

SHARE users conference 28-29 November 2013, Liège, Belgium

Factors for early retirement in Denmark (SHARE waves 1, 2, and 4)

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Have you seen this man?



Otto Rehakel



- German football coach, former player
- Considered one of the most successful German managers
- Born August 9, 1938 (age 75)

40-49

- German cup (aged 42)

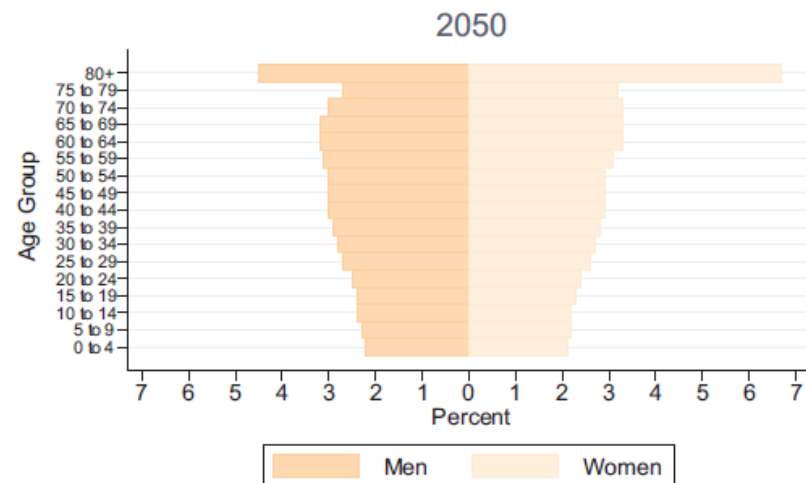
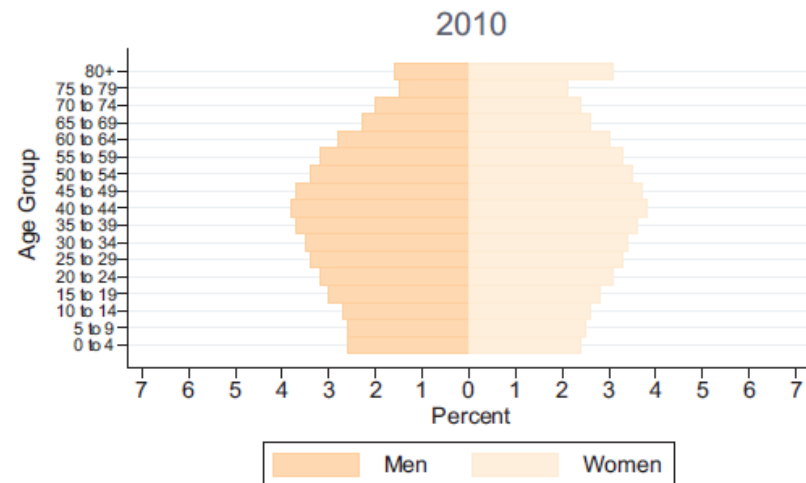
50-59

- 2x German championships (aged 50, 55), 2x German cup (aged 53, 56), UEFA cup winners' cup (aged 54),

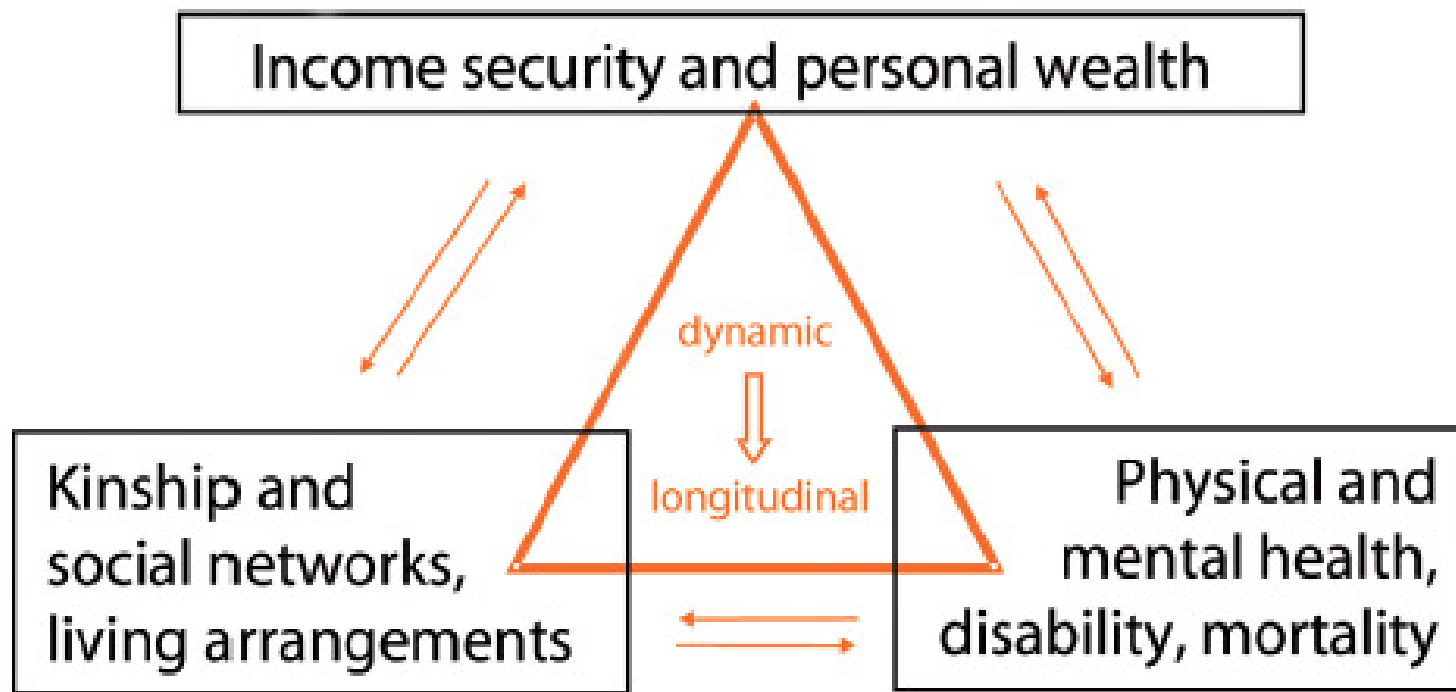
60-69

- German champ. (aged 60), **UEFA Euro 2004 /w Greece (66)**, (first-ever foreigner) Greek of the Year 2004, 'Rehakles'

Age pyramids for EU-27 (Eurostat projections for 2010 and 2050)

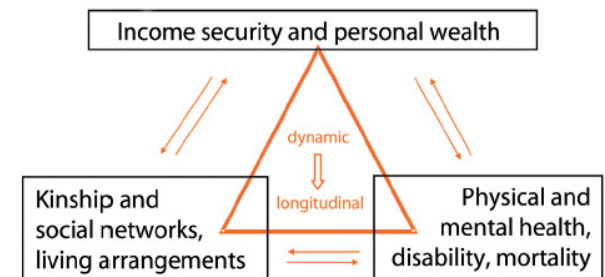


Interplay between economic, health, and social factors in shaping older people's living conditions

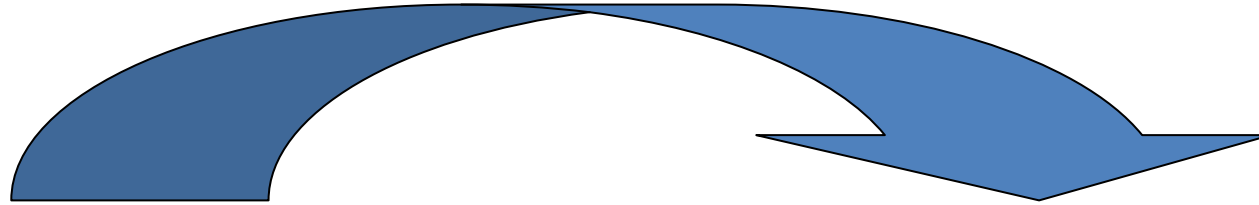
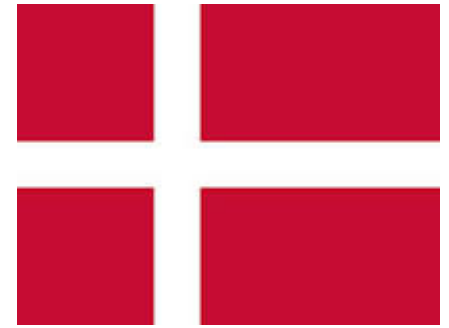


Previous findings

- Patterns of early retirement complex.
 - Multitude of reasons and pathways.
 - No consensus on what limits/promotes early retirement.
 - Voluntariness
 - Supply and demand factors
 - Individual or structural factors
 - Level that primarily controls the decision, i.e. labour force (macro) versus company (meso) versus employee (micro)
- Framework with 5 components
 - Push, pull, jump (leaving the work force)
 - Stay, stuck (staying in the work force)



This study



- Former wave: W1 [W2]
- Not retired (EP005≠1)
- Approx. 100 covariates derived from 26 CAPI modules
- Later wave: W2 [W4]
- Retired? (EP005=1?)
- Age range: 58 – 65 or 67 y

Analysis: (1) logistic regression (stepwise variable selection; $\alpha=0.05, 0.1$)
(2) logistic regression for panel data (SAS: proc surveylogistic)

Results (entry=stay=5%)

- Pro early retirement:
 - Unemployed (ref.: employed): OR 4.4 (95% CI: 2.2, 8.7); $p < 0.0001$
 - Number of grandchildren: 1.6 (0.95, 2.6); $p = 0.08$
 - Limited in activities people usually do due to health problem, GALI (ref.: not limited): 1.7 (1.06, 2.7); $p = 0.03$
 - No. of symptoms reported (ref.: less than 2): 2.1 (1.3, 3.5); 0.005
 - Age at former wave: 1.9 (1.7, 2.2); $p < 0.0001$
- Contra early retirement:
 - Permanently sick or disabled (ref.: employed): 0.1 (0.02, 0.4); 0.001
 - Total hours worked per week (ref.: up to 40 hrs): 0.5 (0.25, 0.99); $p = 0.048$
 - Government raises retirement age: 0.988 (0.981, 0.996); $p = 0.003$
 - Grip strength: 0.962 (0.936, 0.989); 0.006
 - Value of property and/or real estate (in 100,000 DKK): 0.94 (0.88, 1.003); $p = 0.06$

Results (entry=stay=10%)

- Pro early retirement:
 - + Opportunity to develop new skills (ref.: (strongly) agree): 1.8 (0.96, 3.2); 0.07
 - + Number of chronic diseases: 1.2 (0.96, 1.5); 0.10
- Contra early retirement:
 - + No. of limitations /w IADL (ref.: none): 0.3 (0.1, 1.1); 0.07

Summary

- Different dimensions
 - Work place-related (unemployment, new skills development)
 - Kinship (grandchildren)
 - Health (GALI, symptoms, chronic diseases)
- Different mechanisms
 - Push: unemployment, new skills development
 - Jump: grandchildren
 - Stay: >40 hrs/w, grip strength, retirement age, property
 - Stuck: permanently sick or disabled, IADL limitations
- No predominant financial incentives (pull)

Limitations & Perspectives

- N=652
- (Over)simplification of reality
 - Continuous interplay of push, pull, jump, stay, stuck, not static
- . [€, DKK, \$]
- Danish register data
- Other SHARE countries
- HRS, ELSA
- Prolonged stay beyond 65 / 67



Thank you!

Merci beaucoup!

Mange tak!

Vielen Dank!

Back-up slides

Flowchart

N=1707, 2616, 2392 in W1, W2, W4



Consecutive contributions:

- **W1-W2: N=609, W2-W4: 910**
- **N=1519 in total**



Age range: 58 – 65 or 67 y

- **W1-W2: N=225, W2-W4: 427**
- **N=652 in total**

Table 1:
Demographics

Variable	Category	Descriptive statistics
Number of observations	Total	652 (100%)
	Waves 1 & 2	225 (34.5%)
	Waves 2 & 4	427 (65.5%)
Sex	Female	346 (53.1%)
	Male	306 (46.9%)
Mean age (range)		61.2 (58.0, 66.1)
Marital status	Married, living together with spouse	329 (50.5%)
	Registered partnership	1 (0.15%)
	Married, living separated from spouse	4 (0.6%)
	Never married	27 (4.1%)
	Divorced	55 (8.4%)
	Widowed	30 (4.6%)
	Missing values	206 (31.6%)

**Table 1:
Demographics**

Variable	Category	Descriptive statistics
Number of observations	Total	652 (100%)
International Standard Classification of Education (ISCED 1997)	Primary education (first stage of basic education)	25 (3.8%)
	Lower secondary education (second stage of basic education)	21 (3.2%)
	(Upper) secondary education	171 (26.2%)
	First stage of tertiary education (not leading directly to an advanced research qualification)	215 (33.0%)
	Missing values	220 (33.7%)
Household contributions	One person to two consecutive waves (1 & 2 or 2 & 4)	344 (71.1%)
	Two persons to two consecutive waves	114 (23.6%)
	One person to two consecutive waves and one person to waves 1, 2, and 4	24 (4.9%)
	Two persons to waves 1, 2, and 4	2 (0.4%)

**Table 2:
Factors of
early
retirement**

Factor	Factor level	Significance level at which variables entered and stayed in the model			
		5%		10%	
		Odds ratio (95% CI)	P-value	Odds ratio (95% CI)	P-value
Current job situation (ep005_1)	Employed or self-employed (reference)				
	Unemployed	4.4 (2.2, 8.7)	<0.0001	5.4 (2.7, 11.1)	<0.0001
	Permanently sick or disabled	0.09 (0.02, 0.40)	0.001	0.2 (0.04, 0.63)	0.003
	Homemaker or other	0.8 (0.1, 6.5)	0.95	0.9 (0.1, 8.1)	0.99
Total hours worked per week (from ep013)	Up to 40 hours (reference)				
	More than 40 hours	0.50 (0.25, 0.99)	0.048	0.53 (0.26, 1.08)	0.08
Opportunity to develop new skills (ep030)	Strongly agree or agree (reference)				
	Strongly disagree or disagree			1.8 (0.96, 3.2)	0.07
Grandchildren (from ch021)	None (reference)				
	Yes, at least one	1.6 (0.95, 2.6)	0.08	1.7 (0.99, 2.8)	0.05

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retirement**

Factor	Factor level	Significance level at which variables entered and stayed in the model			
		5%		10%	
		Odds ratio (95% CI)	P-value	Odds ratio (95% CI)	P-value
Government raising retirement age (ex008)		0.988 (0.981, 0.996)	0.003	0.989 (0.981, 0.996)	0.004
Grip strength (from gs006 to gs009)		0.962 (0.936, 0.989)	0.006	0.964 (0.938, 0.990)	0.008
Value of property and/or real estate (from ho024 to ho027) [in 100.000 DKK]		0.94 (0.88, 1.003)	0.06	0.94 (0.89, 1.004)	0.07
Limited in activities people usually do because of a health problem (ph005)	Not limited (reference)				
	Limited or severely limited	1.7 (1.06, 2.7)	0.03	1.9 (1.1, 3.3)	0.02
Number of chronic diseases (ph006_1 to ph006_16)				1.2 (0.96, 1.5)	0.10

**Table 2:
Factors of
early
retirement**

Factor	Factor level	Significance level at which variables entered and stayed in the model			
		5%		10%	
		Odds ratio (95% CI)	P-value	Odds ratio (95% CI)	P-value
Number of symptoms reported (from ph010_1 to ph010_13)	Less than two symptoms (reference)				
	At least two symptoms	2.1 (1.3, 3.5)	0.005	2.0 (1.2, 3.4)	0.01
Number of IADL* (from ph049_7 to ph049_13)	No IADL limitations (reference)				
	One or more limitations with IADL			0.3 (0.1, 1.1)	0.07
Age at former wave		1.9 (1.7, 2.2)	<0.0001	1.9 (1.7, 2.2)	<0.0001
Gender	Female (reference)				
	Male	1.3 (0.7, 2.6)	0.45	1.2 (0.6, 2.3)	0.64

* IADL: limitations with instrumental activities of daily living.

**Table 2:
Factors of
early
retirement**

Factor	Factor level	Significance level at which variables entered and stayed in the model			
		5%		10%	
		Odds ratio (95% CI)	P- value	Odds ratio (95% CI)	P- value
Educational status according to ISCED 1997	First stage of tertiary education				
	Primary education (first stage of basic education)	1.2 (0.7, 2.1)	0.70	1.2 (0.6, 2.1)	0.74
	Lower secondary education (second stage of basic education)	0.8 (0.2, 2.9)	0.46	0.7 (0.2, 3.0)	0.48
	(Upper) secondary education	1.6 (0.9, 2.8)	0.14	1.5 (0.8, 2.7)	0.15
Self-perceived health (from ph002, ph003, ph052, ph053)	At least good (reference)				
	Fair or worse	1.3 (0.6, 2.8)	0.55	1.2 (0.5, 2.7)	0.68
Estimated annual income last year (from ep205, ep207, ho030) [in 100,000 DKK]		0.97 (0.90, 1.05)	0.45	0.98 (0.91, 1.06)	0.59