Online Appendix

Table OA1 Sample selection of older and younger partners and singles

Filters older partners	Pre-reform		Post-reform	
	male	**female**	**male**	**female**
Individuals (married or unmarried) reaching the SPA in Feb-March/April-May	19,028	18,236	20,617	19,548
Drop never married	2,547	1916	2696	2156
Drop without a partner at least 2 months younger	2,987	12856	3226	13743
Drop in unstable couples (starting after 2009 or ending before the end of 2016)	4,309	1383	4763	1435
Drop those who were not working at SRA-5 years	3,581	1270	3588	1319
Drop those who worked as self-employed at any moment 2010-2016	800	93	804	91
Drop same gender couples	16	13	10	16
Drop married with partners younger than 50 years old in 2010	80	5	70	8
Drop if younger partner was self-employed in 2010-2016	529	107	599	119
Final sample	**4,179**	**593**	**4,861**	**661**

Note: Pre-reform: older partners born in November or December 1949; Post-reform: older partners born in January or February 1950.

| Filters single individuals	Pre-reform		Post-reform	
	male	**female**	**male**	**female**
Unmarried born in Nov-Dec 1949 or Jan-Feb 1950	1,877	1,897	1,966	2,026
Drop if not working at SRA-5 years	20	63	38	55
Drop if worked as self-employed in 2010-2016	208	167	222	200
	1,649	**1,667**	**1,706**	**1,771**

Note: Pre-reform: Single individuals born in November or December 1949; Post-reform: single individuals born in January or February 1950.

Filters younger partners	Pre-reform		Post-reform	
	male	**female**	**male**	**female**
Younger partners in stable couples	2,097	9,169	2,216	9,930
Drop those who were not working 5 years before older partner´s SRA	642	4,768	669	5,183
Drop those who worked as self-employed in 2010-2016	219	419	213	593
Drop same gender couples	16	99	12	17
Drop those between 19 and 49 years old in 2010	8	84	13	79
Drop if older partners were self-employed in 2010-2016	131	566	126	563
Final sample	**1,081**	**3,233**	**1,183**	**3,495**

Note: Pre-reform: younger partners with spouse born in November or December 1949; Post-reform: younger partners with spouse born in January or February 1950;
Source: Own elaboration from Statistics Netherlands

Figure OA1 Model 4: Average survival functions in employment, married and singles pre- and post-reform. Estimated PA effects and 90% confidence intervals. Males (top panel) and females (bottom panel).
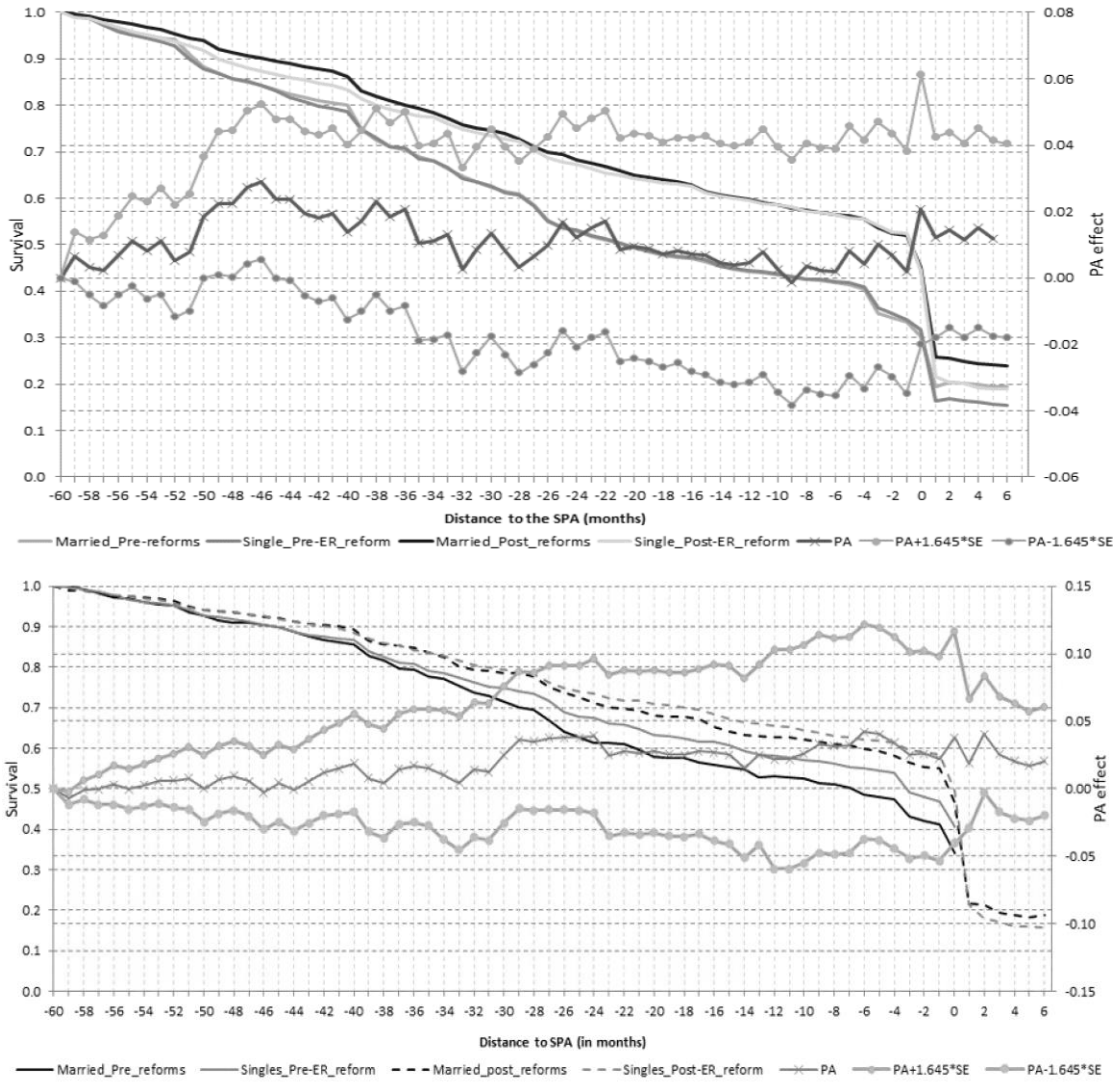
Note: Survival functions in employment use the left hand axis. PA effect (PA; right hand axis) is computed as the difference between the post-reform and pre-reform groups
Source: Own elaboration; data from Statistics Netherlands

Table OA2 Literature review on the effect of policy reforms on the retirement behaviour

Paper	Goal	Reform	Country	Methodology	Measure 1	Measure 2
Mastrobuoni (2009)	Effect of the expected rise in the Social Security NRA on retirement behaviour	Increase in the NRA of 2 months per year for cohorts born in 1938 and after	USA (January 1989 January 2007)	Estimates the distance between the CDFs of retirement age of different cohorts by OLS. Y_i=1 when the worker is retired and 0 otherwise	Distance between the cumulative distribution functions of retirement age for men (women) of different cohorts using OLS "The mean retirement age of the affected cohorts has increased by about half as much as the increase in the NRA.	
Brown (2013)	Studies the link between pension features and retirement timing exploiting an unexpected pension reform and the non-linearities in the pension teacher	The 1999 reforms shifted the age location of the maximum benefit factor from age 60 to a later retirement age for all teachers.	USA (California teachers, 1994-2004)	Method introduced by Saez (2010) to quantify the excess retirements at the budget constraint kinks and to estimate the elasticity of lifetime labour supply	Price elasticity of lifetime labour supply	Prob. of working (OLS): The probability that a teacher does not retire each period conditional on financial return to working. Retirement-eligible individuals will work less than an additional month in the short-run and less than an additional half year in the long-run in response to a 10% increase in the financial return to work.
Gurley-Calvez and Hill (2011)	Effects of state fiscal policies on the decision to retire	1979-1990	USA (University of Michigan Tax Research Database)	RE panel Probit and fixed effects panel linear probability	Marginal effects from a probit model indicates that a one percentage point increase in the state income tax rate decreases the probability of retirement by between 0.6 and 1.2 percentage points. This represents an 8.7% reduction in the prob. of retirement	
Baker (2002)	Impact of the introduction of the SPA on male and female labor force participation (1975)	Introduction of the PA, means tested on family income, for women of age 60 to 64 married to someone older than 64	Canada (1972-1980)	Estimate the impact of SPA on the labor force participation rate in the reference week	The labour market participation rate of SPA eligible males fell 7-11 percentage points relative to the rates of males in control groups. The participation rates of SPA females was flat over the decade while it rose for females in the control group.	

Table OA2, continued

Paper	Goal	Reform	Country	Methodology	Measure 1	Measure 2
Euwals et al. (2010)	Causal impact of the policy reform on early retirement behaviour (Labour force participation of ids age 55 to 64)	transform the generous and actuarially unfair ER schemes into less generous and actuarially fair schemes that rewards ids for postponing retirement	The Netherlands (1989-2000)	Mixed proportional hazard rate model to describe the time spent in employment since the age of 55	An increase in the peak value of 100,000 euros would make the average worker extend his career by 8 months while a decrease in his early retirement wealth by the same amount would induce a career extension of 5 months	All in all, the policy reform was effective in increasing the labour supply of the elderly
Bloemen et al. (2019)	Impact of incentive-induced ER of husbands on their wives' probability to retire within 1 year using a quasi-natural experiment	Policy variation induced the husband to retire early (working at the central government level)	The Netherlands (2000-2005)	OLS of a linear probability model of wife´s retirement status within one year; 2SLS of a linear probability	Local average treatment effect: Induced ER of husbands increased their wives´ probability to retire by 10 percent points. Partly the effect runs through wives at ages they may have been eligible for ER programs themselves.	Strong effect coming from husbands age 60 with wives aged 60 as age 60 was the eligibility age for regular ER benefits.
Mastrogiacomo et al. (2004)	Effect of retirement policies across subgroups (singles & households)	Supplementary benefit of 20% if the income of the working partner is sufficiently low (kind of PA).	The Netherlands (1990-1996)	Discrete choice, discrete-time model for couples & singles Logit models explaining labour force transitions out of work of the head & the partner.	SP policy simulation: Hazard of the partner diminishes (from 13.9% to 13%) and that of the head remains constant	
Laun (2017)	Impact of the tax credit reform after 65th birthday on older workers' labour supply (employment & retirement hazard)	Tax credit reform (2007)	Sweden	Dif-in-Dif applied to employment and retirement hazard;	Participation elasticity with respect to the net-of-participation tax-rate of about 0.22 in the year following the 65th for ids who were working four years earlier	Retirement hazard delayed retirement of the individuals working in the baseline year of 0.1–0.5 months. (assumption that all of the reform effect takes place during the year immediately following the 65th birthday)

Table OA2, continued

Paper	Goal	Reform	Country	Methodology	Measure 1	Measure 2
Lalive and Parrotta (2017)	Effect (own, cross and joint effects) of pension eligibility on labour supply in couples	Sharp change in the pension eligibility of both partners	Switzerland (1990 & 2000)	(Double) regression discontinuity. Yi=1 if i participates in the labour market, 0, otherwise	The effect of their own pension eligibility is 12 percentage points for women and 28 percent points for men	Cross effects: Women reduce their labour force participation by 2 to 3 percentage points as their partner reaches the pension eligibility, for men cross effect is not significant
Kyyrä (2015)	Effects of the reforms on the age workers leave employment (exits to unemployment, disability or outside of the labour force)	Changes in the eligibility age thresholds for unemployment and part-time pensions and the effect of tightening medical criteria for disability pension	Finland (1990-2004)	Mixed logit model for transition probabilities (competing exits).	Policy effects are studied by comparing cumulative exit probabilities and the expected duration of the remaining employment career associated with different counterfactual policy designs	Pension reforms jointly raised the average age at which workers leave employment by 3.9 months mainly due to a sharp drop in disability pension enrolment from age 58 upwards and a lower incidence of unemployment at younger ages
Stancanelli (2017)	Estimate the direct and indirect effects of a pension reform on both (probabilities) spouses' retirement decisions	1993 reform: ids have to work more months to be able to retire with maximum pension benefits	France (1993-2002)	Sharp RD & an incremental D-i-D approach using a linear model	The reform reduced each spouse´s probability of retirement in the year of their 60th birthday of 10 to 24 percentage points	Pooling across a decade of post-reform years, the average effect is equal to a drop of 2 to 4 percentage points in the own retirement prob.
Engels et al. (2017)	Labour market effects of changes in the financial incentives to retire	Cohort specific reform (1992): actuarial deductions for early retirement in combination with an increase in the NRA	Germany	Effects of deductions on retirement, employment & unemployment. Impact of the reform on the retirement age and time spent in (un)employment (duration) between 55 and 65	Women older than 60 years directly affected: an increase in the deduction by one percentage point reduces the average retirement rate by about 1.9 percentage points	Overall effects: the introduction of the reduction increased the retirement age by about 15 months
Atalay and Barret (2015)	Effect of the reduction in social security wealth on employment behaviour	Increase of the pension eligibility age for women from 60 to 65 (1993)	Australia	Linear probability model for an individual's binary choice of participation in the labor force	An increase in the eligibility age of one year induced a decline in the probability of retirement by 12 to 19 percentage points	

Table OA3 Descriptive statistics. Singles and Older and Younger partners with partners attached (A) and not attached (N) to the labour market

	Women older partner_N					Men older partner_N				
	PA eligible		Not PA eligible		t-test	PA eligible		Not PA eligible		t-test
	mean	sd	mean	sd		mean	sd	Mean	sd	
Individual characteristics										
Age_op	723	0	723	0		723	0	723	0	
Age_difference	20.75	25.10	21.13	23.52	-0.11	38.54	31.37	39.89	31.22	-1.34
Partner_duration	427.32	123.25	443.45	103.43	-0.94	463.88	88.09	465.10	83.43	-0.44
Children	0.77	0.42	0.78	0.42	-0.16	0.93	0.25	0.92	0.27	1.70
Household characteristics										
ln_GHI	11.08	0.47	11.04	0.52	0.52	11.09	0.53	11.10	0.46	-0.70
GHI	71,549	32,192	70,403	36,687	0	633,078	23,700,000	74,398	47,219	1.01
home_owner	76%	0.43	61%	0.49	2.16	71%	0.45	75%	0.43	-2.34
ln_fw	10.03	2.30	9.49	2.86	1.40	9.70	2.28	9.79	2.17	-1.25
Job characteristics										
permanent	91%	0.29	92%	0.27	-0.36	88%	0.32	88%	0.32	-0.21
part_time	79%	0.41	77%	0.42	0.38	19%	0.39	21%	0.41	-2.11
ln_wage_op	4.49	0.38	4.50	0.40	-0.22	4.80	0.46	4.82	0.47	-1.07
Macroeconomic Characteristics										
Unemp. rate	0.05	0.00	0.04	0.00	0.30	0.04	0.01	0.04	0.01	0.67
Observations	87		91			1830		2071		

	Women older partner_A					Men older partner_A				
	PA eligible		Non-PA eligible		t-test	PA eligible		Non-PA eligible		t-test
	mean	sd	mean	sd		mean	sd	mean	sd	
Individual characteristics										
Age_op	723	0	723	0		723	0	723	0	
Age_difference	25.59	27.63	26.44	29.63	-0.49	47.95	34.88	46.51	34.18	1.48
Partner_duration	425.53	120.49	431.66	109.89	-0.87	441.75	99.22	445.76	96.56	-1.46
Children	0.81	0.39	0.85	0.36	-1.6	0.91	0.29	0.9	0.3	0.64
Household characteristics										
ln_GHI	11.38	0.38	11.38	0.38	0.02	11.38	0.39	11.37	0.39	1.19
GHI	94,505	38,628	94,602	39,088	-0.04	95,103	46,364	93,638	42,520	1.17
home_owner	84%	0.37	87%	0.34	-1.27	81%	0.39	83%	0.38	-1.51
ln_fw	9.99	1.95	10.03	1.99	-0.32	10.15	1.77	10.13	1.85	0.38
Job characteristics										
permanent	90%	0.3	87%	0.34	1.39	88%	0.33	86%	0.35	1.78
part_time	87%	0.34	89%	0.31	-1.09	23%	0.42	23%	0.42	0.1
ln_wage_op	4.49	0.34	4.48	0.37	0.53	4.82	0.42	4.83	0.43	-0.19
Macroeconomic characteristics										
Unemployment rate	4.50%	0.00	4.50%	0.00	-1.41	4.40%	0.01	4.40%	0.01	2.48
Observations	506		570			2349		2790		

Note: attached defined as doing paid work five years before older partner reaches SPA

Table OA3, continued

| | Women younger partner_N | | | | | Men younger partner_N | | | | |
| | PA eligible | | Non-PA eligible | | t-test | PA eligible | | Non-PA eligible | | t-test |
	mean	sd	mean	sd		mean	sd	mean	Sd	
Individual characteristics										
Age (months)	674.75	36.76	673.75	34.89	0.56	694.45	30.89	698.32	25.85	-2.34
Age_50_54	6.2%	0.24	4.7%	0.21	1.31	2.5%	0.16	1.5%	0.12	1.21
Age_55_59	19.9%	0.40	23.1%	0.42	-1.57	10.2%	0.30	6.7%	0.25	2.15
Age_60_64	73.9%	0.44	72.1%	0.45	0.79	87.3%	0.33	91.8%	0.28	-2.52
Age_diff. (months)	48.25	36.76	49.25	34.89	-0.56	28.55	30.89	24.68	25.85	2.34
Partner_dur. (months)	438.44	107.08	434.59	111.08	0.70	439.44	106.07	443.40	105.66	-0.64
Children	87.8%	0.33	86.0%	0.35	1.07	80.9%	0.39	84.3%	0.36	-1.57
Household income and wealth										
Home_owner	74.5%	0.44	75.3%	0.43	-0.38	78.1%	0.41	77.9%	0.42	0.07
ln_GHI	11.10	0.47	11.14	0.47	-1.68	11.15	0.52	11.15	0.45	0.07
financial wealth	56,404	177,666	64,368	192,708	-0.85	65,074	182,803	55,232	273,212	0.73
Ln_financial_wealth	9.72	2.44	9.72	2.44	-0.02	9.96	2.14	9.82	2.22	1.07
Job characteristics										
Permanent	88.5%	0.32	88.9%	0.31	-0.30	87.3%	0.33	87.1%	0.34	0.10
Part_time	80.7%	0.40	76.9%	0.42	1.82	19.3%	0.40	20.4%	0.40	-0.47
ln_wage	4.48	0.36	4.50	0.38	-0.72	4.91	0.58	4.90	0.49	0.45
Older partner characteristics										
Retirement	95.0%	0.22	94.6%	0.23	0.37	97.2%	0.16	99.0%	0.10	-2.27
Macroeconomic characteristics										
Unemployment rate	4.5%	0.0047	4.5%	0.0046	0.84	4.4%	0.0061	4.4%	0.0058	-0.37
Observations	**884**		**705**			**575**		**613**		

| | Women younger partner_A | | | | | Men younger partner_A | | | | |
| | PA eligible | | Non-PA eligible | | t-test | PA eligible | | Non-PA eligible | | t-test |
	mean	sd	mean	sd		mean	sd	mean	sd	
Individual characteristics										
Age (months)	675.05	34.88	676.49	34.18	-1.48	697.41	27.63	696.56	29.63	0.49
Age_50_54	4.9%	0.21	4.3%	0.20	1.01	1.3%	0.11	2.4%	0.15	-1.36
Age_55_59	20.3%	0.40	19.6%	0.40	0.62	9.1%	0.29	8.2%	0.27	0.53
Age_60_64	74.9%	0.43	76.2%	0.43	-1.07	89.6%	0.31	89.4%	0.31	0.10
Age_diff. (months)	47.95	34.88	46.51	34.18	1.48	25.59	27.63	26.44	29.63	-0.49
Partner_dur. (months)	441.75	99.22	445.76	96.56	-1.46	425.53	120.49	431.66	109.89	-0.87
Children	90.6%	0.29	90.1%	0.30	0.64	81.4%	0.39	85.1%	0.36	-1.60
Household income and wealth										
Home_owner	81.2%	0.39	82.8%	0.38	-1.51	84.0%	0.37	86.8%	0.34	-1.27
ln_GHI	11.38	0.39	11.37	0.39	1.19	11.38	0.38	11.38	0.38	0.02
financial wealth	52,232	175,675	56,380	189,759	-0.81	52,956	164,093	46,207	188,258	0.63
Ln_financial_wealth	10.15	1.77	10.13	1.85	0.38	9.99	1.95	10.03	1.99	-0.32
Job characteristics										
Permanent	89.1%	0.31	88.0%	0.32	1.16	84.8%	0.36	86.3%	0.34	-0.71
Part_time	85.7%	0.35	86.0%	0.35	-0.29	21.5%	0.41	19.3%	0.39	0.91
ln_wage	4.50	0.36	4.49	0.35	0.57	4.87	0.42	4.91	0.43	-1.64
Older partner characteristics										
Retirement	0.0%	0.00	0.0%	0.00		0.0%	0.00	0.0%	0.00	
Macroeconomic characteristics										
Unemployment rate	4.5%	0.0046	4.5%	0.0046	2.66	4.3%	0.0061	4.4%	0.0060	-1.65
Observations	**2,349**		**2,790**			**506**		**570**		

Note: attached defined as doing paid work five years before older partner reaches SPA

Figure OA2 Placebo test: Average Survival estimates (raw data) for older partners. Transition from work to retirement
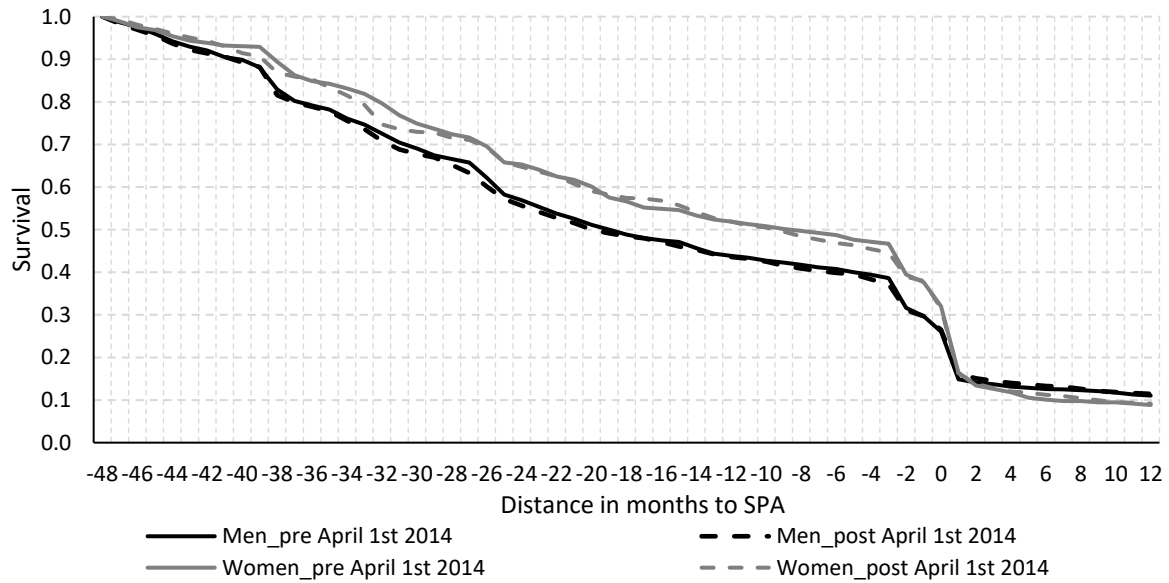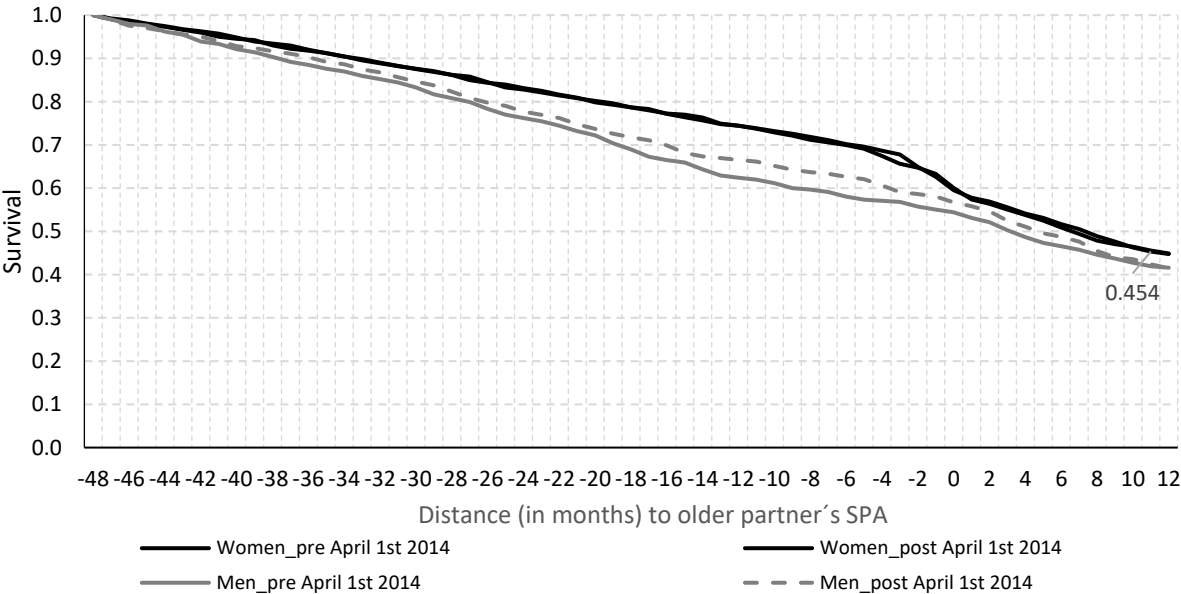

Note: Pre April 1, 2014 group: Older partners reaching the SPA in February-March 2014; Post April 1, 2014 group: Older partners reaching the SPA in April-May 2014.
Source: Own elaboration from Statistics Netherlands

Table OA3 Placebo test: Average Marginal effects of the treatment on the transition from work to retirement. Older partners.

	Men				Women			
	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Post April 1, 2014	0.000062	0.000039	0.000043	-0.00041	-0.000058	-0.000039	-0.00014	0.00032
	(0.00061)	(0.00061)	(0.00061)	(0.00062)	(0.0015)	(0.0015)	(0.0015)	(0.0015)
Observations	277,039	277,039	274,791	273,022	42,897	42,897	42,709	42,495

*Note: Pre April 1, 2014 group: Older partners reaching the SPA in February-March 2014; Post April 1, 2014 group: Older partners reaching the SPA in April-May 2014. * p<0.05;** p<0.01; *** p<0.001. Standard errors clustered at individual level in parentheses.*
Source: Own elaboration from Statistics Netherlands

Figure OA2 Placebo test: Average Survival estimates (raw data) for younger partners. Transition from work to retirement

Note: Pre April 1, 2014 group: Men or women whose older partner reaches the SPA in February-March 2014; Post April 1, 2014 group: Men or women whose older partner reaches the SPA in April-May 2014.
Source: Own elaboration from Statistics Netherlands

Table OA4 Placebo test: Average Marginal effects of the treatment on the transition from work to retirement. Younger partners. Men (top panel) and women (bottom panel)

	Men					
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Post April 2014	-0.00055	-0.00054	-0.00058	-0.00049	-0.00041	-0.00041
	(0.00074)	(0.00074)	(0.00074)	(0.00075)	(0.00075)	(0.00075)
Observations	96,177	96,177	95,331	95,026	95,026	95,026

	Women					
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Post April 2014	0.000020	0.000029	0.000089	-0.00021	-0.00022	-0.00022
	(0.00040)	(0.00040)	(0.00040)	(0.00041)	(0.00041)	(0.00041)
Observations	300,130	300,130	298,044	297,570	297,570	297,570

Note: Sample includes male (female) younger partners of those reaching the SPA in Feb-March and April-May 2014. Observation period: 48 months before older partner´s SPA until 12 months after. For Model description see Section 6.2. * p<0.05;** p<0.01; *** p<0.001. Standard errors clustered at individual level in parentheses.
Source: Own elaboration using data from Statistics Netherlands

Table OA5 Average Marginal Effects of post-reform on the older partner's monthly probability to retire for couples where younger partners earn wages above and below the median; sample with younger partner working five years before older partner reaches SPA

	Men	Women
Post-reform		
above_median_wage_yp=0	-0.0079***	-0.0061***
	(0.00094)	(0.0016)
above_median_wage_yp=1	-0.0069***	-0.0059**
	(0.00086)	(0.0020)
Difference	0.00098	0.00018
	(0.0013)	(0.0026)
P>chi2	0.4416	0.9434
Chi2	0.59	0.01
Observations	213,103	46,095

Note: Model 1 adding the interaction of post-reform and the dummy wage of the younger partner above the median
*Note: Standard Errors clustered by individual in parentheses. * p>0.05; ** p<0.01; *** p<0.001*

Table OA6 Average Marginal Effect of the reforms on the older partner's monthly probability to retire by wage quartile of the younger partner; sample with younger partner working five years before older partner reaches SPA

	Men	Women
Post_reform		
average_wage_q1	-0.0083***	-0.0045*
	(0.0013)	(0.0019)
average_wage_q2	-0.0075***	-0.010***
	(0.0013)	(0.0029)
average_wage_q3	-0.0077***	-0.0054
	(0.0013)	(0.0029)
average_wage_q4	-0.0061***	-0.0064*
	(0.0012)	(0.0029)
Observations	213,103	46,095

Note: Model 1 adding the interaction of post-reform and quartile of younger partner wage
*Note: Standard Errors clustered by individual in parentheses. * p>0.05; ** p<0.01; *** p<0.001*
Note: Test of equality of the four AMEs gives p-values 0.63 and 0.42 for male and female older partners, respectively

Table OA7 Estimation results. Logit model. Retirement of older partners. Model 1 adding the interaction of post-reform and age difference

	Men	Women
Married	-0.24**	0.17
	(0.094)	(0.19)
Post-reform	-0.31***	-0.24***
	(0.039)	(0.040)
Married#Post-reform	-0.089	-0.093
	(0.056)	(0.10)
Age difference	-0.0012	-0.0017
	(0.00062)	(0.0021)
Post-reform#Age difference	-0.00028	-0.00049
	(0.00078)	(0.0025)
Partner duration	0.00080***	0.000018
	(0.00017)	(0.00036)
Children	-0.18***	-0.35***
	(0.030)	(0.041)
Unemployment rate	2.16	2.82
	(1.24)	(1.86)
Constant	-1.53***	-1.31***
	(0.097)	(0.15)
Observations	501,669	209,546
Pseudo R^2	0.15846	0.23999
Log Likelihood	-43,405.81	-15,832.08

*Note: Standard Errors clustered by individual in parentheses. * p>0.05; ** p<0.01; *** p<0.001*

Table OA8 Estimation results. Logit model. Retirement of younger partners. Model 1 adding the interaction of post-reform and age difference

	Men	Women
Post-reform	0.057	-0.23***
	(0.070)	(0.055)
Age	-0.16***	-0.080***
	(0.013)	(0.0063)
Age^2	0.00020***	0.000098***
	(0.000017)	(0.0000081)
Age difference	0.10***	0.045***
	(0.010)	(0.0050)
Post-reform#Age difference	-0.0051	-0.0024*
	(0.0028)	(0.0012)
Partner duration	0.00050	0.000062
	(0.00034)	(0.00023)
Children	-0.20*	-0.14*
	(0.094)	(0.061)
Unemployment rate	-2.64	2.52
	(3.28)	(1.92)
Observations	122,839	384,367
Log Likelihood	-6,879.28	-18,587.56

*Note: Standard Errors clustered by individual in parentheses. * p>0.05; ** p<0.01; *** p<0.001*