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# Incarceration and the labor market: employment and income before and after the first prison sentence in Finland (and other Nordic countries)

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## According to JCN Preliminary results..

“The prison population across Europe is largely made up of people who have been **excluded rather than included**, have **poor formal educational qualifications**, have **few employment skills** and have experienced **long-term housing, family and addiction problems**. Woman and men leaving prison bring with them the effects of a custodial sentence and encounter suspicion, rejection and hostility as they make the transition from prison to society ... For higher risk prisoners leaving custody these factors increase the risk of their return to crime and custody. The risk of re-offending is high.”



## Potential mechanisms through which incarceration can affect employment

- **Stigma of conviction**

→ negative signal potential employers; "negative credential"; (Schwartz & Skolnick 1962; Pager 2003; Western ym. 2001)

- **Loss of human capital**

→ lack of work experience, losing job skills; decreasing health & mental health; change in personality (Waldfoegel 1994; Sampson & Laub 1993; 1997; Western ym. 2001; Sherman 1993)

- **Loss of social capital**

→ no networks through which to find jobs; weakening of social ties; new networks with criminal others (Sampson & Laub 1993; Western ym. 2001)



# Prior research on the effects of incarceration on labor market outcomes (1)

- **Waldfogel 1994 (US)**
  - First unconditional prison sentence lowers employment by 5 percentage points and income by 30 % compared to general population
- **Grogger 1995 (US)**
  - Prison sentence lowers income from work and employment rates in contrast to comparison group
  - Other sanctions have only short-run impacts (due to absence from labor force)
- **Pager 2003 (US)**
  - Criminal record has a significant negative impact on finding employment
- **Aizer & Doyle 2013 (US)**
  - Incarceration especially detrimental for juveniles, evidence for higher school drop out rates and later crime
- **Kling 2006 (US)**
  - Imprisonment length unrelated to labor market outcomes
- **Loeffler 2013 (US)**
  - Exogenous sentencing disparities (use of imprisonment varying by randomly allocated judge) unrelated to employment outcomes



## Prior research on the effects of incarceration on labor market outcomes (2)

- **Tranaes 2008 (DEN)**
  - Those sentenced to prison have roughly twice higher unemployment rates than the general population
  - In before-after comparison, the impact of imprisonment on unemployment wear out in the longer run, social assistance receipt remains on higher levels
- **Andersen 2012 (DEN), Andersen & Andersen 2012 (DEN), Skardhamar 2013a & 2013b (NOR)**
  - Those sentenced to community service or electronic monitoring instead of prison tend to have lower social benefit dependency rates and higher incomes/employment rates after the sentence
- **Landersø 2013 (DEN)**
  - A marginal increase in incarceration length for violent offenders improved labor market outcomes → caused by increased participation in rehabilitation programs/ better aiding of prisoners at the time of release?
- **Skardhamar & Skirbekk 2013 (NOR)**
  - High mortality among prisoners, especially among those convicted of drug-related crimes and drunk driving



## Summing up the evidence

- Majority of studies suggest that imprisonment has a negative effect on labor market outcomes, often interpreted as supporting the "stigma of incarceration" argument (Landersø 2011)
- When compared to alternative sanctions, imprisonment has a greater detrimental effect
- Once imprisoned, marginal changes in imprisonment length may not have much of an effect for labor market outcomes



# Current project

- I Nordic comparison – replication of Tranaes 2008
  - Research question: The impact of *first unconditional prison sentence* on *income trajectories* among individuals who are not sentenced to second prison sentence
  - Analysis with yearly data, by crime types
  - Researchers:
    - FIN Mikko Aaltonen, Petri Danielsson (Oikeuspoliittinen tutkimuslaitos)
    - SWE Felipe Estrada, Anders Nilsson, Olof Bäckman, Susanne Alm (Stockholms universitet)
    - NOR Torbjørn Skardhamar (Statistisk sentralbyrå)
    - DEN Lars Højsgaard Andersen (Rockwool Fonden)
  - Funding for the Finnish part of the research from NSfK and NRILP
  
- II Finnish report
  - More nuanced comparison between sentence types, crime types and different indicators of socioeconomic attainment and living conditions
  - Monthly and yearly analysis
  - Funding from NRILP and Criminal Sanctions Agency



## Data (1)

- Target population
  - All convictions 1.1.2004-31.12.2005
- Sample
  - 100% of unconditional prison sentences
  - 50% of community services
  - 33% of conditional prison sentences
- Final data
  - 23 043 separate convictions, where a total of 15 637 individuals
  - Unconditional 13 207, community service 4 215, conditional 5 621
  - **In this presentation, focus on first-time prisoners (32 % of first-timers in year 2010)**
- Follow-up time
  - 1999-2010, five years pre (1999-2003) and four years post (2007-2010)





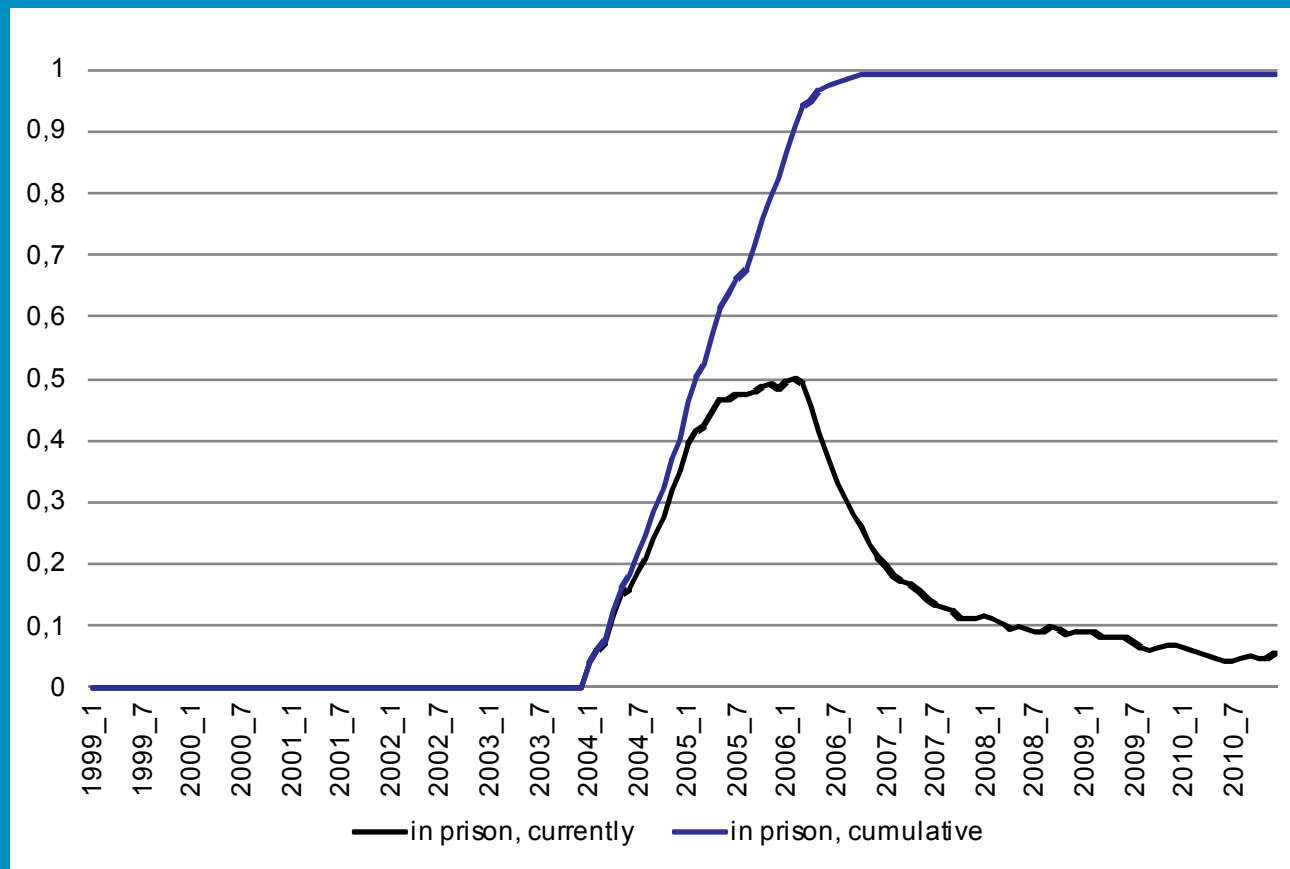
## Data (2)

- Mean age 37.2
  - Age limit > 23 in 2004, to ensure that all individuals are eligible to work for the entire duration of the follow-up (>18 years old in 1999)
- 88% men, 12% women
- Convictions in 2004-2005 (not mutually exclusive)
  - 35% for violence (~35% prisoners with violence as the primary offence in 2004 [CSA 2014])
  - 32% for property
  - 22% for drug-related
  - 28% for DUI



# Proportion imprisoned by month

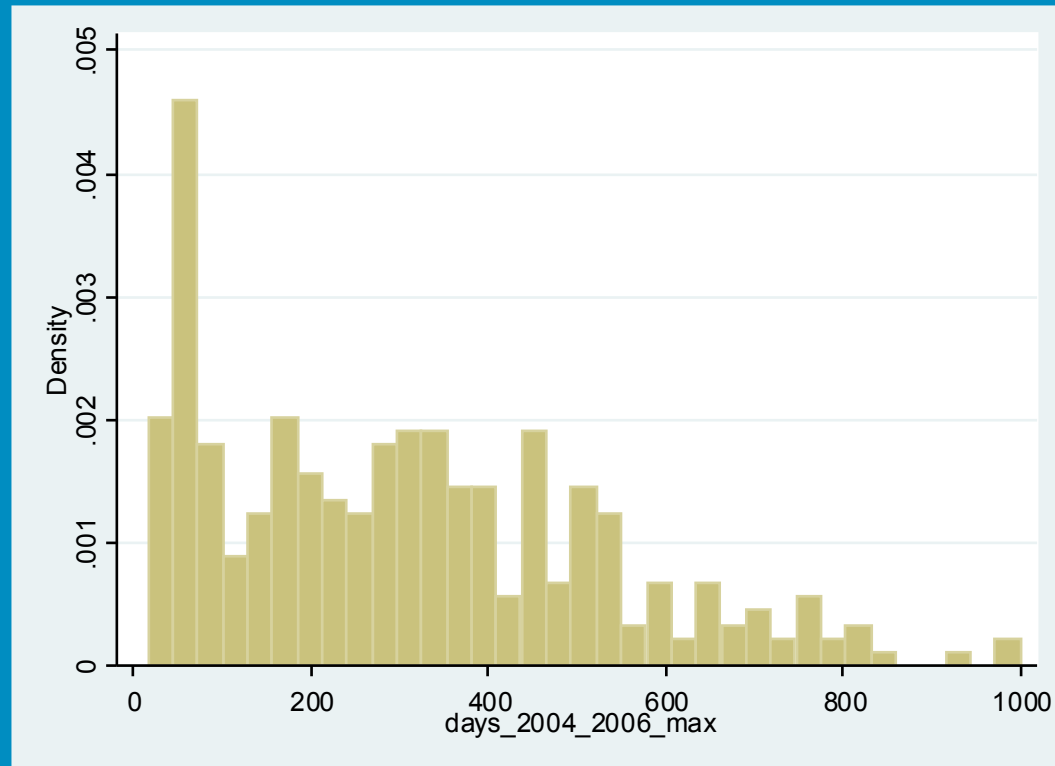
Individuals imprisoned for the first time between 2004-2006





# Distribution of incarceration length, 2004-2006

Mean = 306 days





# Who to compare to?

- Comparison to general population not very informative, as imprisoned offenders tend to have rather limited employment histories *even before the sanction*
  - Inequality in sentencing? Comparison to alternative sanctions (community service, electronic monitoring etc.) often inadequate, as the individuals sentenced to those sanctions tend to be better off to start with (Skardhamar 2013b)
- To ensure that the analysis produces a meaningful estimate of the effect of the sanction in question, selection mechanisms need to be accounted for
- Here, we rely on within-individual estimates (comparable to a fixed-effects panel model), that describe the average within-individual change in selected outcomes. Thus, we effectively control for stable between-individual differences
    - HOWEVER, THESE ARE NOT CAUSAL ESTIMATES, but rather a description of average trajectories of labor market outcomes



# Variables

- **Covariates:**
  - Age
  - Time (either as year or month relative to incarceration)
  - Interaction by recidivism (returns to prison in 2007-2010 or not)
    - Max data size=12 years x (639 no recidivism / 700 recidivism)
    - Individuals=1,339 / Observations=16,068
- **Outcomes:**
  - Income measures adjusted for inflation:
    - Total yearly taxable income
    - Income for work, % with at least 1 € income from work, % with over 12,000 € yearly income from work
  - Unemployment measures
    - % with at least one day of unemployment (in year / month)
    - % on passive vs. active [ALMP] unemployment (month)
    - % outside labor force (no unemployment or salary from work)
    - % on disability benefits



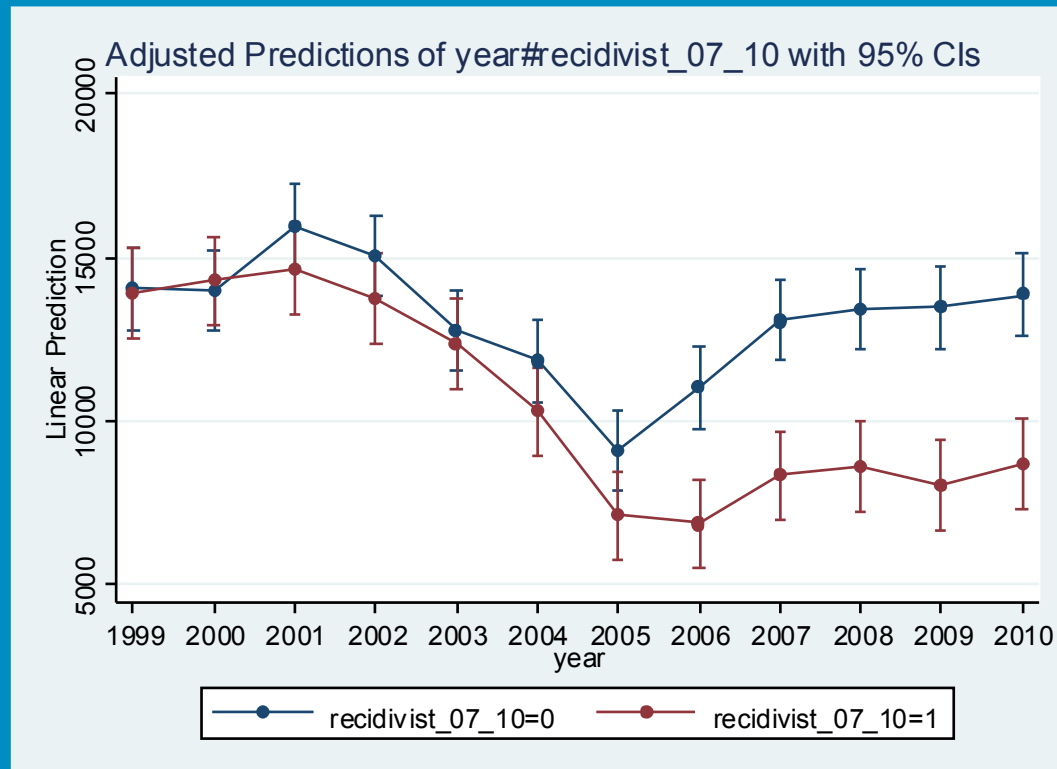
# Results

## Yearly analysis

**ALL RESULTS PRELIMINARY, NOT TO BE QUOTED YET!**

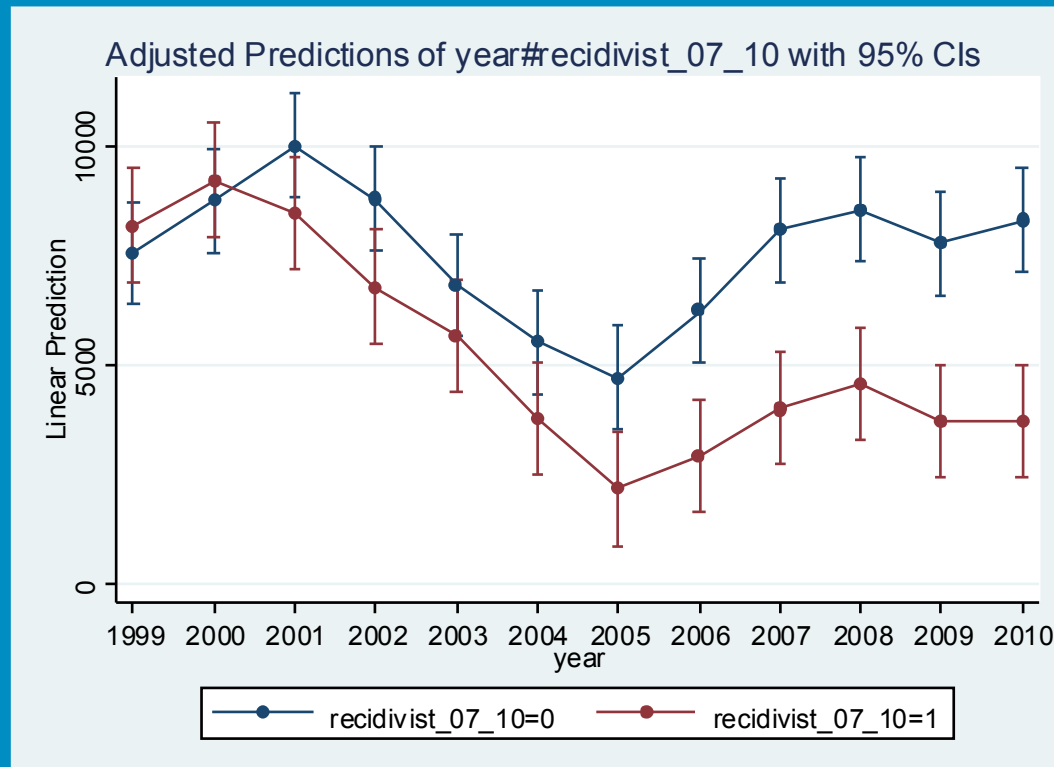


# Mean taxable income before/after imprisonment





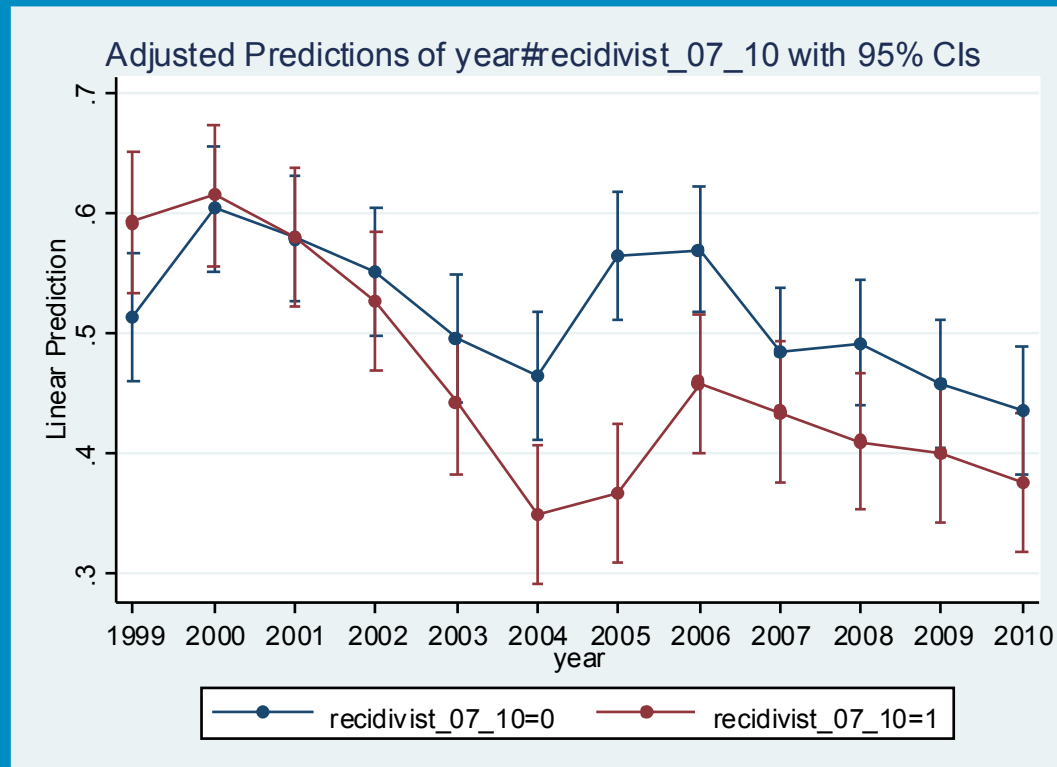
# Mean income from work, before/after





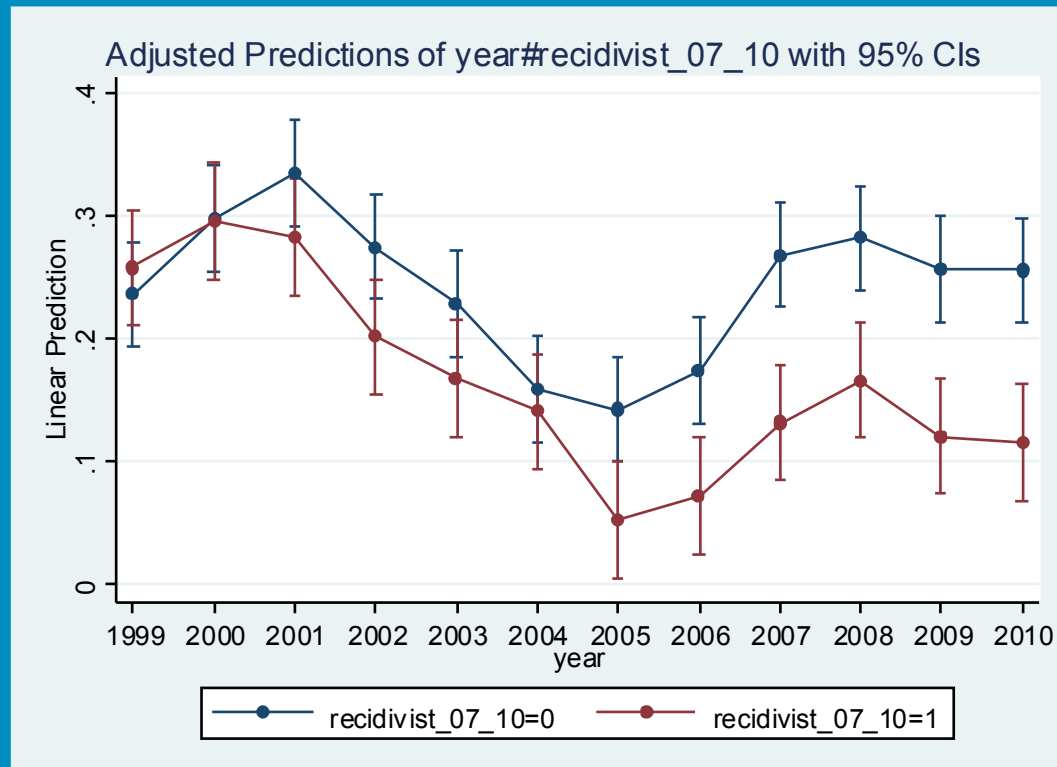


# % at least 1€ of income from work, before/after



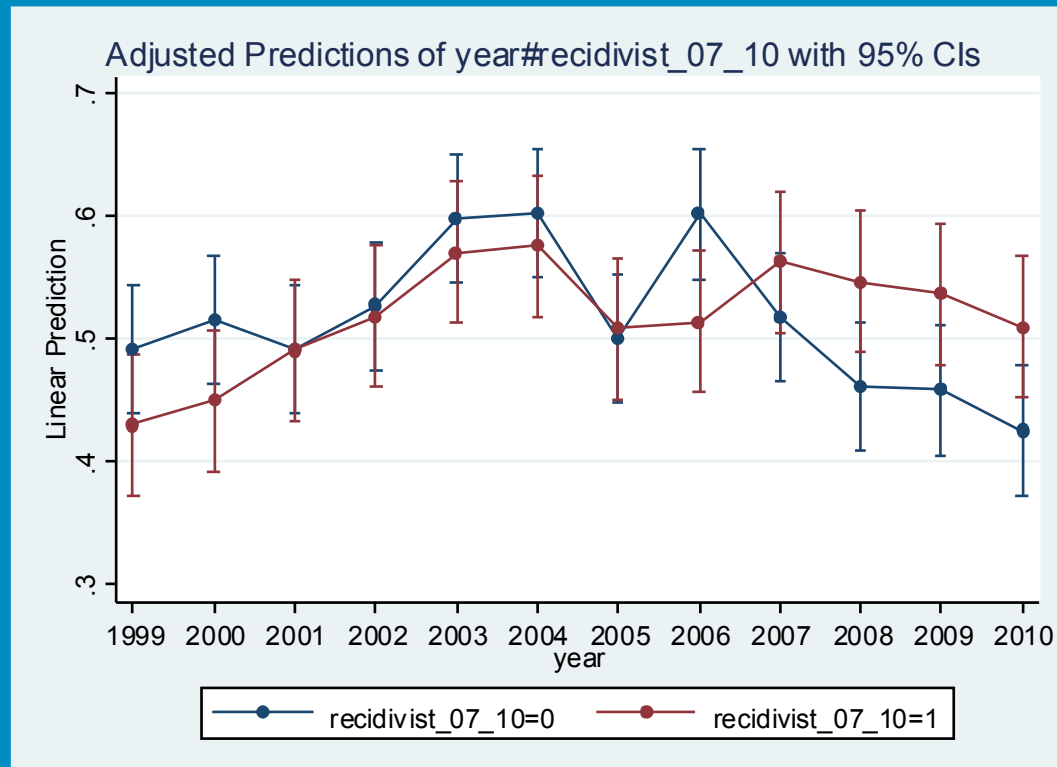


# % at least 12,000€ of income from work, before/after



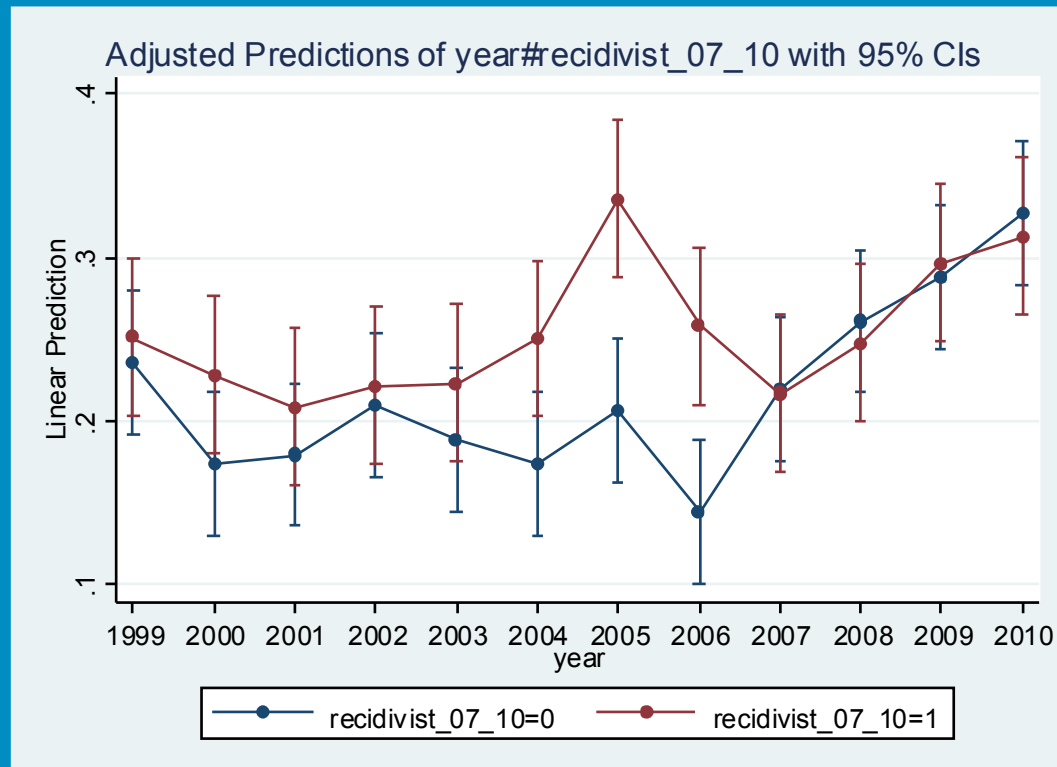


# % registered as unemployed, before/after



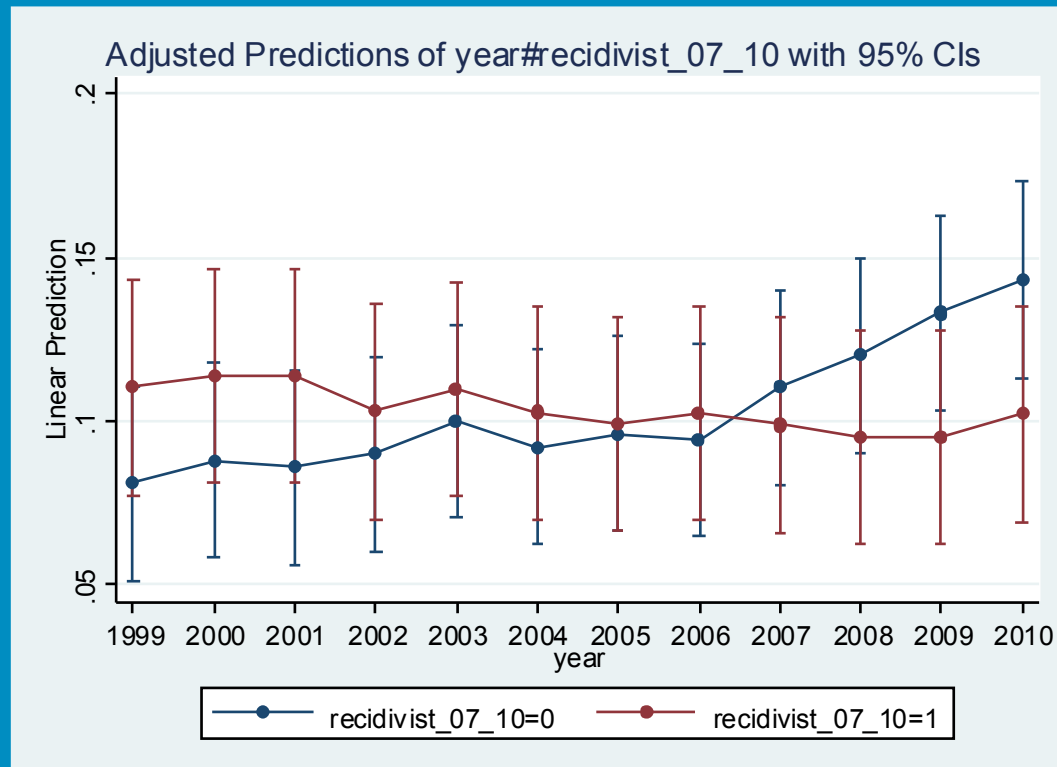


# % outside labor force, before/after





# % on disability benefits, before/after





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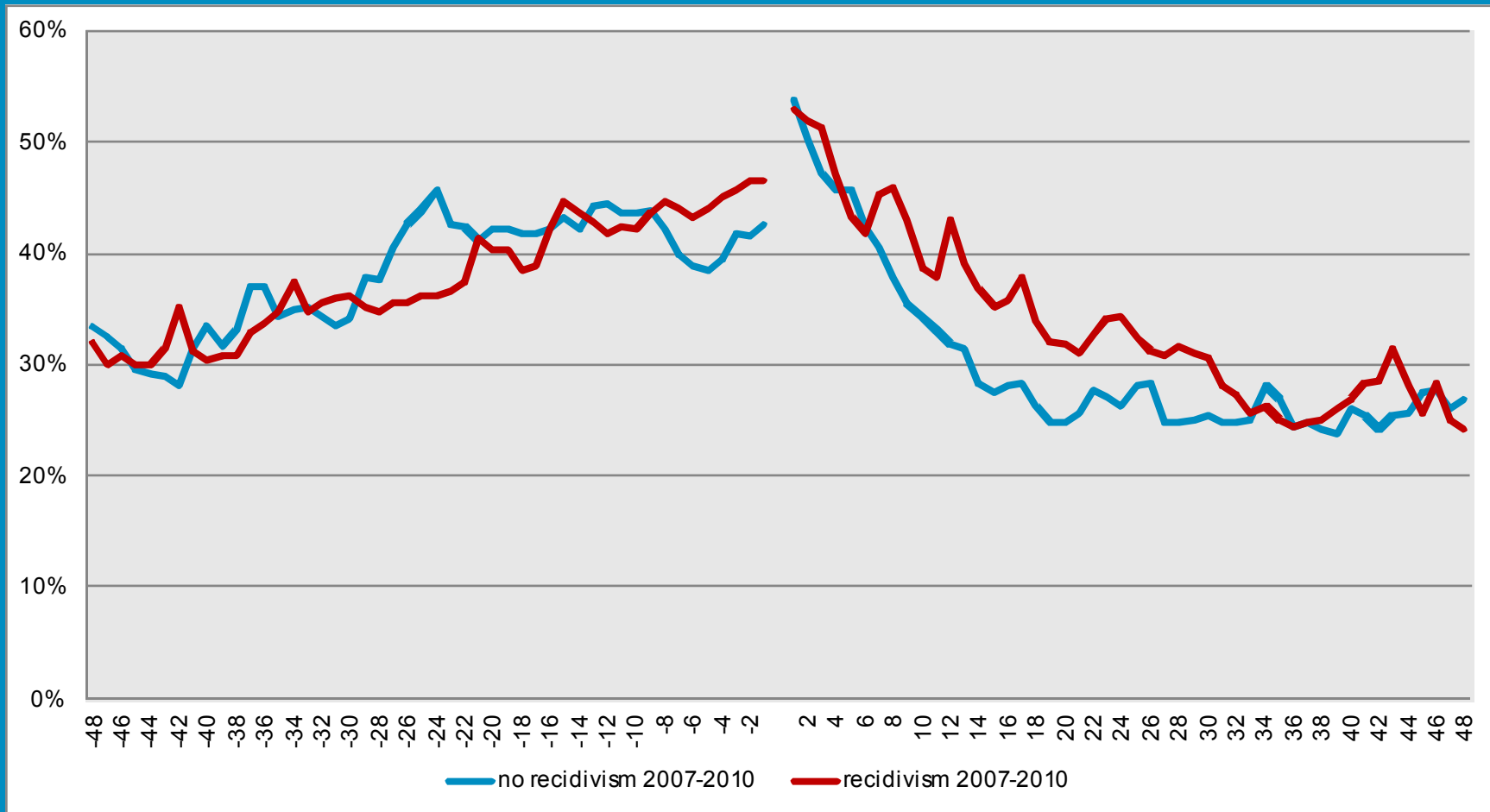
# Results

## Monthly analysis



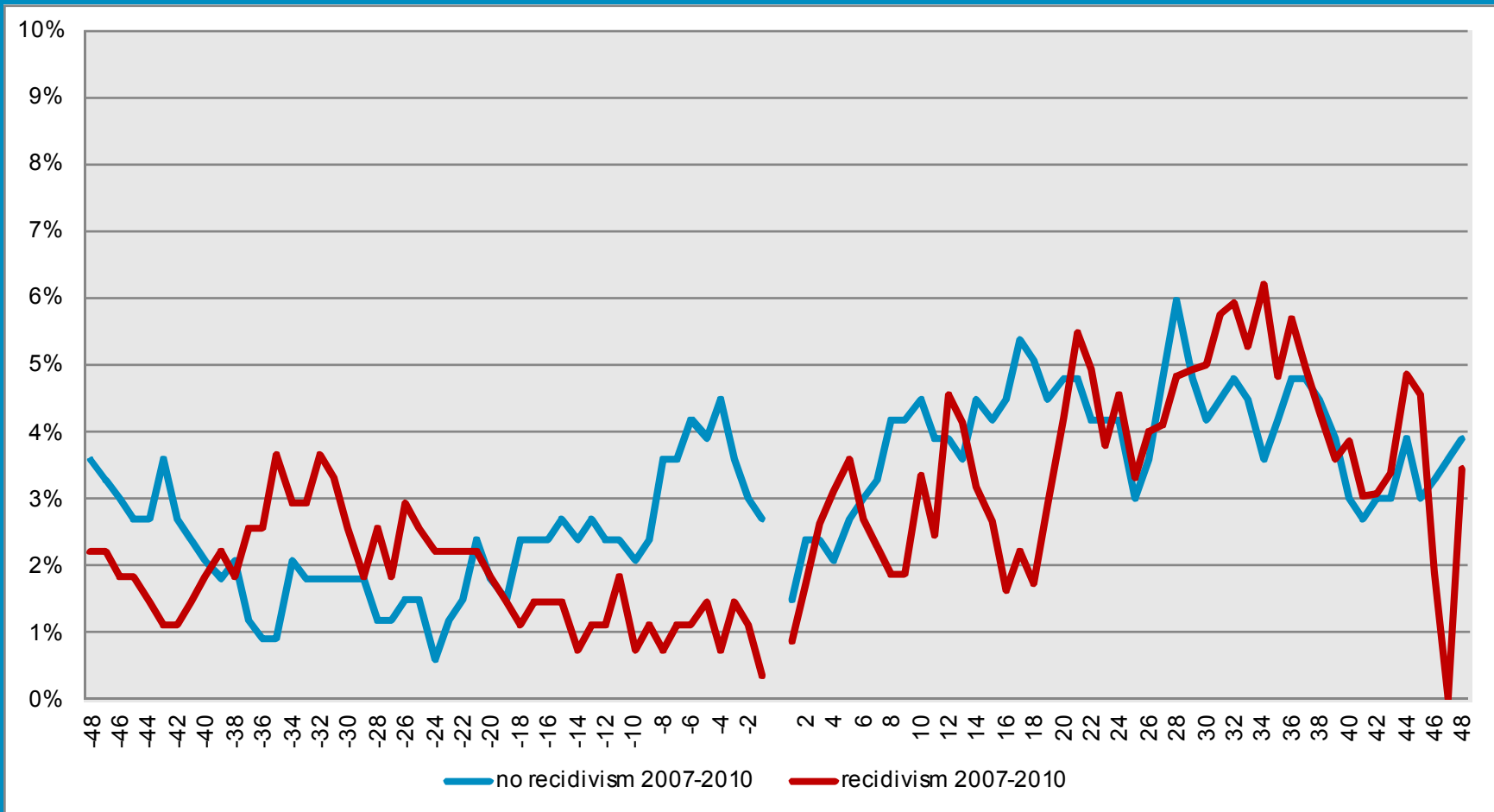


# % on "passive" unemployment -48 to +48 months relative to incarceration





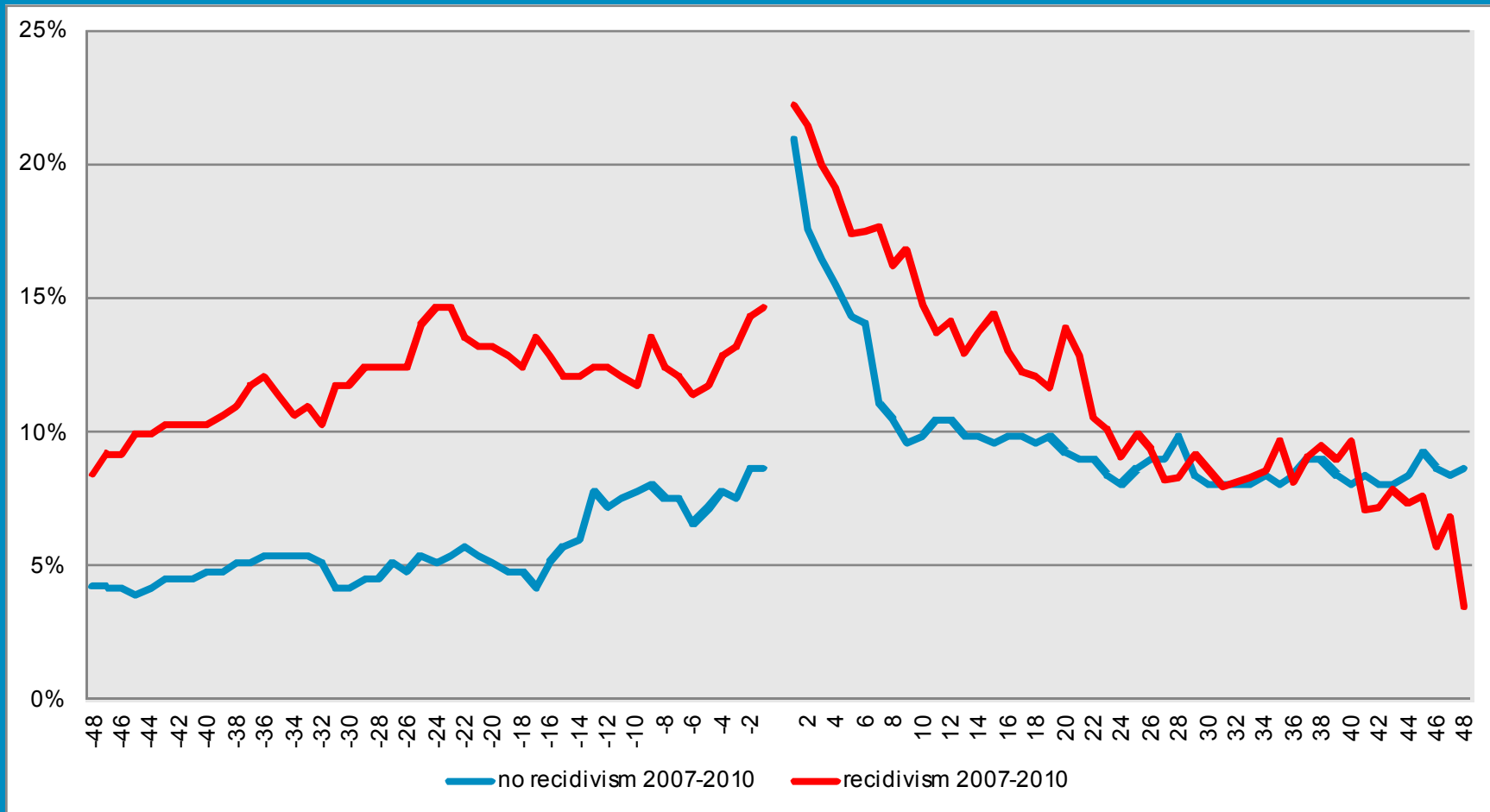
# % on "active" unemployment (ALMP) -48 to +48 months relative to incarceration







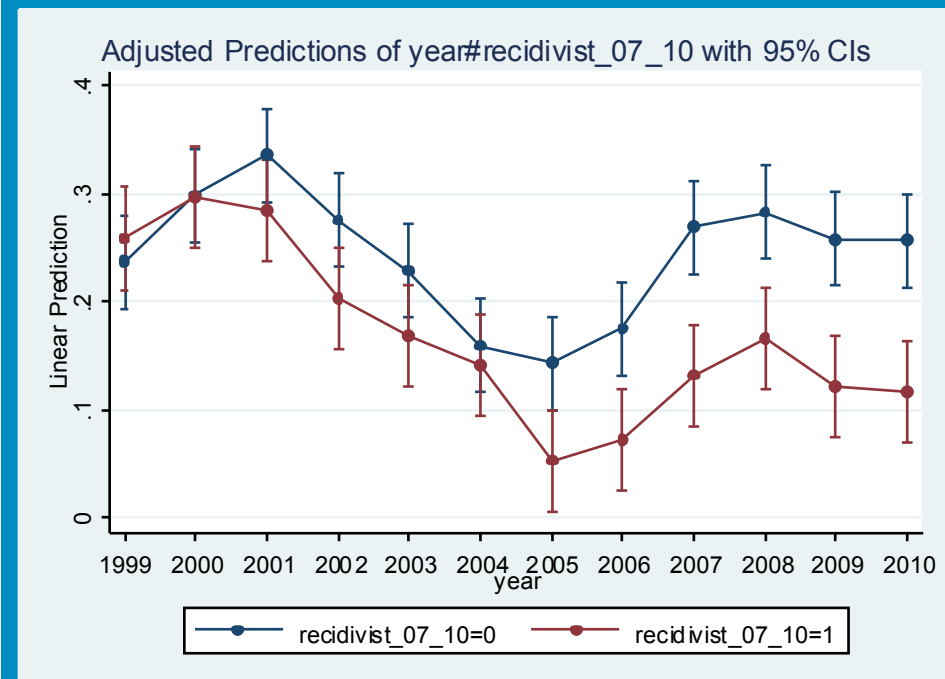
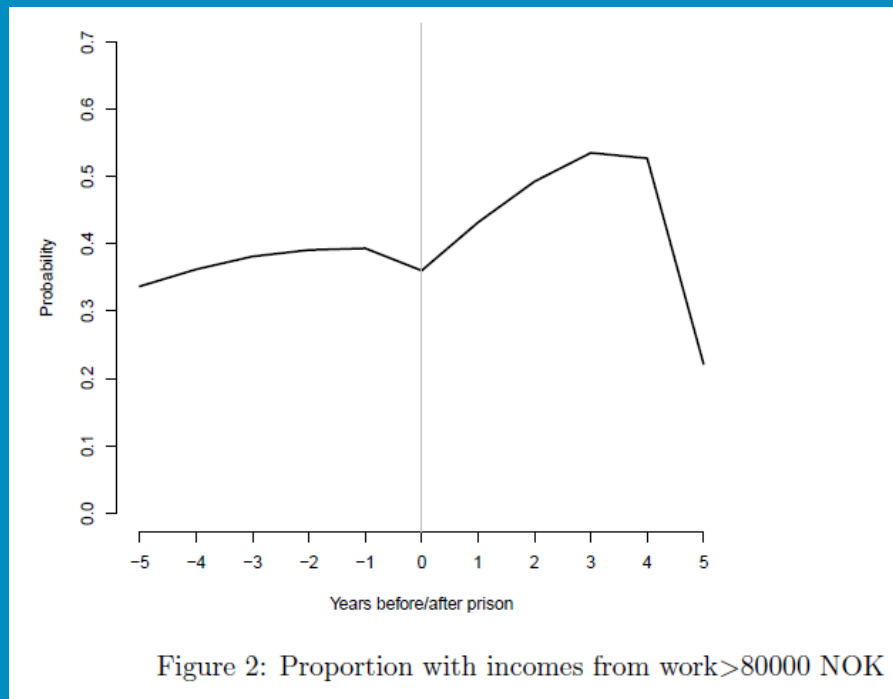
# % without permanent address -48 to +48 months relative to incarceration





# Preliminary comparative analysis

## Norway (Torbjørn Skardhamar) and Finland





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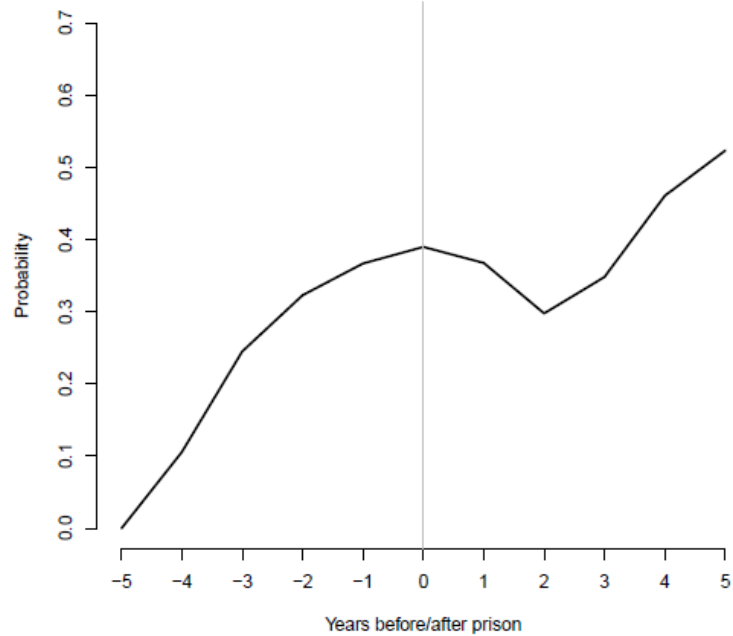
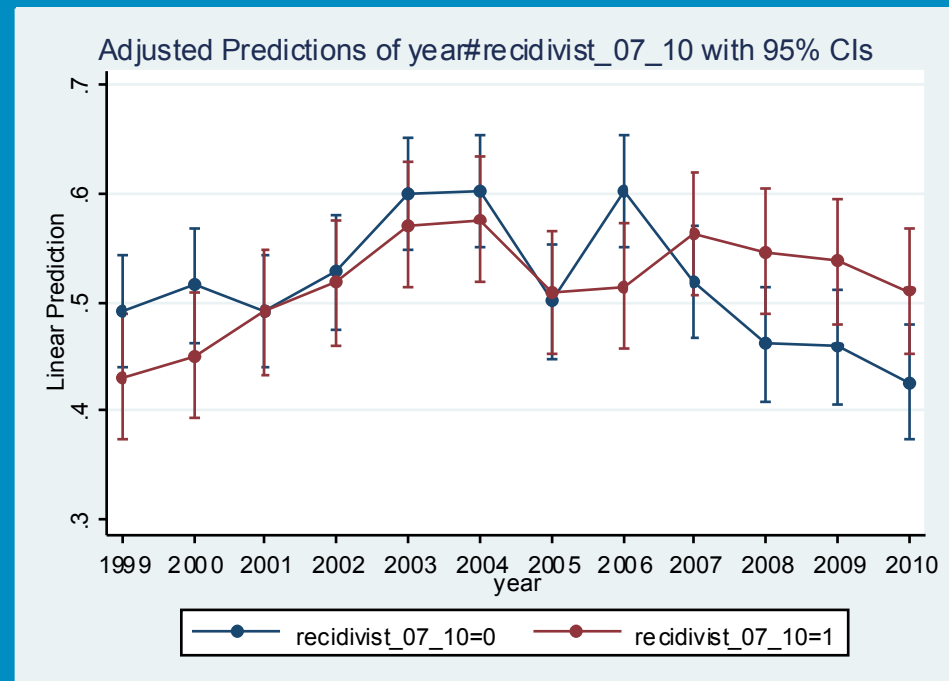


Figure 5: Proportion unemployed ( $\geq 1$  day)





## Key results (1)

	No recidivism 2007-10		Recidivism 2007-10	
	1999-2003 (pre)	2007-2010 (post)	1999-2003 (pre)	2007-2010 (post)
Total income	13,900	14,400	12,900	8,900
Income from work	8,400	8,000	7,600	3,900
<b>% with income from work</b>	<b>56%</b>	<b>44%</b>	57%	39%
% with >12k income from work	28%	26%	25%	13%
<b>% outside labour force</b>	<b>17%</b>	<b>32%</b>	18%	29%
"Passive" unemployment	38%	30%	38%	36%
"Active" unemployment (ALMP)	2%	4%	2%	3%
No permanent address	6%	10%	12%	13%



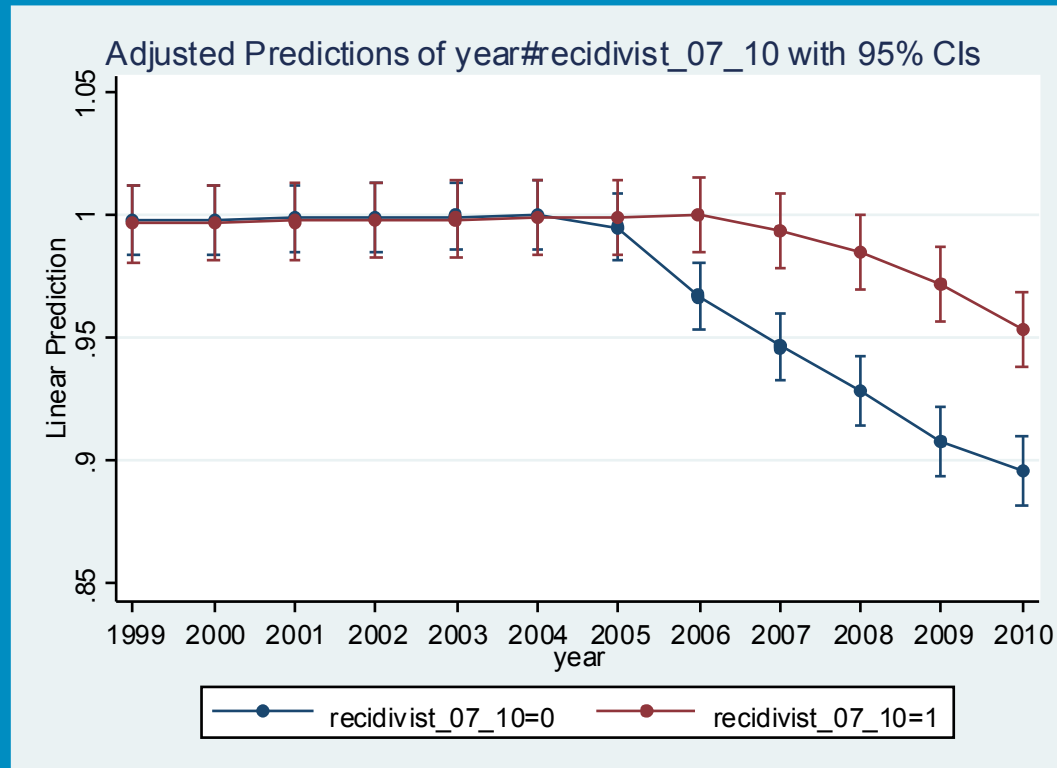
## Key results (2)

- As a whole, the employment rates among future convicts tend to be low already before the first unconditional sentence (average salaries under 1/3 of national median, less than 1/4 employed full-time)
- The impact of imprisonment needs to be assessed with several labour market outcomes → Looking at one indicator (such as registered unemployment) only can give misleading results
- Despite the relatively low pre-prison employment levels, we still detect a decrease in the share employed and increase in the proportion outside labor force after first imprisonment
  - High mortality decreases the magnitude of change pre/post → if those who died were included in "outside labor force" or "zero income" categories, the impact of imprisonment would appear higher



# % alive, 1999-2010

Those imprisoned for the first time between 2004-2006

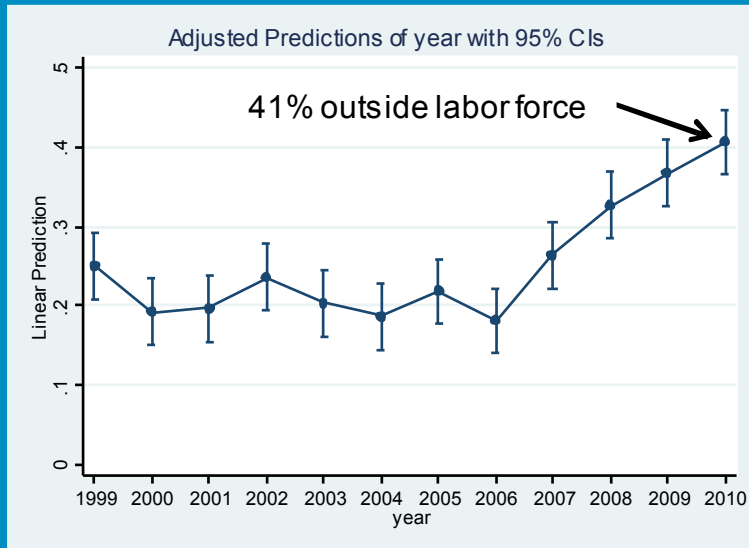




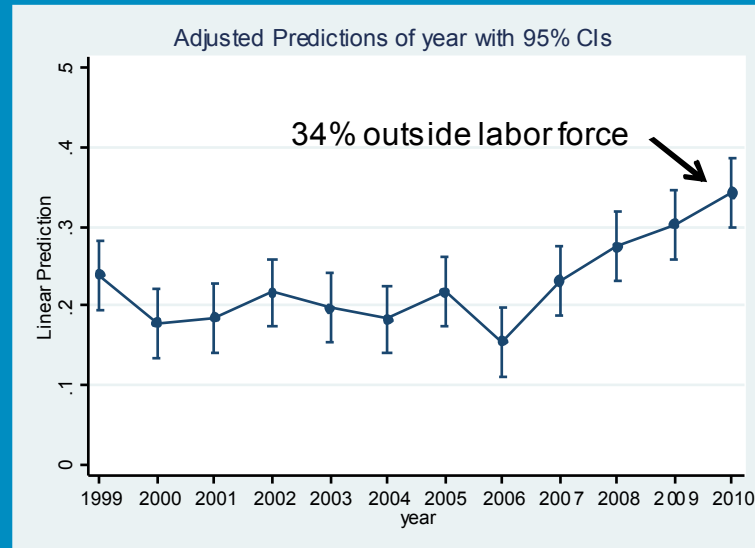
# Outside labor force pre/post, no recidivism group

## With or without mortality

Dead included in "outside labor force"



Dead excluded





## Limitations / issues in Nordic comparison

- Only registered income – how about grey economy/illegal work?
- Which labor market indicator to use?
  - 100% comparable information hard to find
  - Despite the apparent similarities between the Nordic countries, each country still has its own peculiarities in labour markets, criminal law, and criminal sanctions
- In Finland, longitudinal census data (such as FD-Trygd in Norway) are behind relatively strict legislation in Statistics Finland
  - Coming up with a comprehensive dataset covering several aspects of socioeconomic attainment requires compiling data from a number of separate registers
  - Slow and (sometimes) expensive process





# Future

- In the final analysis, we disaggregate the results by:
  - Sanction type (unconditional, conditional, community service)
  - Crime type (at least violence, property, drugs, DUI)
  - Length of prison term
- Results from Sweden and Denmark coupled with Finnish and Norwegian results
  - Preliminary analyses suggest that there are differences between the countries



## Implications for JCN project

- Integrating *high-risk prisoners* into the labour market a difficult task, as even the first-time convicts who do not return to prison fare rather poorly in Finland
- Evaluating the success of re-integrating high-risk prisoners needs to acknowledge this baseline
- More active co-operation with employment agencies at the time of the release, to increase the low participation rates in ALMPs?



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Thank you!

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