (0.003)	0.000 (0.000)
1 pp subsidy cut: year 1 after reform	0.003 (0.005)	0.000 (0.001)
1 pp subsidy cut: year 2 after reform	0.002 (0.008)	0.001 (0.001)
1 pp subsidy cut: year 3 after reform	0.005 (0.010)	0.001 (0.001)
1 pp subsidy cut: year 4 after reform	0.002 (0.015)	0.001 (0.001)
1 pp subsidy cut: year 5 after reform	0.001 (0.018)	0.002 (0.001)
1 pp subsidy cut: year 6 after reform	0.001 (0.021)	0.002 (0.001)
1 pp subsidy cut: year 7 after reform	0.002 (0.024)	0.002 (0.002)
1 pp subsidy cut: year 8 after reform	0.001 (0.025)	0.002 (0.002)
1 pp subsidy cut: year 9 after reform	0.000 (0.027)	0.002 (0.002)
1 pp subsidy cut: year 10 after reform	0.007 (0.030)	0.002 (0.002)
N	1045	1210

Notes: Standard errors in parentheses. See Appendix Figure A.9 for detailed information.

Table D.20: Event study estimates: trade spillover

	(1) log manufacturing employment	(2) log manufacturing employment
1% trade exposure to 1 pp subsidy cut: year 4 before reform	0.000000 (0.000009)	0.000002 (0.000011)
1% trade exposure to 1 pp subsidy cut: year 3 before reform	-0.000011 (0.000007)	-0.000009 (0.000007)
1% trade exposure to 1 pp subsidy cut: year 2 before reform	-0.000004 (0.000006)	-0.000002 (0.000006)
1% trade exposure to 1 pp subsidy cut: year 0 after reform	-0.000014 (0.000006)	-0.000014 (0.000007)
1% trade exposure to 1 pp subsidy cut: year 1 after reform	-0.000017 (0.000009)	-0.000018 (0.000010)
1% trade exposure to 1 pp subsidy cut: year 2 after reform	-0.000032 (0.000009)	-0.000035 (0.000012)
1% trade exposure to 1 pp subsidy cut: year 3 after reform	-0.000030 (0.000012)	-0.000033 (0.000014)
1% trade exposure to 1 pp subsidy cut: year 4 after reform	-0.000038 (0.000015)	-0.000040 (0.000019)
1% trade exposure to 1 pp subsidy cut: year 5 after reform	-0.000044 (0.000017)	-0.000048 (0.000021)
1% trade exposure to 1 pp subsidy cut: year 6 after reform	-0.000051 (0.000019)	-0.000053 (0.000023)
1% trade exposure to 1 pp subsidy cut: year 7 after reform	-0.000053 (0.000019)	-0.000051 (0.000022)
1% trade exposure to 1 pp subsidy cut: year 8 after reform	-0.000058 (0.000020)	-0.000056 (0.000023)
1% trade exposure to 1 pp subsidy cut: year 9 after reform	-0.000066 (0.000019)	-0.000065 (0.000023)
1% trade exposure to 1 pp subsidy cut: year 10 after reform	-0.000092 (0.000032)	-0.000094 (0.000038)
sample restriction	full sample	only West Germany
N	2555361	2153915

Notes: Standard errors in parentheses. See Appendix Figures 5c and A.13a for detailed information.

Table D.21: Event study estimates: trade spillover using 2010 trade exposure

	(1) log manufacturing employment
1% trade exposure to 1 pp subsidy cut: year 4 before reform	-0.000002 (0.000009)
1% trade exposure to 1 pp subsidy cut: year 3 before reform	-0.000008 (0.000006)
1% trade exposure to 1 pp subsidy cut: year 2 before reform	-0.000006 (0.000005)
1% trade exposure to 1 pp subsidy cut: year 0 after reform	-0.000010 (0.000005)
1% trade exposure to 1 pp subsidy cut: year 1 after reform	-0.000010 (0.000007)
1% trade exposure to 1 pp subsidy cut: year 2 after reform	-0.000019 (0.000009)
1% trade exposure to 1 pp subsidy cut: year 3 after reform	-0.000019 (0.000011)
1% trade exposure to 1 pp subsidy cut: year 4 after reform	-0.000023 (0.000014)
1% trade exposure to 1 pp subsidy cut: year 5 after reform	-0.000023 (0.000015)
1% trade exposure to 1 pp subsidy cut: year 6 after reform	-0.000027 (0.000018)
1% trade exposure to 1 pp subsidy cut: year 7 after reform	-0.000028 (0.000018)
1% trade exposure to 1 pp subsidy cut: year 8 after reform	-0.000026 (0.000019)
1% trade exposure to 1 pp subsidy cut: year 9 after reform	-0.000035 (0.000019)
1% trade exposure to 1 pp subsidy cut: year 10 after reform	-0.000059 (0.000031)
N	2555361

Notes: Standard errors in parentheses. See Appendix Figure A.13b for detailed information.

Table D.22: Event study estimates: import and export spillover

	(1) log manufacturing employment
1% import exposure to 1 pp subsidy cut: year 4 before reform	-0.000005 (0.000018)
1% import exposure to 1 pp subsidy cut: year 3 before reform	-0.000023 (0.000011)
1% import exposure to 1 pp subsidy cut: year 2 before reform	-0.000014 (0.000009)
1% import exposure to 1 pp subsidy cut: year 0 after reform	-0.000012 (0.000008)
1% import exposure to 1 pp subsidy cut: year 1 after reform	-0.000023 (0.000011)
1% import exposure to 1 pp subsidy cut: year 2 after reform	-0.000038 (0.000014)
1% import exposure to 1 pp subsidy cut: year 3 after reform	-0.000038 (0.000017)
1% import exposure to 1 pp subsidy cut: year 4 after reform	-0.000052 (0.000022)
1% import exposure to 1 pp subsidy cut: year 5 after reform	-0.000060 (0.000025)
1% import exposure to 1 pp subsidy cut: year 6 after reform	-0.000065 (0.000029)
1% import exposure to 1 pp subsidy cut: year 7 after reform	-0.000060 (0.000028)
1% import exposure to 1 pp subsidy cut: year 8 after reform	-0.000070 (0.000030)
1% import exposure to 1 pp subsidy cut: year 9 after reform	-0.000074 (0.000030)
1% import exposure to 1 pp subsidy cut: year 10 after reform	-0.000098 (0.000049)
1% export exposure to 1 pp subsidy cut: year 4 before reform	0.000007 (0.000018)
1% export exposure to 1 pp subsidy cut: year 3 before reform	0.000006 (0.000014)
1% export exposure to 1 pp subsidy cut: year 2 before reform	0.000010 (0.000011)
1% export exposure to 1 pp subsidy cut: year 0 after reform	-0.000017 (0.000010)
1% export exposure to 1 pp subsidy cut: year 1 after reform	-0.000009 (0.000013)
1% export exposure to 1 pp subsidy cut: year 2 after reform	-0.000023 (0.000015)
1% export exposure to 1 pp subsidy cut: year 3 after reform	-0.000020 (0.000020)
1% export exposure to 1 pp subsidy cut: year 4 after reform	-0.000019 (0.000025)
1% export exposure to 1 pp subsidy cut: year 5 after reform	-0.000022 (0.000027)
1% export exposure to 1 pp subsidy cut: year 6 after reform	-0.000032 (0.000031)
1% export exposure to 1 pp subsidy cut: year 7 after reform	-0.000044 (0.000032)
1% export exposure to 1 pp subsidy cut: year 8 after reform	-0.000041 (0.000033)
1% export exposure to 1 pp subsidy cut: year 9 after reform	-0.000055 (0.000036)
1% export exposure to 1 pp subsidy cut: year 10 after reform	-0.000085 (0.000051)
N	2555361

Notes: Standard errors in parentheses. See Appendix Figure A.12 for detailed information.

Table D.23: Event study estimates: Within-firm spillover

	(1) log manufacturing employment
1% firm exposure to 1 pp subsidy cut: year 4 before reform	0.000048 (0.000038)
1% firm exposure to 1 pp subsidy cut: year 3 before reform	-0.000026 (0.000047)
1% firm exposure to 1 pp subsidy cut: year 2 before reform	0.000056 (0.000036)
1% firm exposure to 1 pp subsidy cut: year after reform	0.000088 (0.000045)
1% firm exposure to 1 pp subsidy cut: year after reform	0.000055 (0.000039)
1% firm exposure to 1 pp subsidy cut: year after reform	0.000043 (0.000046)
1% firm exposure to 1 pp subsidy cut: year after reform	-0.000012 (0.000061)
1% firm exposure to 1 pp subsidy cut: year after reform	0.000069 (0.000059)
1% firm exposure to 1 pp subsidy cut: year after reform	0.000023 (0.000064)
1% firm exposure to 1 pp subsidy cut: year after reform	-0.000044 (0.000077)
1% firm exposure to 1 pp subsidy cut: year after reform	-0.000088 (0.000108)
1% firm exposure to 1 pp subsidy cut: year after reform	-0.000005 (0.000107)
1% firm exposure to 1 pp subsidy cut: year after reform	-0.000098 (0.000108)
1% firm exposure to 1 pp subsidy cut: year after reform	0.000001 (0.000098)
N	24357

Notes: Standard errors in parentheses. See Appendix Figure 5d for detailed information.

Table D.24: Event study estimates: local business tax rate, tax revenues, and tax base

	(1) log business tax rate	(2) log business tax revenues per capita	(3) log business tax base per capita
1 pp subsidy cut: year 4 before reform	-0.001 (0.001)	-0.004 (0.004)	-0.003 (0.004)
1 pp subsidy cut: year 3 before reform	-0.000 (0.000)	-0.002 (0.004)	-0.002 (0.004)
1 pp subsidy cut: year 2 before reform	-0.000 (0.000)	0.005 (0.003)	0.006 (0.003)
1 pp subsidy cut: year 0 after reform	0.000 (0.000)	-0.007 (0.004)	-0.007 (0.004)
1 pp subsidy cut: year 1 after reform	0.000 (0.001)	0.005 (0.005)	0.005 (0.005)
1 pp subsidy cut: year 2 after reform	-0.000 (0.001)	0.007 (0.010)	0.008 (0.010)
1 pp subsidy cut: year 3 after reform	0.000 (0.001)	-0.000 (0.006)	-0.001 (0.006)
1 pp subsidy cut: year 4 after reform	0.001 (0.001)	-0.003 (0.007)	-0.004 (0.007)
1 pp subsidy cut: year 5 after reform	0.002 (0.001)	0.005 (0.005)	0.003 (0.006)
1 pp subsidy cut: year 6 after reform	0.002 (0.001)	0.001 (0.007)	-0.001 (0.007)
1 pp subsidy cut: year 7 after reform	0.003 (0.001)	-0.006 (0.006)	-0.009 (0.007)
1 pp subsidy cut: year 8 after reform	0.003 (0.002)	-0.001 (0.007)	-0.004 (0.007)
1 pp subsidy cut: year 9 after reform	0.004 (0.002)	-0.006 (0.010)	-0.010 (0.011)
1 pp subsidy cut: year 10 after reform	0.004 (0.002)	-0.008 (0.010)	-0.012 (0.010)
N	1210	1210	1210

Notes: Standard errors in parentheses. See Figure 5e and Appendix Figures A.14a and A.14b for detailed information.

Table D.25: Event study estimates: local property tax rate, tax revenues, and tax base

	(1) log property tax rate	(2) log property tax revenues per capita	(3) log property tax base per capita
1 pp subsidy cut: year 4 before reform	-0.000 (0.001)	-0.002 (0.003)	-0.002 (0.003)
1 pp subsidy cut: year 3 before reform	0.000 (0.001)	-0.003 (0.003)	-0.003 (0.003)
1 pp subsidy cut: year 2 before reform	0.000 (0.001)	-0.002 (0.003)	-0.003 (0.003)
1 pp subsidy cut: year 0 after reform	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)
1 pp subsidy cut: year 1 after reform	0.001 (0.001)	0.002 (0.002)	0.001 (0.002)
1 pp subsidy cut: year 2 after reform	0.000 (0.001)	0.002 (0.002)	0.002 (0.002)
1 pp subsidy cut: year 3 after reform	0.000 (0.001)	0.002 (0.002)	0.002 (0.002)
1 pp subsidy cut: year 4 after reform	0.002 (0.001)	0.002 (0.002)	0.001 (0.002)
1 pp subsidy cut: year 5 after reform	0.001 (0.001)	0.005 (0.002)	0.004 (0.003)
1 pp subsidy cut: year 6 after reform	0.001 (0.002)	0.004 (0.002)	0.003 (0.003)
1 pp subsidy cut: year 7 after reform	0.003 (0.002)	0.004 (0.003)	0.000 (0.003)
1 pp subsidy cut: year 8 after reform	0.004 (0.002)	0.005 (0.003)	0.001 (0.003)
1 pp subsidy cut: year 9 after reform	0.003 (0.002)	0.006 (0.003)	0.003 (0.003)
1 pp subsidy cut: year 10 after reform	0.004 (0.002)	0.006 (0.003)	0.002 (0.004)
N	1210	1210	1210

Notes: Standard errors in parentheses. See Figure 5e and Appendix Figures A.14a and A.14b for detailed information.

Table D.26: Event study estimates: GDP per capita

	(1) log GDP per capita
1 pp subsidy cut: year 4 before reform	-0.000 (0.001)
1 pp subsidy cut: year 3 before reform	-0.001 (0.000)
1 pp subsidy cut: year 2 before reform	-0.000 (0.000)
1 pp subsidy cut: year 0 after reform	-0.002 (0.002)
1 pp subsidy cut: year 1 after reform	-0.002 (0.002)
1 pp subsidy cut: year 2 after reform	-0.002 (0.002)
1 pp subsidy cut: year 3 after reform	-0.005 (0.003)
1 pp subsidy cut: year 4 after reform	-0.005 (0.003)
1 pp subsidy cut: year 5 after reform	-0.005 (0.003)
1 pp subsidy cut: year 6 after reform	-0.006 (0.004)
1 pp subsidy cut: year 7 after reform	-0.006 (0.004)
1 pp subsidy cut: year 8 after reform	-0.006 (0.005)
1 pp subsidy cut: year 9 after reform	-0.006 (0.005)
1 pp subsidy cut: year 10 after reform	-0.006 (0.005)
N	1210

Notes: Standard errors in parentheses. See Appendix Figure A.16 for detailed information.

Table D.27: Event study estimates: unemployed and labor force

	(1) log unemployed	(2) log labor force
1 pp subsidy cut: year 4 before reform	-0.000 (0.002)	0.000 (0.001)
1 pp subsidy cut: year 3 before reform	-0.001 (0.001)	0.000 (0.001)
1 pp subsidy cut: year 2 before reform	-0.002 (0.001)	-0.000 (0.001)
1 pp subsidy cut: year 0 after reform	0.000 (0.001)	-0.000 (0.001)
1 pp subsidy cut: year 1 after reform	0.001 (0.002)	-0.000 (0.001)
1 pp subsidy cut: year 2 after reform	0.003 (0.002)	-0.000 (0.001)
1 pp subsidy cut: year 3 after reform	0.003 (0.002)	0.001 (0.002)
1 pp subsidy cut: year 4 after reform	0.003 (0.003)	0.001 (0.002)
1 pp subsidy cut: year 5 after reform	0.002 (0.004)	0.001 (0.002)
1 pp subsidy cut: year 6 after reform	0.004 (0.004)	0.001 (0.003)
1 pp subsidy cut: year 7 after reform	0.003 (0.004)	0.001 (0.003)
1 pp subsidy cut: year 8 after reform	0.003 (0.005)	0.001 (0.003)
1 pp subsidy cut: year 9 after reform	0.005 (0.005)	0.000 (0.003)
1 pp subsidy cut: year 10 after reform	0.006 (0.006)	0.001 (0.004)
N	990	1155

Notes: Standard errors in parentheses. See Appendix Figure A.17 for detailed information.

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