

Retirement Policy in a Post-Covid World

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- In an unfunded pension system

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 $\# \text{ of retirees} \times \text{benefits per retiree} =$
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- Focus trends driving $\#$ of retirees and workers during 1980-2020 for five countries: US, UK, Japan, Korea, Singapore

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- How can we fund retirement in the future?
 - Impact of retirement policy reforms (in the UK and Europe) on labor supply

Historical Trends and Covid-19

Life Expectancy at Age 65 - Women

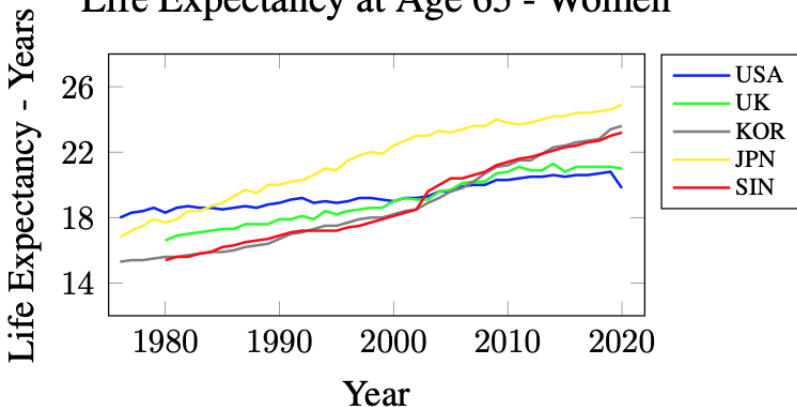


Figure: Age 65 Life expectancy for women between 1976 and 2020.

	Life Expectancy at age 65 (men)						Life Expectancy at age 65 (women)					
	Year						Year					
	1980	1990	2000	2010	2019	2020	1980	1990	2000	2010	2019	2020
US	14.1	15.1	16.0	17.7	18.2		18.3	18.9	19.0	20.3	20.8	
UK	12.6	14.0	15.8	18.2	18.8		16.6	17.9	19.0	20.8	21.1	
KOR	10.6	12.6	14.3	16.8	19.1		15.6	16.7	18.2	21.2	23.4	
JPN	14.6	16.2	17.5	18.7	19.8		17.7	20.0	22.4	23.8	24.6	
SIN	12.6	14.5	15.6	18.0	19.5		15.4	16.9	18.1	21.4	23.0	

Table: Age 65 Life expectancy for men and women.

	Life Expectancy at age 65 (men)						Life Expectancy at age 65 (women)					
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	1980	1990	2000	2010	2019	2020	1980	1990	2000	2010	2019	2020
US	14.1	15.1	16.0	17.7	18.2	17.0	18.3	18.9	19.0	20.3	20.8	19.8
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Table: Age 65 Life expectancy for men and women.

Age 55 to 64 - Employment rates

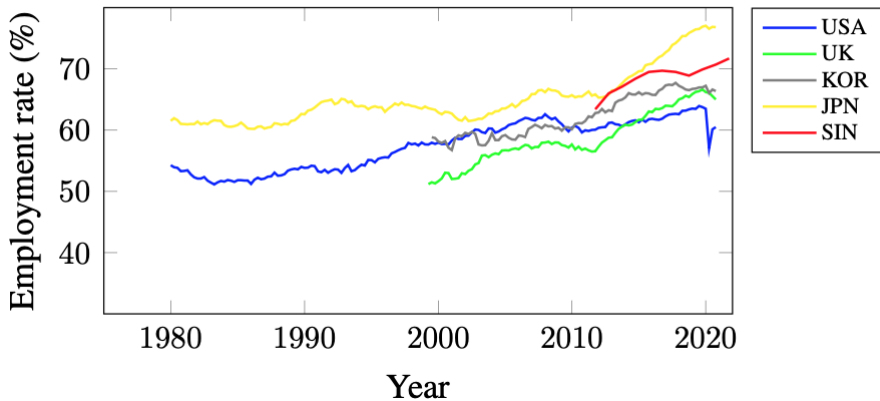


Figure: Age 55 to 64 employment rates between 1980 and 2020.

Fiscal Sustainability

- Over the last 40 years
 - Age 65 life expectancies rose \approx 5 years, more in East Asia
 - Age 55-64 employment rose \approx 10 percentage points (retirement delayed 1 year)
 - More years of retirement to fund
 - Covid-19 did not help
 - \Rightarrow 2021 Social Security actuaries: Social Security trust fund will be exhausted 1 year earlier

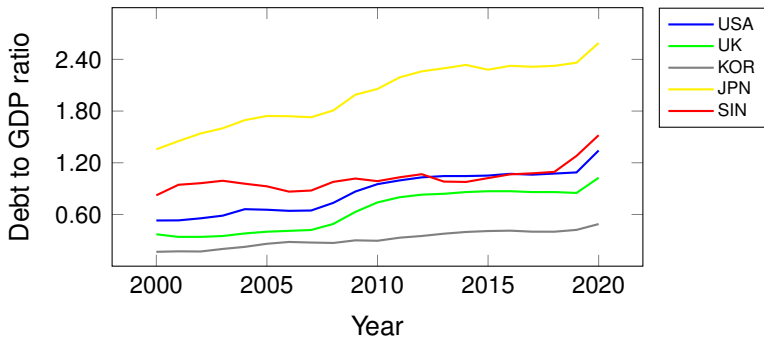


Figure: Public debt to GDP ratio between 2000 and 2020.

- Covid: fiscal sustainability problem exacerbated
 - ⇒ Unemployment and other benefits led to higher national debts

Delaying retirement

Government Pensions and Retirement

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3. Once receiving benefits they often face an earnings test (where individuals have benefits taxed away if they work and draw benefits at the same time)
4. Integration with disability/unemployment benefits

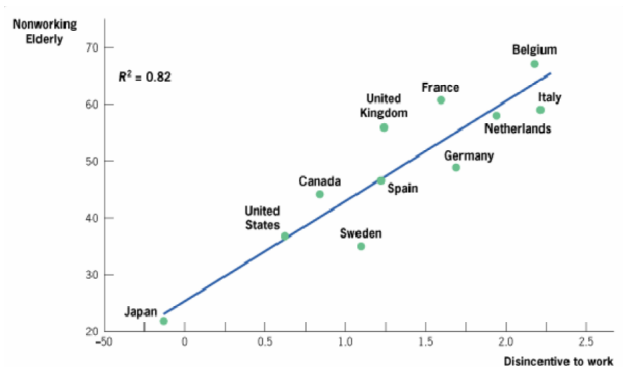


Figure: Implicit Taxes on Work and Nonwork. Source: Gruber and Wise (1999).

Introduction - Delaying Retirement

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- We consider four types of reforms:
 1. Shifting ERA forward
 2. Eliminating earnings test
 3. Tightening eligibility criteria for benefits
 4. Moving to National Defined Contribution Schemes

Shifting the Early Retirement Age (ERA)

- People often stop working when eligible for benefits
- Austrian data. ERA varies by gender

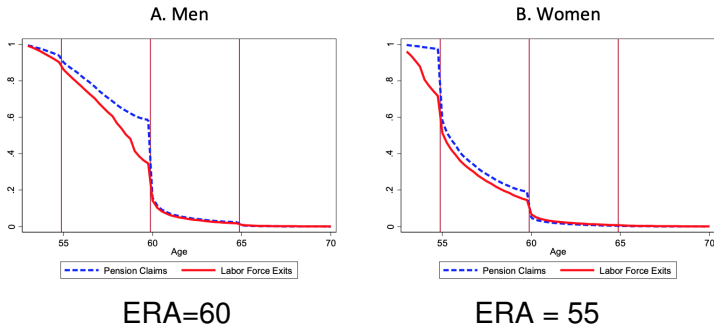
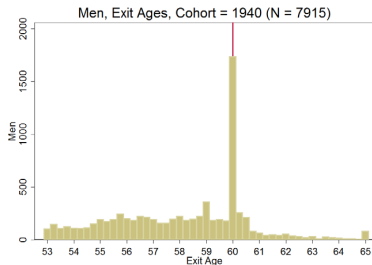
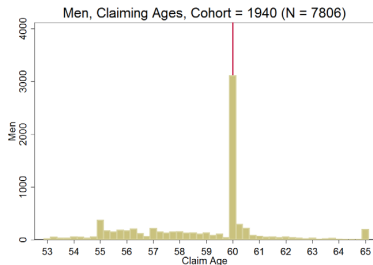


Figure: Pre-Reform (2000) Pension Claims & Employment. Source: Manoli and Weber (2016)

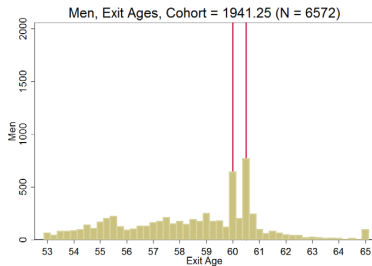
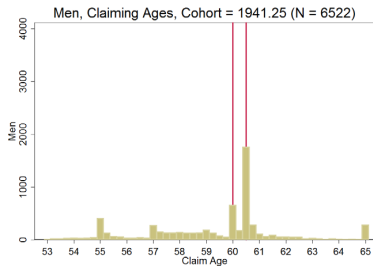
- Austria changed the ERA by birth cohort
- Men goes from 60 to 62, women goes from 55 to 57

Fig. 5A. Men's Claiming Ages & Exit Ages by Cohort



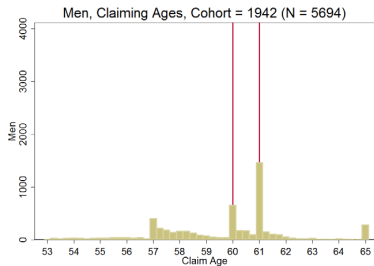
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In the last 30 Years, Lots of Countries have Shifted their ERA

- A partial list:
 - ⇒ UK
 - ⇒ Norway
 - ⇒ Denmark
 - ⇒ Italy
 - ⇒ Switzerland
 - ⇒ Australia
- Evidence suggests raising ERA 1 year increases labor supply $\approx .1$ years

Eliminating earnings tests

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- Disney and Smith (2002) looks at the effects of removing the UK earnings test
- They find that work hours increased by around 4 hours per week for men; smaller effect for women.
- Lots of other countries have removed their earnings test also (e.g., US), again finding labor supply responses

Tightening eligibility criteria for benefits

- Multiple countries have tightened eligibility for disability and unemployment benefits
- French et al. (2022) exploit a radical change in eligibility for the **Old Age Unemployment Benefit** in Poland-eligibility for benefit depends on age and termination of employment caused by employer
- In August 2004 age eligibility threshold increased from 55 to 60

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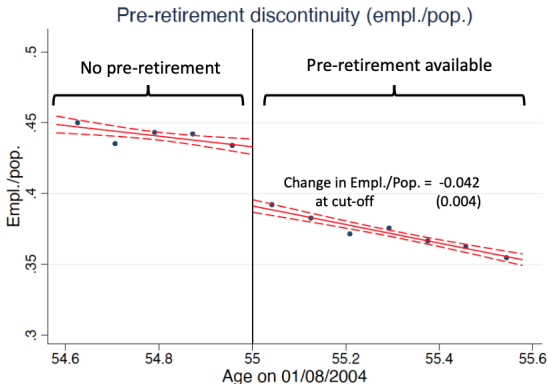
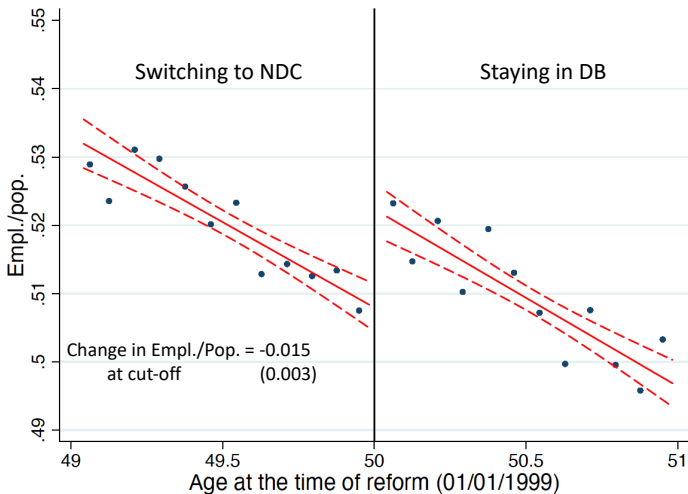


Figure: Employment rates the the groups with and without pre-retirement option.

Shifting to Notional Defined Contribution Schemes

- Multiple countries have recently shifted from Defined Benefit (DB) to Notional Defined Contribution (NDC) Systems
 - ▶ DB: retirement benefits a function of “best earnings years”
 - ▶ NDC: retirement benefits a function of all earnings years
- French et al. (2022) study a switch from a DB to a NDC system in Poland
 - ▶ Over 50 on 1/1/1999: remain in DB system
 - ▶ Under 50 on 1/1/1999: in NDC system

2000-2002: high-growth regions



Discussion - Conclusions

- Incentives matter:
 - Reducing the implicit tax on work and address the problem of retirement funding
 - But potentially at the risk of increased inequality

Introduction - Effects of Covid-19

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 - Life expectancies by gender at birth and age 65
 - Employment rates by age group: 15-24, 25-54, 55-64

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 - Life expectancies by gender at birth and age 65
 - Employment rates by age group: 15-24, 25-54, 55-64
- Covid-19 had small impact relative to longer term trends, but exacerbated the fiscal sustainability problem.
 - Reduced government revenue
 - Increased government debt due to unemployment benefits and other spending