

Online Appendix for:

**Tax incentives for migrants with
mid-level earnings: evidence from the
Netherlands**

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A Labour income taxation with and without 30% rule

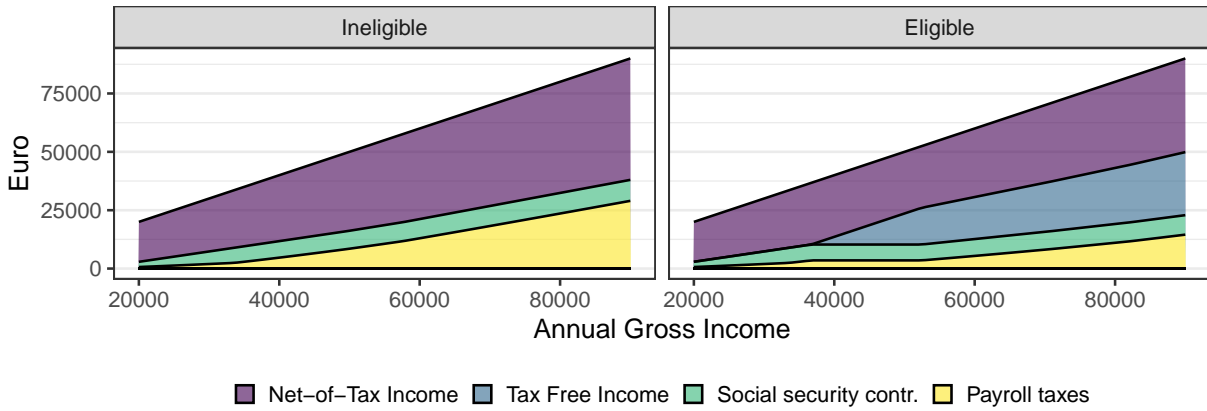
Panel (a) of Figure [A.1](#) shows the gains in income for employees that benefit from the 30% rule relative to those that do not.

Panel (b) shows that also the employer benefits from hiring a 30%-rule beneficiary. For employees with gross income above the threshold, they are able to pay part of the salary tax-free, and thereby save on social security contributions (SSCs) and other labor costs such as pension contributions.

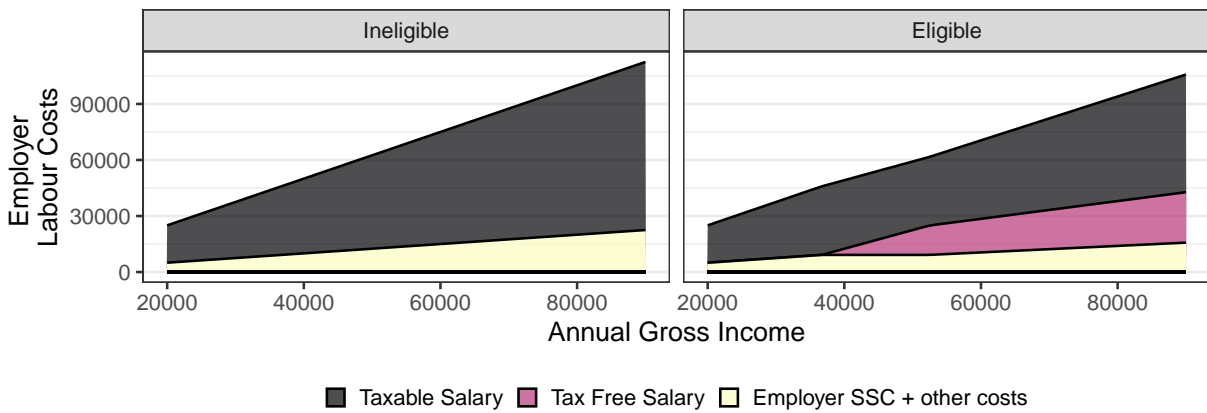
The benefits for the employee and employer are shown in Panel (c): at a gross income of €50,000 the employees gains over €5,000 per year, while at a gross income of €90,000 the benefits increase to €15,000. The benefits for the employer are substantially smaller than for the employee, nevertheless they are not negligible: for an employee with a gross wage of €50,000, the employer saves €3,300.

Figure A.1: Labor income taxation with and without 30% rule

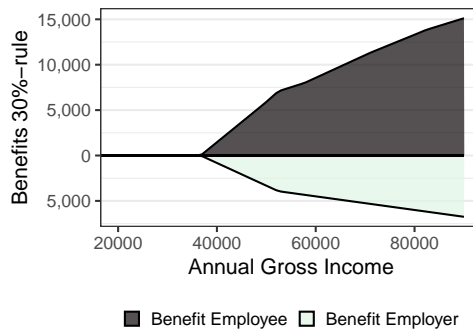
(a) Employees' income taxation



(b) Employers' labor costs



(c) Benefits for employee and employer



Note: Panel (a) (Employees' income taxation) incorporates applicable tax credits (general tax credit and labour tax credit). Panel (b) (Employers' labor costs) assumes that employer SSC and other costs are 25% of the taxable salary. In reality this percentage varies by sector, employer or even employment contract, and may range between 20% and 35%. Source: The Tax, n.d.

B Wage bargaining model

Using the framework of a static wage bargaining model with matching frictions, we show how the income threshold may induce a differential wage bargaining outcome. We follow Kleven et al. (2014) in incorporating the tax-rule eligibility threshold into a standard Diamond-Mortensen-Pissarides wage bargaining framework (Mortensen and Pissarides, 1994). For simplification we take the meeting process between employer and employee as given. Wage bargaining occurs if the employee's marginal product at the employer, y , is equal or higher than the migrant's reservations wage (before taxes), y_0 , which captures the minimum compensation for which the migrant is willing to move to and work in the Netherlands. In the event of an employer-employee match where $y \geq y_0$, any wage $z \in [y_0, y]$ will be acceptable to both parties.

The reservation wage is the wage that equalizes net income in the Netherlands and net income in the home country plus migration costs. With τ and τ_H denoting the average tax rate in the Netherlands and in the migrant's home country respectively, z_H the wage in the home country and c the migration costs, the (pre-tax) reservation wage y_0 is such that $(1 - \tau) \cdot y_0 = (1 - \tau_H)z_H + c$, or

$$y_0 = \frac{(1 - \tau_H)z_H + c}{1 - \tau}$$

Given a range of acceptable wages, the wage z is determined through a bargaining process. A well-established solution is Nash bargaining, which splits employer and employee surplus based on an exogenous parameter for employee bargaining power $0 \leq \beta \leq 1$ (conversely, $1 - \beta$ captures employer bargaining power). The Nash bargaining solution maximises

$$W = \underbrace{(y - z)^{1-\beta}}_{\text{firm surplus}} \underbrace{((1 - \tau)(z - y_0))^\beta}_{\text{worker surplus}}$$

In the absence of a discontinuity (i.e. with a constant tax rate τ), the maximisation problem yields a wage of

$$z^* = \beta y + (1 - \beta)y_0$$

Now the income threshold introduces a kink in the tax rate: below the threshold, the regular Dutch income tax rate applies (denoted as τ). For cases where the original wage z^* exceeds the threshold, a reduced income tax rate applies ($\tilde{\tau} < \tau$) for beneficiaries.¹ As

¹The flat-tax assumed here is a simplification of the real tax exemption, but it serves the purpose to demonstrate the qualitative implications on the bargained wage.

shown by Kleven et al. (2014), for these cases the reservation wage for beneficiaries (\tilde{y}_0) decreases and thereby the bargained wage also decreases (\tilde{z}), as long as firms have some bargaining power ($\beta < 1$).²

$$\tilde{y}_0 = \frac{(1 - \tau_H)z_H + c}{1 - \tilde{\tau}} < \frac{(1 - \tau_H)z_H + c}{1 - \tau} = y_0$$

$$\tilde{z} = \beta y + (1 - \beta)\tilde{y}_0 < \beta y + (1 - \beta)y_0 = z$$

Intuitively, as benefiting workers receive more after-tax income due to the lower average tax rate, they are willing to accept a slightly lower before-tax income y_0 to move to the Netherlands and take up work. This reduction of the reservation wage increases the range of acceptable wages (by decreasing the lower bound), and hence results in a lower bargained wage as long as firms have some bargaining power. This is ‘bunching from above’ and it is reflected in the income distribution by a left-shift of the distribution above the threshold and excess mass at the threshold.³ This type of bunching is more prevalent when firms have higher bargaining power.

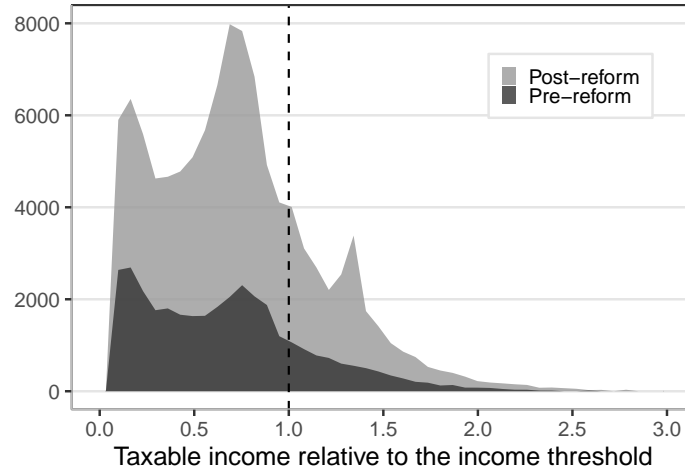
For cases where the preform bargained wage z^* falls below the threshold, the introduction of the threshold may induce ‘bunching from above’. If z^* is close enough to the threshold, the migrant may be able to bargain up their wage to meet the threshold. This results in a disproportionate increase in employee’s surplus for a small price for the employer and hence may be consistent with a solution in the bargaining problem. In the income distribution this would be reflected in a decrease in mass in a range closely below the threshold and an increase in mass at the threshold. This type of bunching would be stronger, the higher the employee bargaining power is.

²As we show in Section 3, the tax exemption also generates benefits for the employer as they pay reduced social security contributions. These benefits increase the productivity parameter y in the bargaining problem. For simplicity we ignore these benefits. The qualitative results persist as long as the benefits for the migrant exceed those for the employer, which we show is the case in Section 3.

³Note that the threshold imposes a lower-bound on the reduced wage \tilde{z} , which creates bunching at the threshold.

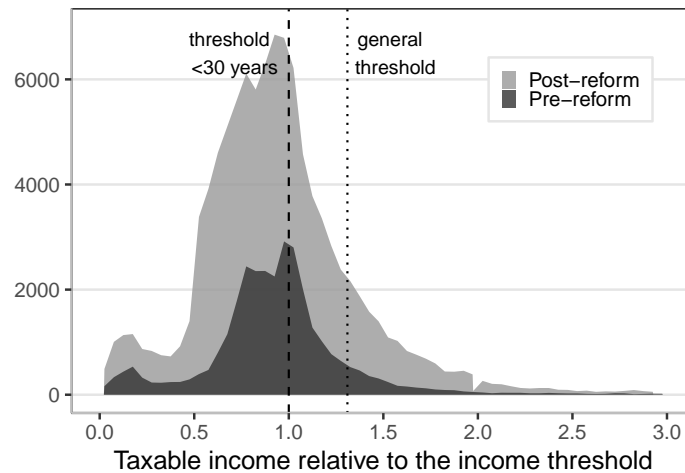
C Additional empirical results

Figure C.1: Income distribution of migrants with age < 28



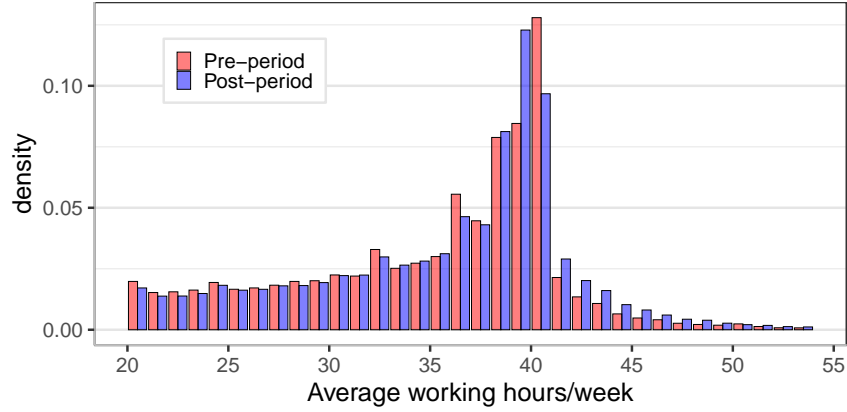
Note: The chart shows total number of arriving migrants for each level of annual taxable income (in the first full year of employment), normalized relative to the 30% rule's income threshold for migrants below the age of 30, in bins of 5% relative to the income threshold. The sample is restricted to migrants in the age range 18 to 28 on the date of arrival. Other sample restrictions as outlined in Table 1 apply.

Figure C.2: Income distribution of migrants working in academia



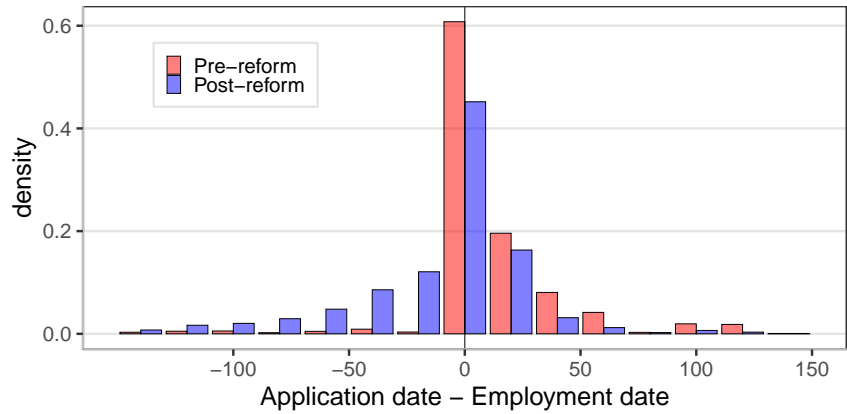
Note: The chart shows total number of arriving migrants for each level of annual taxable income (in the first full year of employment), normalized relative to the 30% rule's income threshold, in bins of 5% relative to the income threshold. The sample is restricted to migrants employed in academia. Other sample restrictions as outlined in Table 1 apply.

Figure C.3: Distribution of average weekly working hours, non-beneficiaries



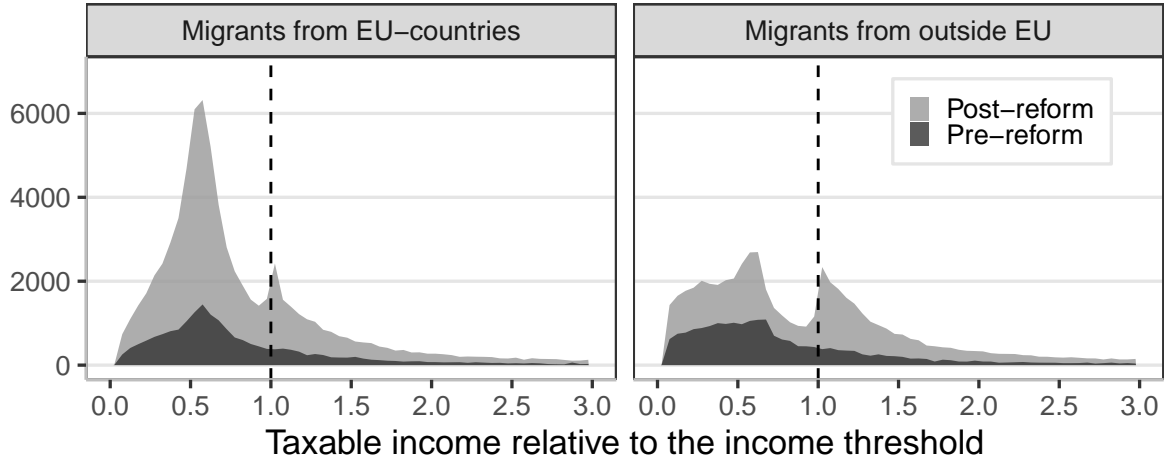
Note: The chart shows the densities of average weekly working hours for non-beneficiaries in the pre-reform (2006-2011) and post-reform (2012-2019) periods. Weekly working hours are averaged by person and year, for the weeks in which an individual was employed.

Figure C.4: Distribution of time between application and start of employment



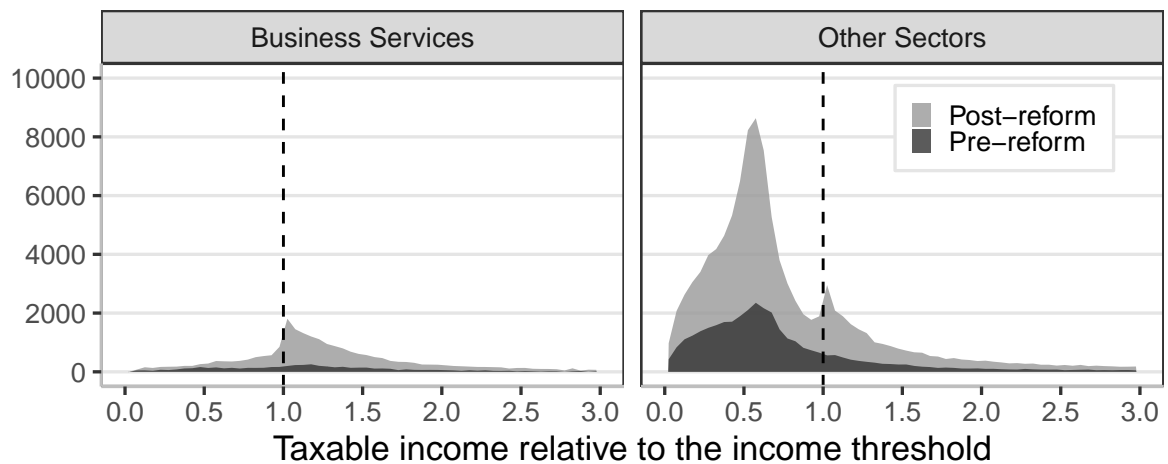
Note: The charts show the distribution of the difference between application date and start of employment in days. Positive values mean that the application was filed after starting employment (immigration). The figure refers to the sub-sample of 30%-rule beneficiaries.

Figure C.5: Income distribution by previous residence



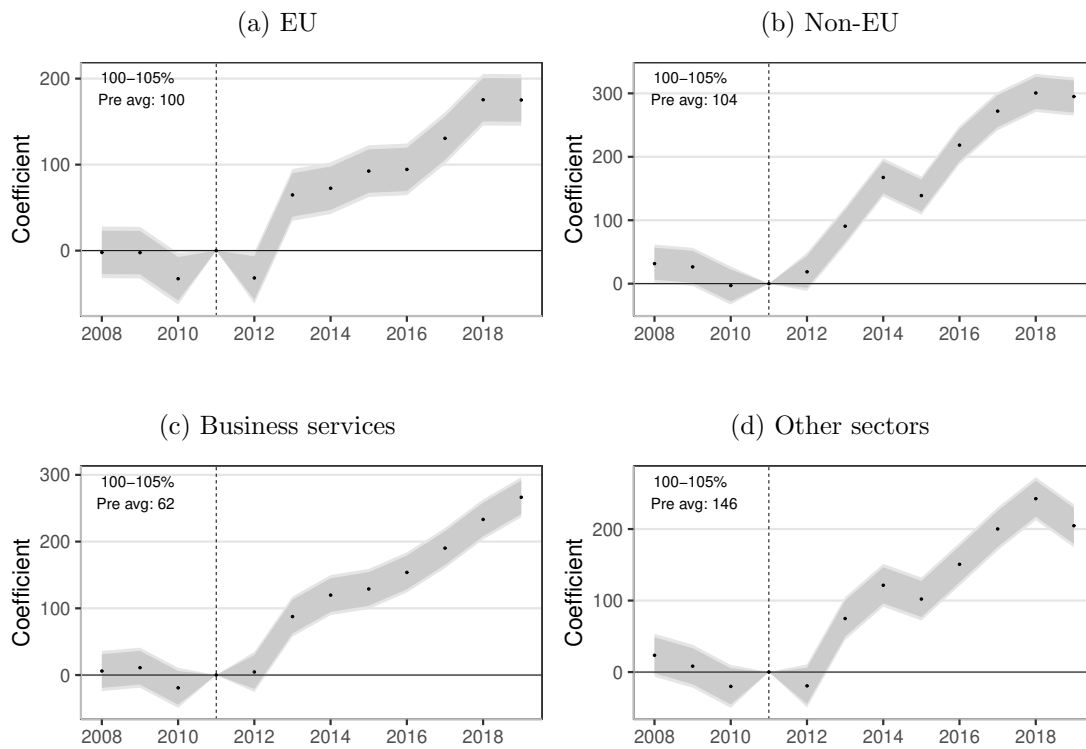
Note: The chart shows total number of arriving migrants for each level of annual taxable income (in the first full year of employment), normalized relative to the 30% rule's income threshold, in bins of 5% relative to the threshold. EU-countries contain EU member countries in each respective year. Sample restrictions as outlined in Table 1 apply.

Figure C.6: Income distribution by sector



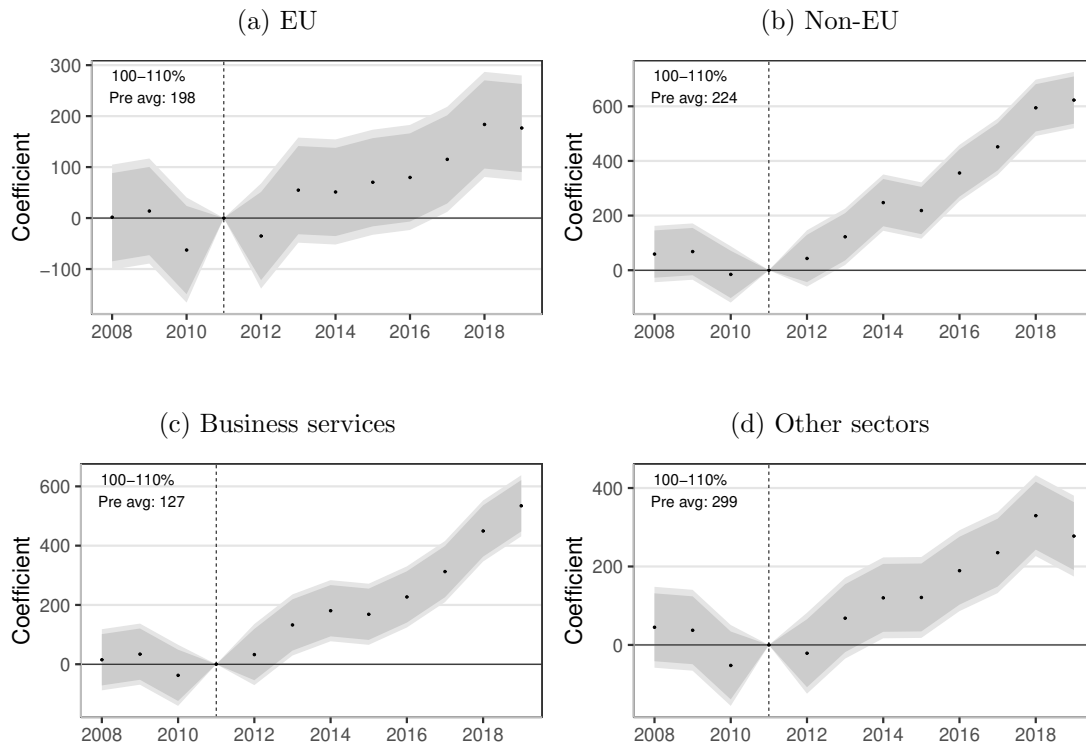
Note: The chart shows total number of arriving migrants for each level of annual taxable income (in the first full year of employment), normalized relative to the 30% rule's income threshold, in bins of 5% relative to the income threshold. For the definition of sectors, see Note in Table 2 and Table G.2 in this appendix. Sample restrictions as outlined in Table 1 apply.

Figure C.7: Event study estimates, group 100 - 105%



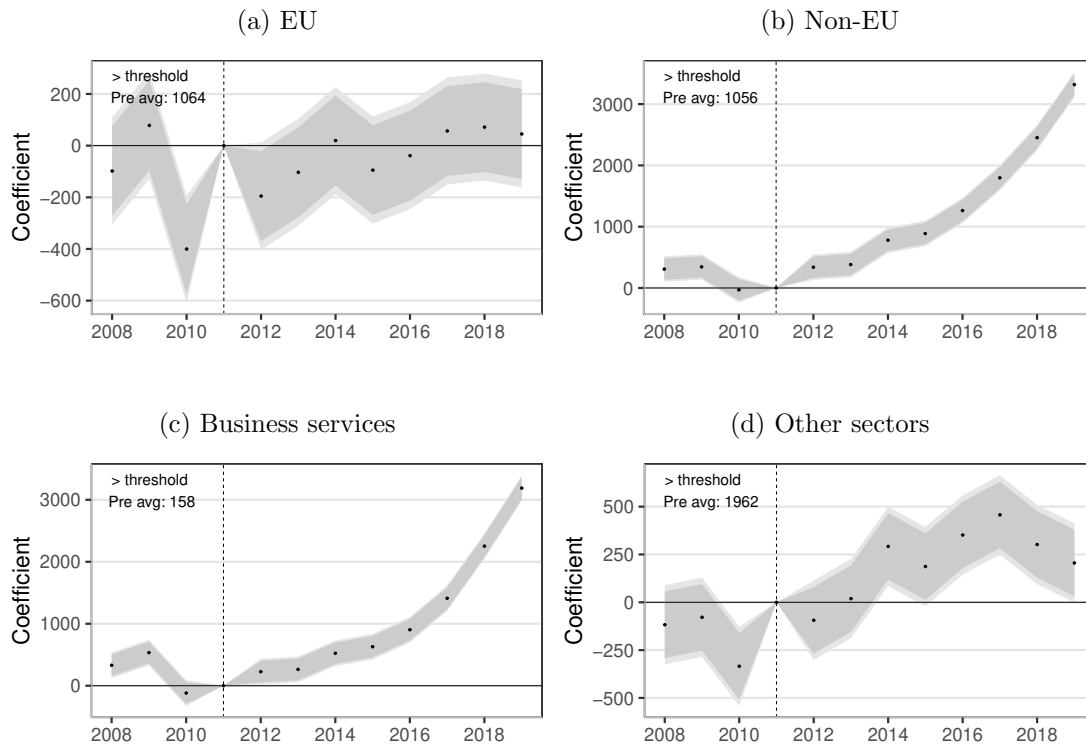
Note: The charts show the coefficients for the interaction terms in the event-study approach, along with the corresponding 90% and 95% confidence intervals. Each chart shows a different sample: Inflow of migrants from EU countries; non-EU countries; migrants working in business services and migrants working in sectors except for business services. For a more detailed explanation on the sample, see Note of Table 6.

Figure C.8: Event study estimates, group 100 - 110%



Note: The charts show the coefficients for the interaction terms in the event-study approach, along with the corresponding 90% and 95% confidence intervals. Each chart shows a different sample: Inflow of migrants from EU countries; non-EU countries; migrants working in business services and migrants working in sectors except for business services. For a more detailed explanation on the sample, see Note of Table 6.

Figure C.9: Event study estimates, group > threshold



Note: The charts show the coefficients for the interaction terms in the event-study approach, along with the corresponding 90% and 95% confidence intervals. Each chart shows a different sample: Inflow of migrants from EU countries; non-EU countries; migrants working in business services and migrants working in sectors except for business services. For a more detailed explanation on the sample, see Note of Table 6.

Table C.1: Estimates from density comparison and DiD

Affected group	Avg effect		Total effect	
	Density	DiD	Density	DiD
100% - 101%	132	137	1,055	1,031
100% - 105%	253	280	2,023	2,257
100% - 110%	347	403	2,778	3,306
> 110%	434	804	3,473	6,141
> threshold	781	1,334	6,250	10,959
95 - 100%	-16	-1	-127	8
90 - 95%	-105	-75	-841	-544

Note: The table above shows the estimated effect from the density comparison and the DiD estimation. For each method, the table shows the estimated average additional migration in the post-reform period as well as the estimated accumulated effect. The accumulated effect is based on the comparison of the pre- and post-reform period density and the sum of estimated annual additional inflow respectively.

Table C.2: Hiring concentration per period

	Pre-reform		Post-reform		Difference
	Mean	Std. dev	Mean	Std. dev	
Beneficiaries	0.372	0.033	0.614	0.124	0.242***
Migrants	0.193	0.030	0.197	0.044	0.005***
Employees	0.151	0.048	0.178	0.079	0.027***

Note: Average and standard deviation of annual Herfindahl-Hirschmann-Index over pre-reform (2006-2011) and post-reform (2012-2019) period. The last column shows a t-test for the difference per period. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Table C.3: DiD estimates for baseline sample excl. Germans

	<i>Dependent variable: Number of arriving migrants</i>						
	Affected groups, defined as income relative to threshold						
	100-101%	100-105%	100-110%	> 110%	> threshold	95-100%	90-95%
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Affected group x post-reform period	133.1*** (11.9)	282.7*** (48.6)	403.3*** (107.1)	773.3 (668.2)	1,310.8* (767.1)	5.2 (57.9)	-72.9 (56.5)
Included individuals	68,134	72,063	72,322	112,933	123,538	70,100	68,697
Pre-reform yearly average	43	180	364	1,989	1,989	232	227
Relative effect	310%	157%	111%	39%	66%	2%	-32%
Accumulated effect	1,017	2,328	3,375	5,904	10,815	48	-552
Observations	1,316	322	154	42	42	252	252
Adjusted R ²	0.29	0.33	0.32	0.28	0.42	0.10	0.10

Note: The estimates refer to the baseline sample excluding migrants with previous residence in Germany. The first row shows the coefficient for the interaction term from the DiD specification (β in Equation 2). This can be interpreted as the average additional number of migrants in the post-reform period. Standard errors in parenthesis. ‘Observations (bins)’ captures the amount of bins, containing both the affected income range and control bins. ‘Included individuals’ refers to the total number of individuals in both affected and control group in all years of the sample (2006-2019). ‘Pre-reform yearly average’ refers to the affected group. The control group contains (subgroups of) individuals with income the range 50% – 90% of the threshold. ‘Accumulated effect’ is calculated as the sum of the coefficients for the interaction effects from the Event study specification. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Table C.4: DiD estimates for "non-changers" sample

	<i>Dependent variable: Number of arriving migrants</i>						
	Affected groups, defined as income relative to threshold						
	100-101%	100-105%	100-110%	> 110%	> threshold	95-100%	90-95%
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Affected group x post-reform period	107.0*** (11.3)	228.9*** (43.8)	302.9*** (100.5)	303.0 (699.3)	754.8 (812.6)	-4.0 (44.2)	-55.6 (40.9)
Included individuals	35,870	38,864	40,113	73,608	81,929	35,346	35,484
Pre-reform yearly average	35	138	293	1,964	1964	151	142
Relative effect	306%	166%	103%	15%	38%	-3%	-39
Accumulated effect	800	1,810	2,402	1,449	5,425	-13	-453
Observations	798	210	98	28	28	182	196
Adjusted R ²	0.36	0.39	0.36	0.21	0.32	0.19	0.19

Note: The estimates refer to the 'full-time' sample (include only migrants that stay work at one employer during the entire first year after migration). The first row shows the coefficient for the interaction term from the DiD specification (β in Equation 2). This can be interpreted as the average additional number of migrants in the post-reform period. Standard errors in parenthesis. 'Observations (bins)' captures the amount of bins, containing both the affected income range and control bins. 'Included individuals' refers to the total number of individuals in both affected and control group in all years of the sample (2006-2019). 'Pre-reform yearly average' refers to the affected group. The control group contains (subgroups of) individuals with income the range 50%–90% of the threshold. 'Accumulated effect' is calculated as the sum of the coefficients for the interaction effects from the Event study specification. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Table C.5: DiD estimates for partial-year sample

	<i>Dependent variable: Number of arriving migrants</i>						
	Affected groups, defined as income relative to threshold						
	100-101%	100-105%	100-110%	> 110%	> threshold	95-100%	90-95%
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Affected group x post-reform period	100.4*** (23.7)	287.6*** (66.6)	402.6*** (142.9)	676.2 (736.2)	1,233.0 (851.6)	227.3*** (63.4)	5.2 (64.0)
Included individuals	76,153	76,752	79,194	126,691	138,685	76,764	74,853
Pre-reform yearly average	62	253	512	2,297	2,297	254	268
Relative effect	162%	114%	79%	29%	54%	89%	2%
Accumulated effect	745	2,215	3,101	3,924	8,375	1,768	-22
Observations	1,036	252	126	42	42	252	238
Adjusted R ²	0.09	0.23	0.22	0.25	0.40	0.21	0.09

Note: The estimates refer to the partial-year sample (extrapolated income for migrants that arrive during a year). The first row shows the coefficient for the interaction term from the DiD specification (β in Equation 2). This can be interpreted as the average additional number of migrants in the post-reform period. Standard errors in parenthesis. "Observations (bins)" captures the amount of bins, containing both the affected income range and control bins. "Included individuals" refers to the total number of individuals in both affected and control group in all years of the sample (2006-2019). "Pre-reform yearly average" refers to the affected group. The control group contains (subgroups of) individuals with income the range 50%–90% of the threshold. "Accumulated effect" is calculated as the sum of the coefficients for the interaction effects from the Event study specification. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Table C.6: DiD estimates for "365 days" sample

	<i>Dependent variable: Number of arriving migrants</i>						
	Affected groups, defined as income relative to threshold						
	100-101%	100-105%	100-110%	> 110%	> threshold	95-100%	90-95%
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Affected group x post-reform period	130.7*** (26.9)	331.1*** (64.4)	458.6*** (146.1)	874.1 (797.2)	1,506.1 (908.4)	-10.7 (73.3)	-113.1 (79.2)
Included individuals	87,946	89,637	93,556	146,852	160,488	84,786	86,937
Pre-reform yearly average	58	249	535	2556	2556	300	331
Relative effect	225%	133%	86%	34%	59%	-4%	-34%
Accumulated effect	973	2,645	3,644	6,777	12,413	-64	-883
Observations	1,246	294	140	42	42	238	224
Adjusted R ²	0.11	0.30	0.26	0.34	0.49	0.09	0.09

Note: The estimates refer to the '365 days' sample (include only migrants that stay for at least 365 days). The first row shows the coefficient for the interaction term from the DiD specification (β in Equation 2). This can be interpreted as the average additional number of migrants in the post-reform period. Standard errors in parenthesis. 'Observations (bins)' captures the amount of bins, containing both the affected income range and control bins. 'Included individuals' refers to the total number of individuals in both affected and control group in all years of the sample (2006-2019). 'Pre-reform yearly average' refers to the affected group. The control group contains (subgroups of) individuals with income the range 50% – 90% of the threshold. 'Accumulated effect' is calculated as the sum of the coefficients for the interaction effects from the Event study specification. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Table C.7: DiD estimates for "first spell" sample

	<i>Dependent variable: Number of arriving migrants</i>						
	Affected groups, defined as income relative to threshold						
	100-101%	100-105%	100-110%	> 110%	> threshold	95-100%	90-95%
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Affected group x post-reform period	134.4*** (10.8)	277.3*** (48.9)	398.0*** (109.0)	889.9 (638.4)	1,385.7* (740.3)	13.2 (53.2)	-66.1 (53.3)
Included individuals	62,929	66,351	67,033	109,507	120,089	64,916	61,662
Pre-reform yearly average	41	191	392	1,952	1,952	228	228
Relative effect	328%	145%	102%	46%	71%	6%	-29%
Accumulated effect	1,016	2,223	3,208	6,903	11,354	153	-496
Observations	1,344	294	140	42	42	252	238
Adjusted R ²	0.30	0.29	0.28	0.33	0.47	0.04	0.03

Note: The estimates refer to the 'first spell' sample (include only the first migration spell of a migrant). The first row shows the coefficient for the interaction term from the DiD specification (β in Equation 2). This can be interpreted as the average additional number of migrants in the post-reform period. Standard errors in parenthesis. 'Observations (bins)' captures the amount of bins, containing both the affected income range and control bins. 'Included individuals' refers to the total number of individuals in both affected and control group in all years of the sample (2006-2019). 'Pre-reform yearly average' refers to the affected group. The control group contains (subgroups of) individuals with income the range 50% – 90% of the threshold. 'Accumulated effect' is calculated as the sum of the coefficients for the interaction effects from the Event study specification. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

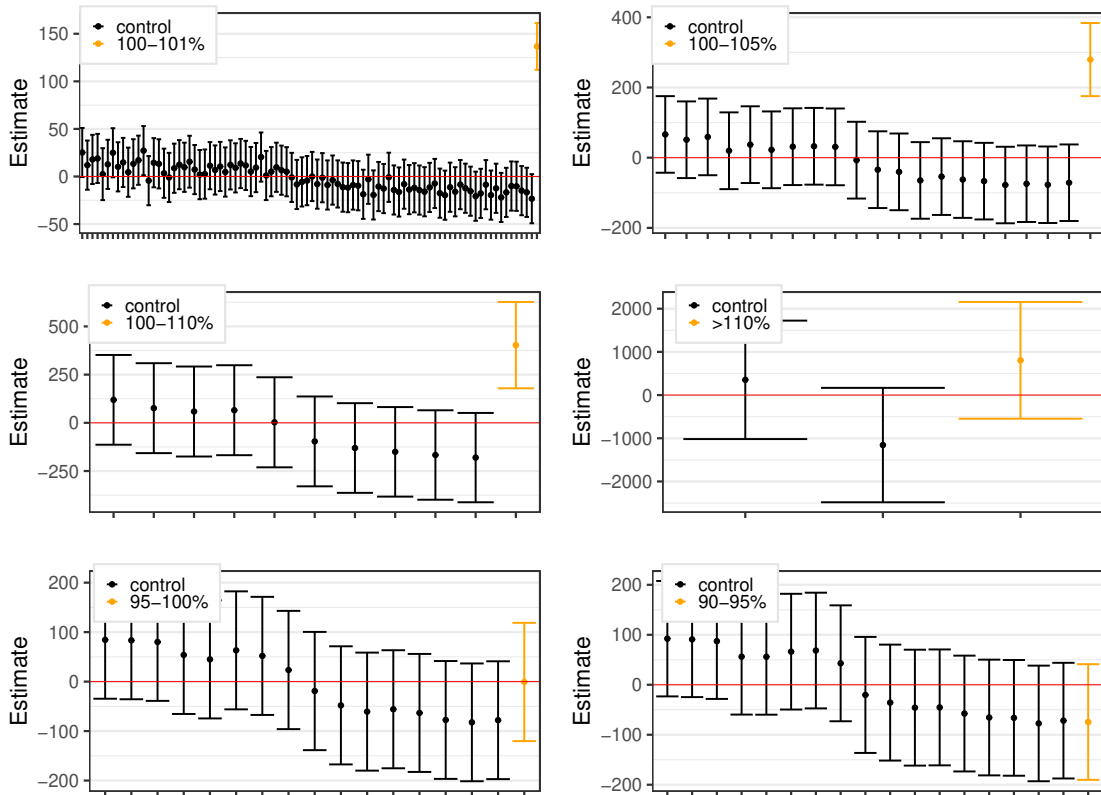
D Permutation tests

We present an additional test to strengthen our DiD results. In the spirit of MacKinnon and Webb (2020), we conduct an exercise of permutation. The underlying idea is to assign treatment to any other group and re-run the DiD model (Equation 2). The coefficient for the newly assigned treatment group should then be statistically insignificant if the treatment was "falsely" assigned to a control group.

Figure D.1 shows the results from this permutation exercise. For every group, we show the point estimate including the 95% confidence intervals. For the 1%, 5% and 10% treatment group, the permutation exercise yields a sizeable and statistically significant coefficient for the actual treatment group only. For the > 1 treatment group, there is only one control group due to the size of the actual treatment group. For the groups below the threshold, all coefficients, including the one for the actual treatment group, are not significantly different from zero.

Overall, the results from this permutation exercise formalize what is visually shown in Figure 7. For the 1%, 5% and 10% group, they support the notion that the positive and statistically significant results did not occur by chance. For the > 1 treatment group and the groups below the threshold, they show that also no other group would yield statistically significant results.

Figure D.1: Coefficients from DiD permutation



Note: The chart shows the point estimate and the 95% confidence interval for estimating the basic DiD (Equation 2) and assigning the treatment dummy sequentially to a group from the set of treatment and control groups. Each point refers to a different group. The original treatment group is shown in orange. Note that due to the size of the actual treatment group and the partitioning (see Section 5), the number of control groups varies by treatment group.

E Calculating migration elasticity

Definition. The migration elasticity captures the change in migration (flow) relative to the change in the net-of-tax rate:

$$\eta = \frac{\% \text{ change in migration (inflow)}}{\% \text{ change in net-of-tax rate}}$$

where the net-of-tax rate is defined as $1 - \text{average tax rate}$ or $\frac{\text{net income}}{\text{gross income}}$. The net income for non-beneficiaries (beneficiaries) is defined as gross income minus tax payments minus social security contribution. The difference between beneficiaries and non-beneficiaries is that for non-beneficiaries, gross income is equal to taxable income. For beneficiaries, gross income includes both taxable income and the tax-free benefit (up to 30% of taxable income). Hence for beneficiaries, the net-of-tax rate is higher as the average tax rate is lower due to an untaxed component in the gross income.

Data. We obtain data on taxes and benefits in the Netherlands from the OECD Tax-benefit web calculator for a range of income levels and years (OECD, [n.d.](#)). We calculate the personal income tax schedule for a single individual of 38 years without kids.⁴ The information on the income distribution of migrants comes from the administrative data described in the main part of the paper (using the same sample as we use in our baseline analyses).

Calculation steps. We calculate the migration elasticity for migration inflow in the range of 100-150% of income relative to the threshold and for the medium term (2012 - 2015). Furthermore, we assume that beneficiaries would get the full 30% benefits. For beneficiaries and non-beneficiaries, we separately calculate the population-weighted tax rate per year τ_t , weighing by the fraction of migrants in income ranges j :

$$\overline{1 - \tau_t} = \sum_{j=1}^J \frac{N_{j,t}}{N_t} \times \frac{\text{net income}_{j,t}}{\text{gross income}_{j,t}}$$

for income bins j within the range 100-150% and the number of migrants in a bin and year, $N_{j,t}$ relative to the total number of migrants in a given year, N_t . These annual tax rates are then averaged over the years in the pre- and post-reform period (2009 - 2011 and 2012 - 2015 respectively).

⁴Hence abstracting from joint taxation of spouses and tax benefits for families.

Next, we weigh the average net-of-tax rates for beneficiaries and non-beneficiaries by the probability of receiving the benefits to calculate an expected value of the net-of-tax rate. The (expected) probability of receiving the benefits matters when defining the change in the average tax rate. For example, if migrants expect to be beneficiaries in the post-reform period, but assign a low (or 0) probability to being eligible prior to the reform, the main change in the net-of-tax rate is manifested in the difference between net-of-tax rates for beneficiaries and non-beneficiaries. Table 7 gives an overview of how the (subjective) probability to receive the benefits affects the elasticity estimate.

For example, the expected net-of tax rate for the pre-reform period is calculated as:

$$\mathbb{E} [\tau_{pre}] = \mathbb{P}_{pre} \times (1 - \tau_{pre}^{beneficiary}) + (1 - \mathbb{P}_{pre}) \times (1 - \tau_{pre}^{non-beneficiary})$$

with \mathbb{P}_{pre} the (assumed) probability of benefitting in the pre-reform period, $\tau_{pre}^{beneficiary}$ the average tax rate for beneficiaries in the pre-reform period and $\tau_{pre}^{non-beneficiary}$ is the average tax rate for non-beneficiaries. The post-reform expected net-of-tax rate is calculated analogously.

F Government Budget calculation

Assumptions The goal of this exercise is to calculate the implications of additional migration and the difference in eligibility criteria on government tax revenue. The income threshold affects government tax revenue through two main channels: Firstly, as the eligibility criteria are more clear, this may attract more migrants (beneficiaries). Secondly, more migrants can apply for (and also eventually benefit from) the tax benefits, even those that would have come absent the reform.

We make a few simplifying assumptions. Firstly, we assume that migrants do not crowd out domestic workers (or in other words, migrant's employment is created independently of domestic employment). Secondly, related to the first point, we assume away equilibrium wage effects between migrants or between domestic and migrant workers which could arise through competition and/or (positive) productivity spillovers. Thirdly, we calculate tax rates for a single individual without children⁵ and we only take into account the personal income tax. Lastly, we calculate the change in tax revenue for a given year, without taking into account migrants' duration of stay in the Netherlands and hence abstracting also from considerations related to costs of health care and pensions.

We calculate the additional inflow of migrants per income bin (defined in 5% brackets) relative to the threshold. For each of these income bins, we calculate the additional inflow using the DiD approach: Compared with the trend in the control group (50% to 90% of the income threshold), how many (more/less) migrants arrive in a given year in a given income bin? With this approach, we define marginal migrants (the number of migrants that arrives in proportion to the trend in the control group) and infra-marginal migrants (the number of additional migrants) in a given income bin.

We define the foregone tax revenue as the reduced tax revenue from marginal migrants that qualify for the tax benefits after the reform. Next, we define the additional tax revenue as the entire tax revenue from infra-marginal (additional) migrants, even though their taxable income may be reduced in accordance with the preferential tax scheme.

Lastly, we sum both foregone tax revenue and additional tax revenue over the income bins and calculate the difference between additional tax revenue and foregone tax revenue.

⁵Hence abstracting from joint taxation for spouses and tax benefits for families.

G Other

Table G.1: Income thresholds for eligibility to the 30% rule

	general	< 30 years & Master's degree	academia
2012	35,000 €	26,605 €	<i>always</i>
2013	35,770 €	27,190 €	<i>always</i>
2014	36,378 €	27,653 €	<i>always</i>
2015	36,705 €	27,901 €	<i>always</i>
2016	36,889 €	28,041 €	<i>always</i>
2017	37,000 €	28,125 €	<i>always</i>
2018	37,296 €	28,350 €	<i>always</i>
2019	37,743 €	28,690 €	<i>always</i>
2020	38,347 €	29,149 €	<i>always</i>

Source: Dutch Tax Office (*Belastingdienst*).

Table G.2: Businesses included in the “Business Services” industry

Business Services I	Business Services II	Business Services III
Offices of lawyers and attorneys	Advertising agencies	Securities dealers, not being commercial banks
Notary offices	Marketing and PR agencies	Administrative and trust offices
Offices of bailiffs and legal aid agencies	Efficiency and economic consulting agencies	Securities depositories
Offices of accountants and tax consultants	Engineering and architectural services	Registry associations
Patent offices	Software development	Intermediaries for banking/insurance and real estate
	Expertise bureaus	Administrative offices
		Management companies
		Investment companies
		Hospital care associations
		Journalism
		News and press agencies
		Association offices and group administrations
		Interpreters and translators
		Detective agencies
		Debt collection agencies
		Real estate exploitation
		Management and maintenance of dwellings by housing associations admitted under the Housing Act