

Effects of delaying the normal retirement age on retirement behaviour of Belgian women

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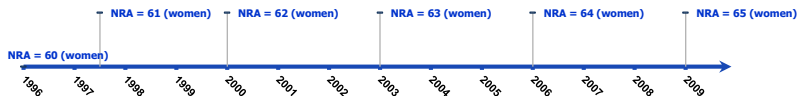
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Belgian Day for Labour Economists

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- Aim of the study: analyse the effects of delaying the normal retirement age (NRA) of Belgian women
- Reform
 - ▷ Mid-1996: Belgian government announced public pension reform in the wage earners and self-employed schemes
 - ▷ Among the announced changes: gradual increase in the NRA of women

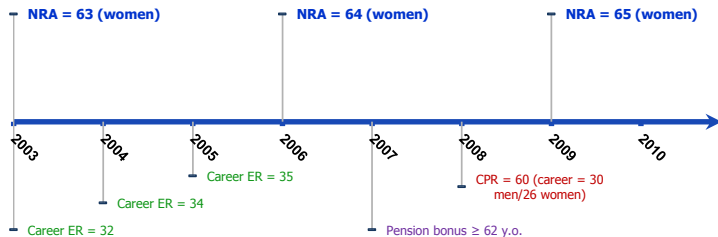


- Data: 2003-2012 (quarterly)

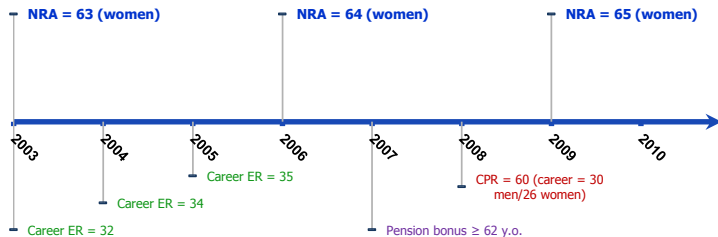
- Data: 2003-2012 (quarterly)

- Focus of the study
 - ▷ Increase in the NRA from 63 to 64 and from 64 to 65

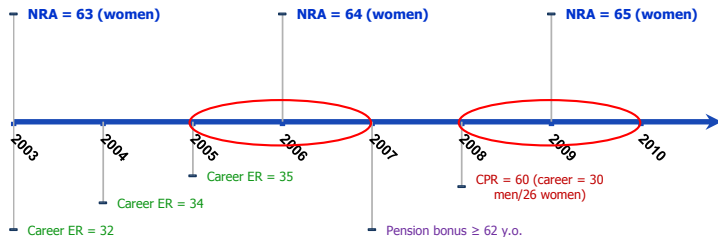
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 - ▷ Increase in the NRA from 63 to 64 and from 64 to 65
 - ▷ wage earner women (excluding those who have spent any time working as civil servant or self-employed)
 - ▷ observation period covers one year before and after each increase in the NRA



Contribution to the literature

- ▷ estimation of the overall effect of the reform for the selected population, based on a stock of individuals
 - ↔ impact on employment and spillover effects on other social security programs
- ▷ impact of the reform on early pension benefits claiming
- ▷ special focus on married women

Difference-in-differences approach

- ▷ compare the behaviour of the treatment group before and after the reform
 - ▷ use a control group observed during the same period to remove changes related to the general trends
- ⇒ estimate the following equation for each status of interest separately

$$y_{it} = \beta_0 + \delta_1 \mathbf{Treat}_{it} + \delta_2 \mathbf{After}_t + \gamma(\mathbf{Treat}_{it} \times \mathbf{After}_t) + \mathbf{X}'_{it}\beta + \sum_{l=2}^4 \theta_l + u_{it}$$

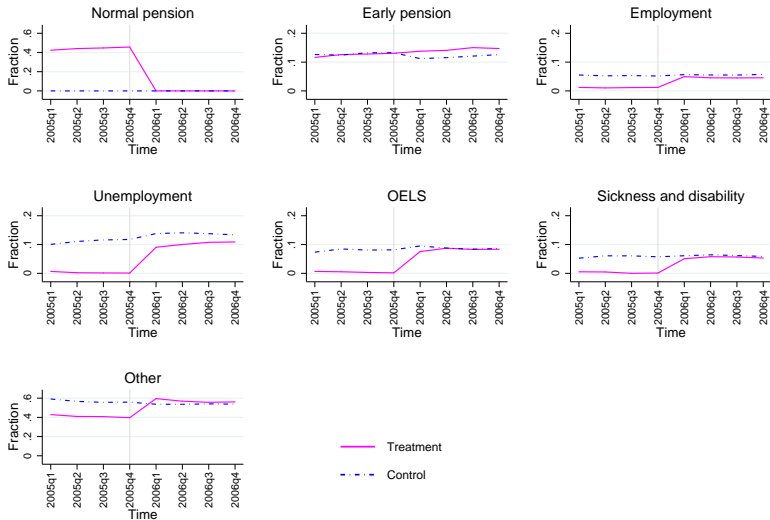
Sample selection

Selection of the treatment and control groups depends on the date of birth

Change in the NRA	Group	Observation period	Birth cohort
From 63 to 64	Treatment, age 63	2005	Dec. 1941 - Nov. 1942
		2006	Dec. 1942 - Nov. 1943
	Control, age 62	2005	Dec. 1942 - Nov. 1943
		2006	Dec. 1943 - Nov. 1944
From 64 to 65	Treatment, age 64	2008	Dec. 1943 - Nov. 1944
		2009	Dec. 1944 - Nov. 1945
	Control, age 63	2008	Dec. 1944 - Nov. 1945
		2009	Dec. 1945 - Nov. 1946

Trends before and after the increase in the NRA

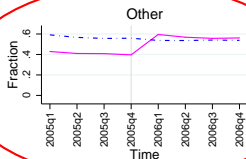
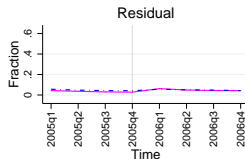
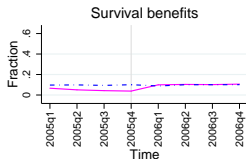
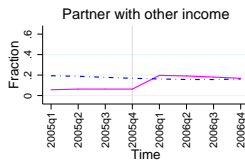
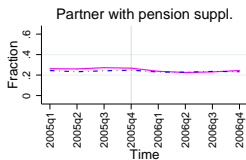
NRA = 64



Source: Own calculations based on the data from the Crossroads Bank for Social Security.

Decomposition of the category *Other*

$NRA = 64$



— Treatment
- - - Control

Source: Own calculations based on the data from the Crossroads Bank for Social Security.

Estimation results - main effects

	NRA = 64						
	Normal PE	Early PE	E	UI	OELS	SDI	Other
Treat. effect (γ)	-0.451*** (0.010)	0.019 (0.013)	0.025*** (0.005)	0.071*** (0.012)	0.076*** (0.010)	0.044*** (0.009)	0.218*** (0.012)
Observations	31845						
	NRA = 65						
	Normal PE	Early PE	E	UI	OELS	SDI	Other
Treat. effect (γ)	-0.470*** (0.009)	0.012 (0.014)	0.020*** (0.005)	0.132*** (0.013)	0.074*** (0.010)	0.049*** (0.009)	0.182*** (0.011)
Observations	33005						

Notes: Standard errors, in parentheses, are clustered at the individual level. Specifications include indicators for the treatment group, the period after the treatment and additional controls for blue-collar status, activity sector, region, family status, partner's employment status, partner's pension status, second-order polynomials in experience, assimilated days, lifetime average earnings, annual earnings, partner's annual earnings and partner's age as well as quarter dummies. *** indicate statistical significance at the 1% level. PE stands for pension, E for employment, UI for unemployment insurance, OELS for other early leave schemes and SDI for sickness and disability insurance.

Estimation results - transitions

	NRA = 64						
	Normal PE	Early PE	E	UI	OELS	SDI	Other
Panel A. Transition from E							
Treat. effect (γ)	-0.588*** (0.046)	0.041* (0.023)	0.621*** (0.059)	-0.006 (0.010)	-0.040** (0.018)	0.005 (0.013)	-0.033 (0.029)
Observations	1635						
Panel B. Transition from UI							
Treat. effect (γ)	-0.967*** (0.009)	0.051*** (0.018)	-0.003 (0.002)	0.920*** (0.020)	(dropped)	0.003 (0.004)	-0.004 (0.009)
Observations	3783						
Panel C. Transition from OELS							
Treat. effect (γ)	-0.973*** (0.007)	(dropped)	0.000 (0.000)	0.003 (0.002)	0.971*** (0.010)	-0.001 (0.001)	0.000 (0.005)
Observations	2560						
Panel D. Transition from SDI							
Treat. effect (γ)	-0.940*** (0.018)	0.017 (0.020)	-0.003 (0.003)	0.014 (0.011)	(dropped)	0.927*** (0.026)	-0.016* (0.009)
Observations	1803						
Panel E. Transition from Other							
Treat. effect (γ)	-0.351*** (0.012)	0.002* (0.001)	0.002 (0.002)	0.001* (0.001)	(dropped)	(dropped)	0.346*** (0.012)
Observations	18088						

Notes: Standard errors, in parentheses, are clustered at the individual level. Specifications include indicators for the treatment group, the period after the treatment and additional controls for blue-collar status, activity sector, region, family status, partner's employment status, partner's pension status, second-order polynomials in experience, assimilated days, lifetime average earnings, annual earnings, partner's annual earnings and partner's age as well as quarter dummies. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level respectively.

Estimation results - by family status

	NRA = 64						
	Normal PE	Early PE	E	UI	OELS	SDI	Other
Single							
Treat. effect (γ)	-0.615*** (0.018)	0.017 (0.027)	0.042*** (0.012)	0.100*** (0.026)	0.079*** (0.019)	0.055*** (0.020)	0.322*** (0.027)
Married							
Treat. effect (γ)	-0.389*** (0.011)	0.019 (0.015)	0.018*** (0.006)	0.060*** (0.013)	0.074*** (0.012)	0.039*** (0.009)	0.178*** (0.012)
Observations	33005						

Notes: Standard errors, in parentheses, are clustered at the individual level. Specifications include indicators for the treatment group, the period after the treatment and additional controls for blue-collar status, activity sector, region, family status, partner's employment status, partner's pension status, second-order polynomials in experience, assimilated days, lifetime average earnings, annual earnings, partner's annual earnings and partner's age as well as quarter dummies. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level respectively.

Increasing the NRA by one year leads to

- large spillover effects on other social security programs
 - ↪ women extend their stay in the status they previously occupied
- no effect on early pension claiming
 - ↪ might be due to a failure to satisfy eligibility conditions
- small employment effect
 - ↪ a low proportion still in employment prior to the NRA
 - ↪ **but** those who were employed continue to work after the NRA is delayed

Thank you for your attention!



Photo: Howard McWILLIAM