Learning from Social Insurance Design: Advances and Challenges

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Motivation

- Social safety and social insurance are closely related:
  - Shocks to health, disability, unemployment reduce earnings/wealth
  - Incidence of these shocks is highest among individuals with low earnings ability
  - Generous social insurance reduces pressure on social safety net
- Design issues are similar, but literatures evolve in parallel, subject to a conceptual divide:
  - Social safety net is about redistribution
  - Social insurance is about insurance
- Is that divide meaningful?

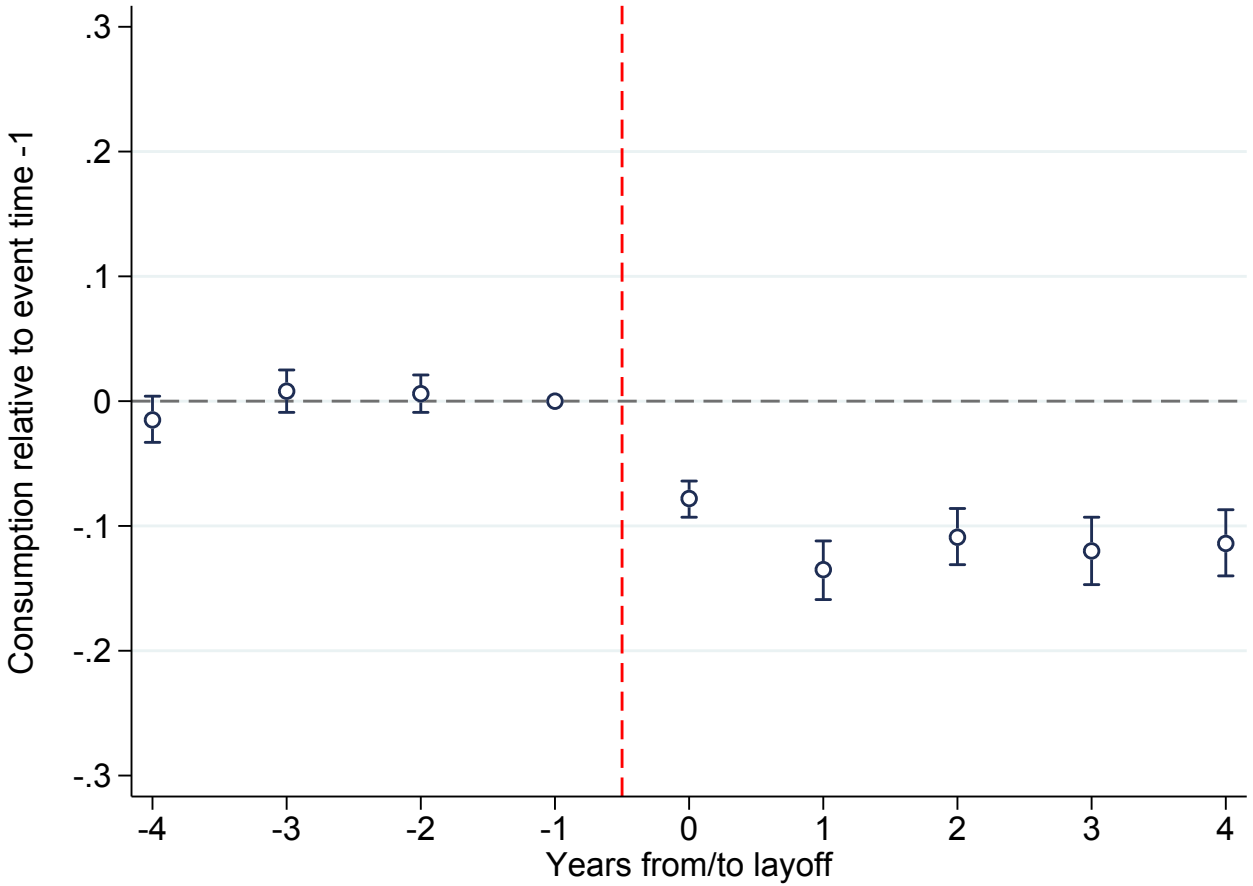
Challenges and Advances

- Challenge for social insurance literature:
  - Come to terms with inherent distribution that takes place
    - Evaluate its importance empirically
    - Provide framework to evaluate normatively
  - Account for persistent impact of adverse events and complementary role of social safety/low-wage policies

- Spillovers from advances in social insurance literature:
  - Identifying key trade-offs and evaluating them empirically
  - New approaches to evaluation of social transfers

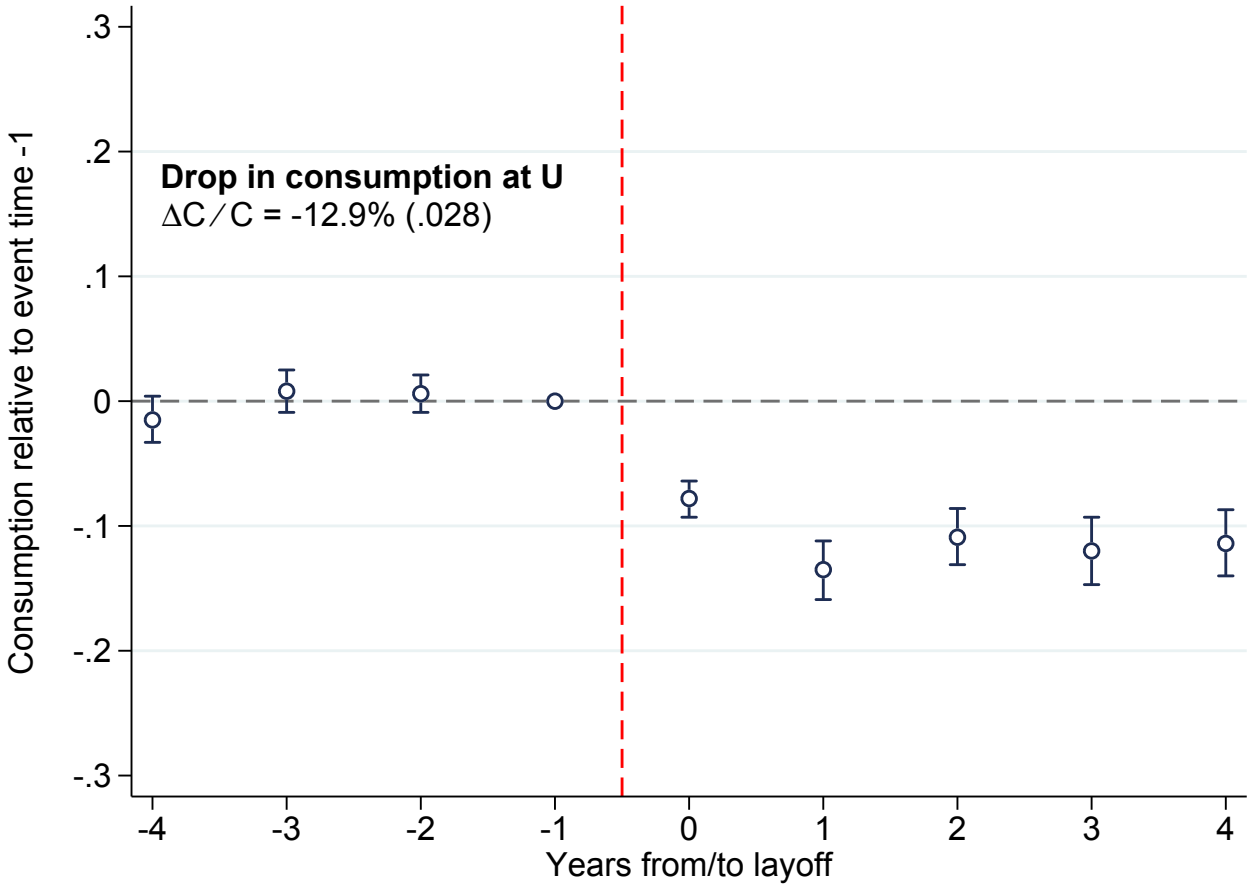
- Two closely related literatures:
  - Empirics: identifying different shocks / initial conditions underlying income inequality
  - Theory (NDPF): characterizing optimal tax policy with heterogeneous skill types evolving stochastically

Consumption Drop Around Job Loss



Source: Landais and Spinnewijn [Restud '20]

Consumption Drop Around Job Loss



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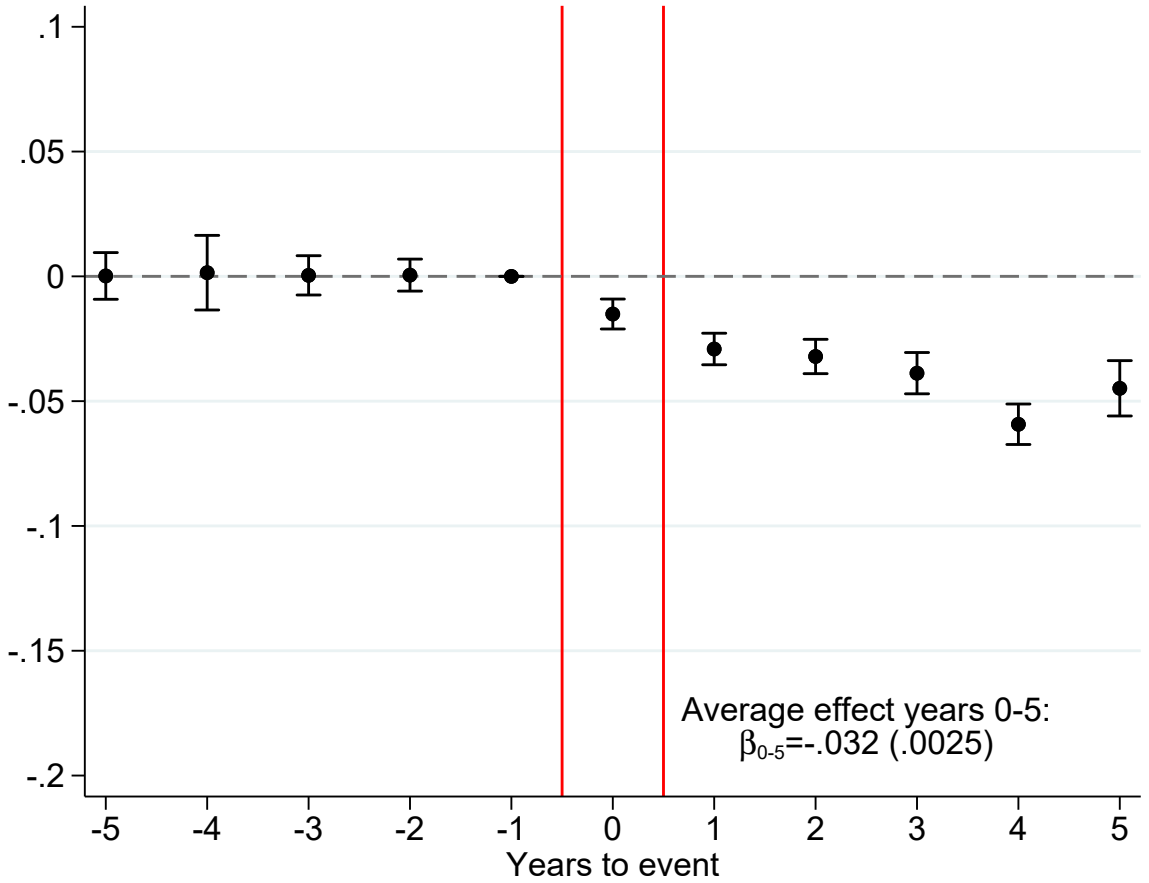
Consumption Drop Around Health Shock



Source: Kolsrud, Landais and Spinnewijn [JpubE '20]

Design Comparison: First-order issue is the same

- Conceptually:
  - **Social safety**: receive transfer b if $y < \bar{y}$
  - **Social insurance**: receive transfer b if adverse event happens (health shock, disability, unemployment)
  - **Social security**: receive transfer b when retired
- How generous should social transfer b be?

$$\left.\begin{array}{r}\text{Redistribution}\\ \text{Insurance}\\ \text{Consumption Smoothing}\end{array}\right\} \textit{vs.}\ \text{Incentives}$$

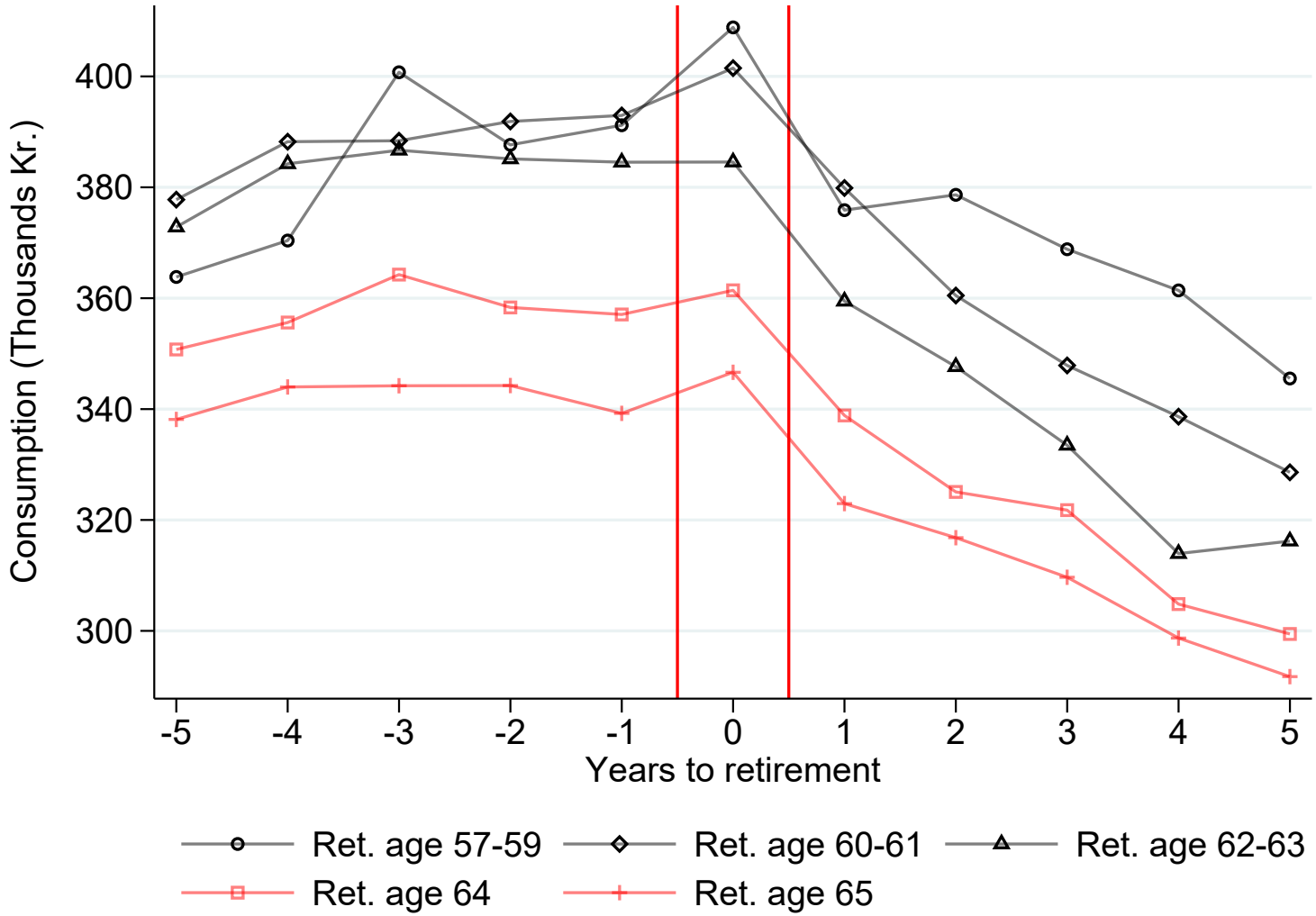
Design Comparison: Implementation Differences

- How to set $b'(y)$?
  - **Social safety**: $b'(y)$ tends to be negative – with exception of in-work benefits
  - **Social insurance**: $b'(y)$ tends to be positive – distinction between contributory and non-contributory systems

- Contributory system:
  - Key advantage is that it can be non-distortionary: $E(b'(y)) = \tau'(y)$
  - In practice, you redistribute between income and/or risk groups (unless we move to individual savings accounts...)
  - Key disadvantage is the missed opportunity to provide insurance / redistribution

- Too little work on what $b'(y)$ should be in SI:
  - e.g., large reforms in how pensions change with retirement age/career
  - same trade-off between 'insurance' and incentives applies

Consumption Drop Around Retirement



Source: Kolsrud, Landais, Reck and Spinnewijn [in progress]

Advance I: Sufficient statistics Approach

- Express policy recommendation as a function of small set of estimable moments
  - Re-inventing the wheel? Still useful: *'fiscal externalities determine required return to a social transfer'*
- Allowed for theoretical progress:
  - Incorporate relevant dynamics and heterogeneity
  - Extend to other externalities including internalities
  - Seems valuable for evaluation of welfare programs as well, especially when leveraging complementarity with structural approaches
- Provides empirical roadmap:
  - What do/don't we understand well?
  - Incentive cost of transfers are well understood...
  - ...but what about value of transfers??

Advance II: Value of Social Transfers

- Key challenge: how to evaluate in absence of choices?

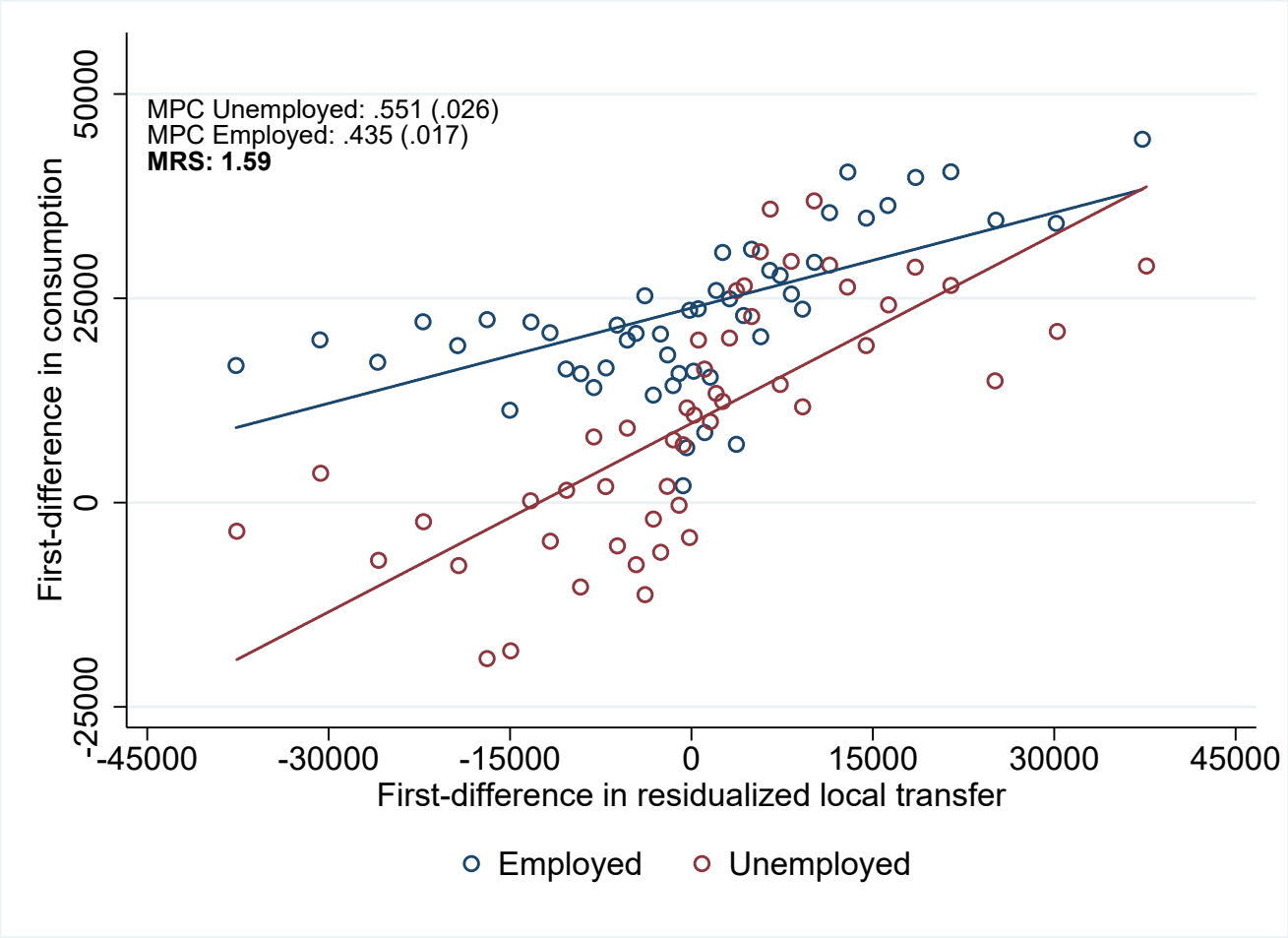
- Consumption-based Approach:
  - Consider differences in consumption and scale with risk aversion parameter
  - **Challenge**: what risk aversion parameter to use?
    - Consumption responses are endogenous to preferences
    - Preferences/consumption may be state-dependent
  - Similar issues when considering redistributive value!

- MPC Approach:
  - Consider differences in MPCs instead to bound the value of social transfers
  - **Intuition**: State-specific MPCs identify the price of smoothing consumption

- Active research agenda: same issues are relevant for evaluating redistributive value of transfers, especially during Covid-19 pandemic

MPC when Unemployed vs. Employed

Figure: Δc **vs.** Δy **by employment status**



Source: Landais and Spinnewijn [Restud '20]

Challenges: Choice / Redistribution / Frictions

- Growing trend to introduce choice in SI:
  - e.g., retirement savings, health insurance
  - non-contributory – contributory – voluntary – ineligible
  - extending social programs to self-employed, gig workers, etc.
- When/how to provide for choice?
  - **Single benefit**: average MV = average MC
  - **Supplemental benefit**: selection on MV > selection on MC
  - Regulation/pigouvian pricing to complement choice
    - adverse selection, non-contributory safety net, behavioral frictions
- Stance on redistribution is key again:
  - Choice allows low-risk individuals to contribute less
  - Presumes ability to unlock value of offered choice
  - Low-income individuals face higher risk and make worse decisions
- Social safety net protects against: (i) bad initial conditions, (ii) bad luck and (iii) bad choices

Inequality in Quality of Health Insurance Choices

	Mean			Over/underrepresentation	
	Top 5% decisionmakers	*Bottom 5% decisionmakers*		*Top 5% decisionmakers*	*Bottom 5% decisionmakers*
Demographics			**Education level**		
Gender (male)	62%	28%	Less than high school	0.30	2.99
Age	36	63	High school	0.82	0.33
Has children	59%	34%	College	3.48	0.00
Has a partner	46%	90%	Further Studies	15.57	0.00
Financials			Unknown	0.08	1.05
Gross income	105,801	39,347	**Education field**		
Net worth	250,632	4,969	Statistics	19.66	0.00
Has Mortgage Debt	64%	19%	Philosophy	13.14	0.00
Has Other Debt	27%	53%	Economics	6.95	0.01
Has Savings >2000EUR	91%	38%	Tax and administration	3.30	0.01
Peer Effects			Marketing and advertising	1.91	0.06
Firm FE decile	6.41	4.09	Hair and beauty services	0.64	1.79
Postcode FE decile	6.07	5.47	Protection of persons	0.38	2.24
Mother With 500 Deductible	37%	0%	**Work Status**		
Father With 500 Deductible	45%	0%	Student	2.80	0.16
			Retired	0.07	2.47
			Self-employed	2.07	0.05
			Employee	1.16	0.31
			On Benefits	0.32	1.94
			Professional sector		
			Business services	2.77	0.09
			Insurance	2.13	0.07
			Retail	1.10	0.34
			Construction	0.75	0.24
			Cleaning	0.26	1.40
			Public utilities	1.51	0.11
Observations					11,369,800

Source: Handel, Kolstad, Minten and Spinnewijn ['20]

For my inspiration and further references to related work see:

- *Choice in SI*: Hendren, Landais and Spinnewijn [prepared for ARE,'20]
- *Differentiating SI*: Spinnewijn [50th anniversary IFS,'20]
- *Dynamics in SI*: Kolsrud, Landais, Nilsson and Spinnewijn [AER '18]
- *Value of SI*: Landais and Spinnewijn [Restud '20], Kolsrud, Landais and Spinnewijn [JpubE '20]
- *Unequal Frictions in SI*: Handel, Kolstad, Minten and Spinnewijn ['20]
- *Retirement Consumption and Pension Design*: Kolsrud, Landais, Reck and Spinnewijn [in progress]