Job Loss Expectations, Durable Consumption and Household Finances Evidence from Linked Survey Data

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Research questions

1. How predictive are job loss expectations of workers?

2. Do job loss expectations affect car acquisitions and savings?

> *"Do you think that there is any chance that you might lose your job in the coming 12 months? You can indicate this in terms of a percentage.* [0−100] *"*

Motivation & Literature

Even if unemployment does not increase, higher job loss expectations could affect durables and precautionary savings, creating a "deep" recession (Ravn and Sterk, JME 2017)

- **Predictive power of expectations**
  - Stephens, RESTAT 2004; Hendren, AER 2017
  - Dominitz and Manski, JASA 1997; Dominitz, JEctrics 2001
- **Job loss expectations and consumption**
  - Stephens, RESTAT 2004; Klemm, 2012
- **Consumption and financial portfolios of the unemployed**
  - Gruber, AER 1997; Hendren, AER 2017, Benito, Oxford EcPap, 2006
  - Browning and Crossley, JEEA 2009
  - Basten, Fagereng and Telle, JMCB 2016

Dutch Labor market

- 7M workers employed (2010-2016).
- Unemployment rate: 5-7%
- Workers with flexible contract: 21-26%
  - Difference in employment protection
- Universal **unemployment insurance**
  - *Entitlement criteria*: (i) no wrongful or own termination, available for work, (ii) search requirement (monitored + sanctions) and (iii) it depends on length of employment prior to spell
  - *Replacement rate* is 70% of average earnings in the 12 months prior (and 75% for the first 2 months)

Data

1 **Survey**
- Two representative household panels for the Netherlands: DHS and LISS (2008-2018)

2 **Administrative (Statistics Netherlands)**
- Monthly payroll data for the universe of firms (public and private)
- Monthly car acquisitions (universe of car registrations)
- Annual household assets and liabilities: deposits, stocks + bonds, net worth

1+2 **Linking (2010-2016)**
- 85% gives consent to be linked
- Anonymous identifiers

Labor market flows

Transition		
No change in 12 months (baseline)	78.1%	
Any job loss	21.9%	100%
New job, *same* firm	3.8%	17%
New job, *new* firm	6.7%	31%
Unemployed	3.8%	17%
Other job loss	7.6%	35%

Sample percentages

- Job loss defined as loss of contract
- Unemployed defined as collecting unemployment benefits
- Self-employment or retirement are excluded

Roadmap to results

1. **How predictive are job loss expectations of workers?**

2. Do job loss expectations affect car acquisitions?

3. Do job loss expectations affect savings?

Predictive Power - conditional

	Lost Job	New Job Same Firm	New Job New Firm	Unemployed	Other Job Loss
	(1)	(2)	(3)	(4)	(5)
Job loss expectation [0-100]	0.0089***	0.0005	0.0054***	0.0146***	0.0021***
$[0-100]$	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)
Mean dependent variable	0.220	0.039	0.068	0.039	0.078
N households	6,140	6,029	6,089	5,983	6,048
N observations	19,628	19,163	19,461	19,003	19,217

Marginal effect: 1%-point increase in job loss expectations is associated with a 0.89 pp (4%) increase in the probability of any job loss.

Roadmap to results

1. How predictive are job loss expectations of workers?
2. **Do job loss expectations affect car acquisitions?**
3. Do job loss expectations affect savings?

Car Purchases - Monetary value

	Buy Car (1)	ln(value car) (2)	Buy Car (3)	ln(value car) (4)
Job loss expectation	0.017	-1.793*		
	(0.059)	(1.040)		
Probability job loss [21-40]			0.047	0.369
			(0.044)	(0.824)
Probability job loss [41-60]			-0.028	-1.581**
			(0.044)	(0.805)
Probability job loss [61-80]			-0.047	-2.564
			(0.092)	(1.701)
Probability job loss [81-100]			0.114	0.193
			(0.073)	(1.359)
Mean dependent variable	0.105	0.573	0.105	0.573
N households	6,047	6,051	6,047	6,051
N observations	18,865	18,890	18,865	18,890

Higher job loss expectations are negatively correlated with car value of acquired car

Car Purchases - type of car

	Old Car (1)	New Car (2)	Old Car (3)	New Car (4)
Job loss expectation	0.095	-0.283**		
	(0.061)	(0.113)		
Probability job loss [21-40]			0.071	-0.062
			(0.047)	(0.084)
Probability job loss [41-60]			0.028	-0.254**
			(0.044)	(0.099)
Probability job loss [61-80]			0.009	-0.219
			(0.097)	(0.176)
Probability job loss [81-100]			0.170**	-0.147
			(0.076)	(0.143)
Mean dependent variable	0.087	0.019	0.087	0.019
N households	6,046	5,970	6,046	5,970
N observations	18,858	18,268	18,858	18,268

Higher job loss expectations are negatively correlated with probability of acquiring **new** cars

Roadmap to results

1. How predictive are job loss expectations of workers?
2. Do job loss expectations affect car acquisitions?
3. **Do job loss expectations affect savings?**

Savings and wealth holdings - flow

	Savings (1)	Stocks (2)	Financial Wealth (3)	Savings (4)	Stocks (5)	Financial Wealth (6)
Job loss expectation	7.969***	-0.047	6.763**			
	(2.913)	(0.784)	(3.052)			
Probability job loss [21-40]				109.995	-147.614**	-28.990
				(223.006)	(67.665)	(247.511)
Probability job loss [41-60]				497.650**	-4.789	528.219**
				(204.627)	(54.234)	(214.462)
Probability job loss [61-80]				567.693	126.766	736.117*
				(435.596)	(118.038)	(435.514)
Probability job loss [81-100]				581.307	-55.961	180.712
				(408.538)	(103.217)	(438.424)
Adjusted R-squared	0.024	0.021	0.030	0.024	0.021	0.030
Mean dependent variable	417.800	85.501	518.427	417.800	85.501	518.427
N households	4,347	4,347	4,347	4,347	4,347	4,347
N observations	13,033	13,033	13,033	13,033	13,033	13,033

Higher job loss expectations are positively correlated with savings flows (change in deposits)

Savings and wealth holdings - balances

	Savings (1)	Stocks (2)	Fin. Wealth (3)	Savings (4)	Stocks (5)	Fin. Wealth (6)
Job loss expectation	0.048***	0.009	0.056***			
	(0.014)	(0.007)	(0.019)			
Probability job loss [21-40]				2.388**	-0.755*	1.542
				(0.972)	(0.400)	(1.207)
Probability job loss [41-60]				2.333**	-0.084	2.263*
				(1.009)	(0.424)	(1.255)
Probability job loss [61-80]				1.878	0.040	1.917
				(1.613)	(0.704)	(2.010)
Probability job loss [81-100]				3.839**	1.642*	5.271**
				(1.820)	(0.996)	(2.481)
Adjusted R-squared	0.253	0.093	0.250	0.253	0.094	0.249
Mean dependent variable	20.466	4.250	25.505	20.466	4.250	25.505
N households	4,347	4,347	4,347	4,347	4,347	4,347
N observations	13,033	13,033	13,033	13,033	13,033	13,033

Higher job loss expectations are negatively correlated with changes in risky assets (though not statistically significant)
Financial portfolios at the end of the year are tilted towards savings

Conclusions

1. **Predictive power**
   - Using linked administrative data we find that workers predict very well transitions into unemployment and firm-to-firm transitions.
   - Suggests that workers adjust search effort and/or desired wages
2. **Car acquisitions**
   - Find that higher job loss expectations are related to smaller propensities to buy cars, especially new cars
3. **Household finances**
   - Higher job loss expectations are related to larger inflows in deposits
   - Some evidence for rebalancing of financial portfolio into deposits

Thank you for your time!

Any comments welcome at
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Job loss expectations: descriptives

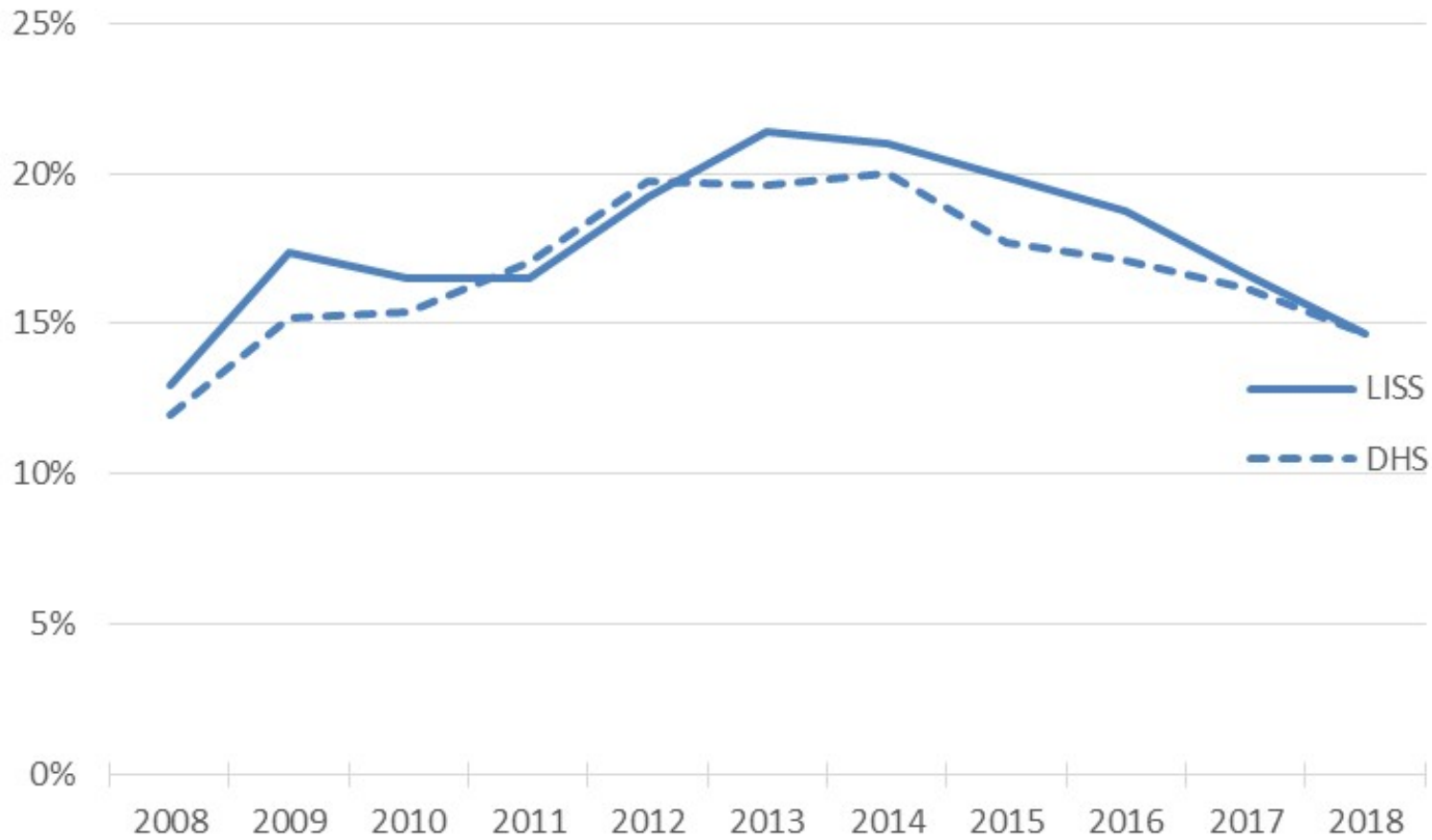


Figure: Cross-sectional average of job loss expectations for the core module of the LISS and the DHS in each year

Job loss expectations: descriptives

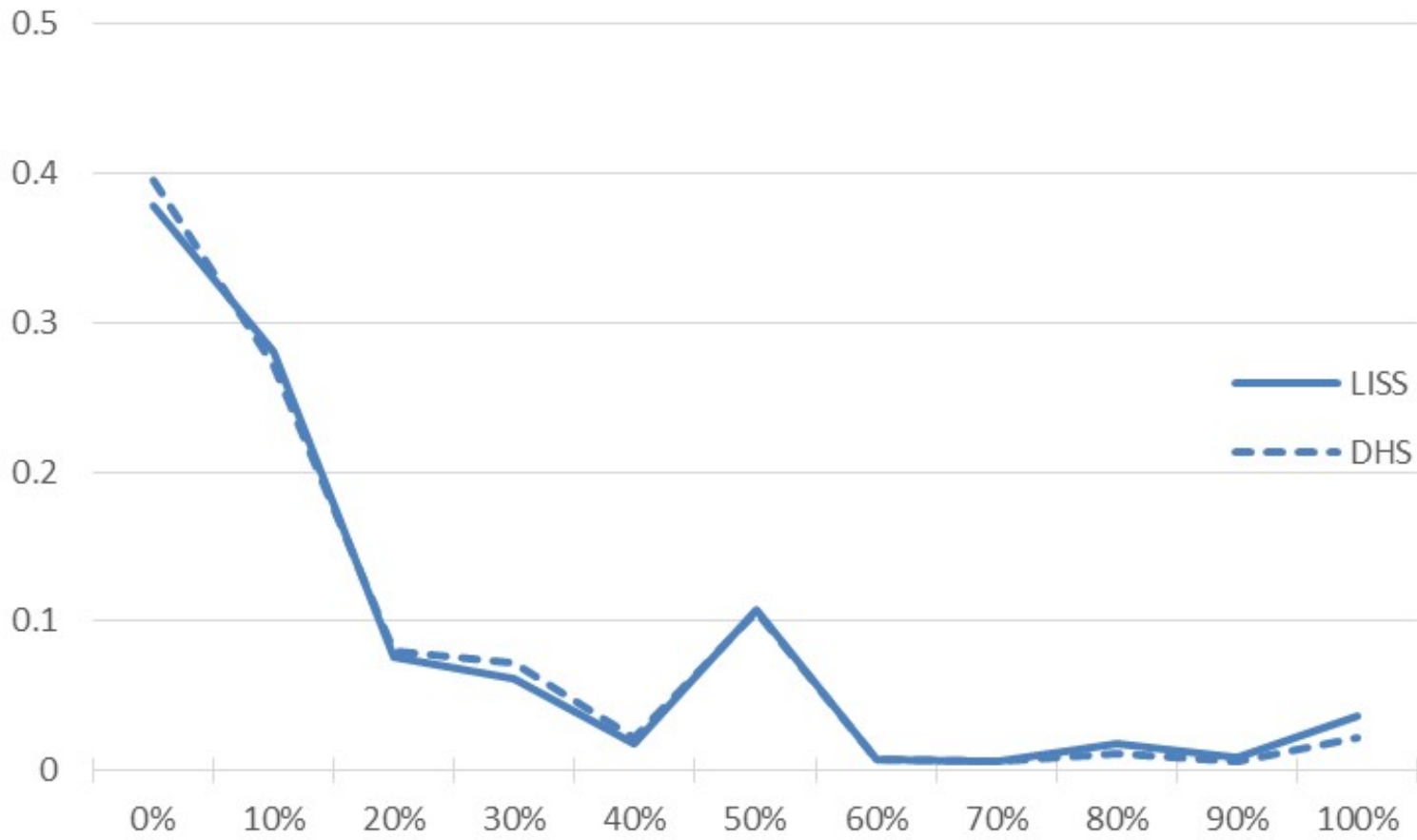


Figure: Histogram of job loss expectations of each survey pooled over all years

Linear predictions - unconditional

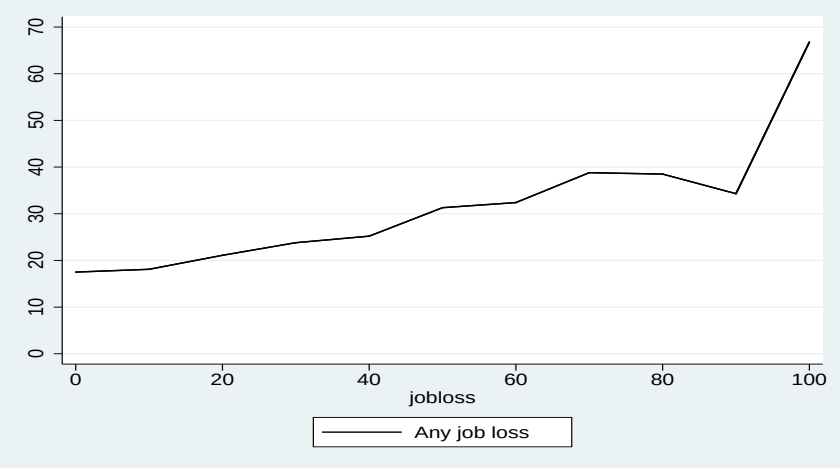


Figure: Any Job Loss

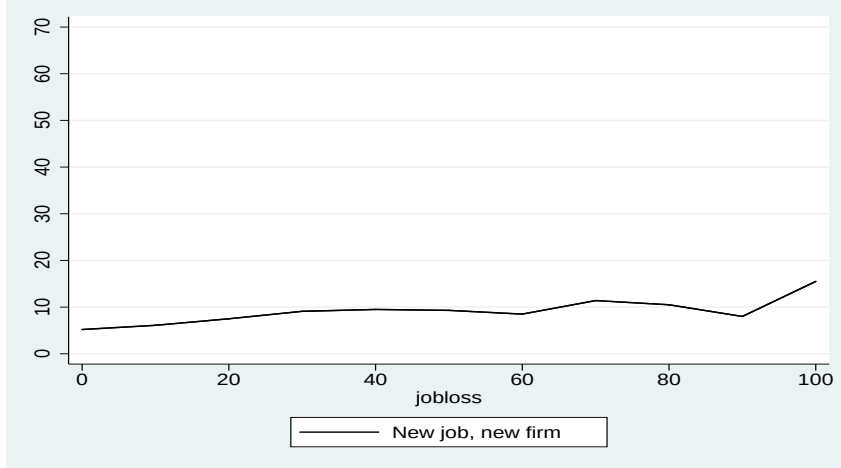


Figure: Unemployed

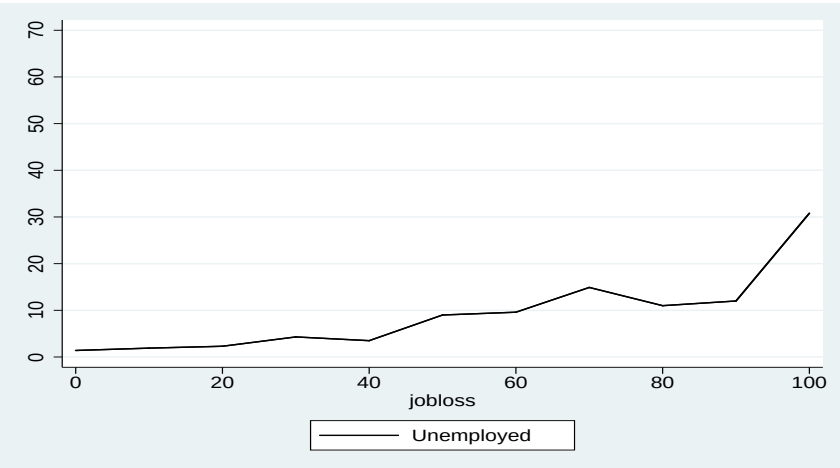


Figure: New Job, New Firm

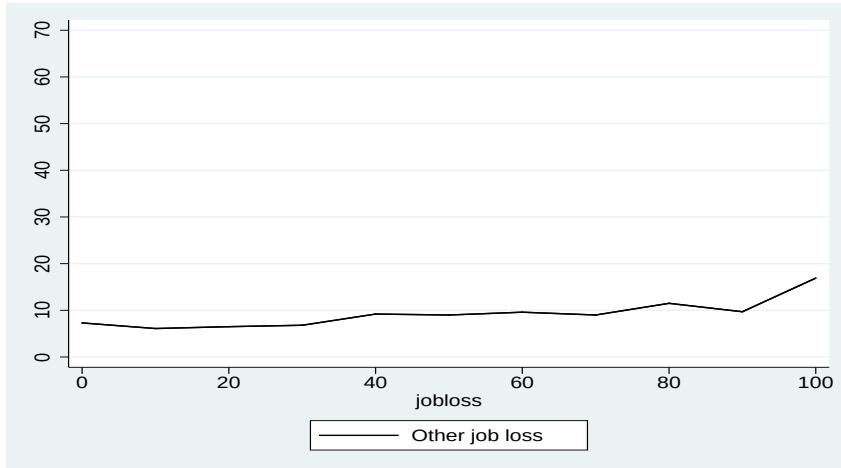
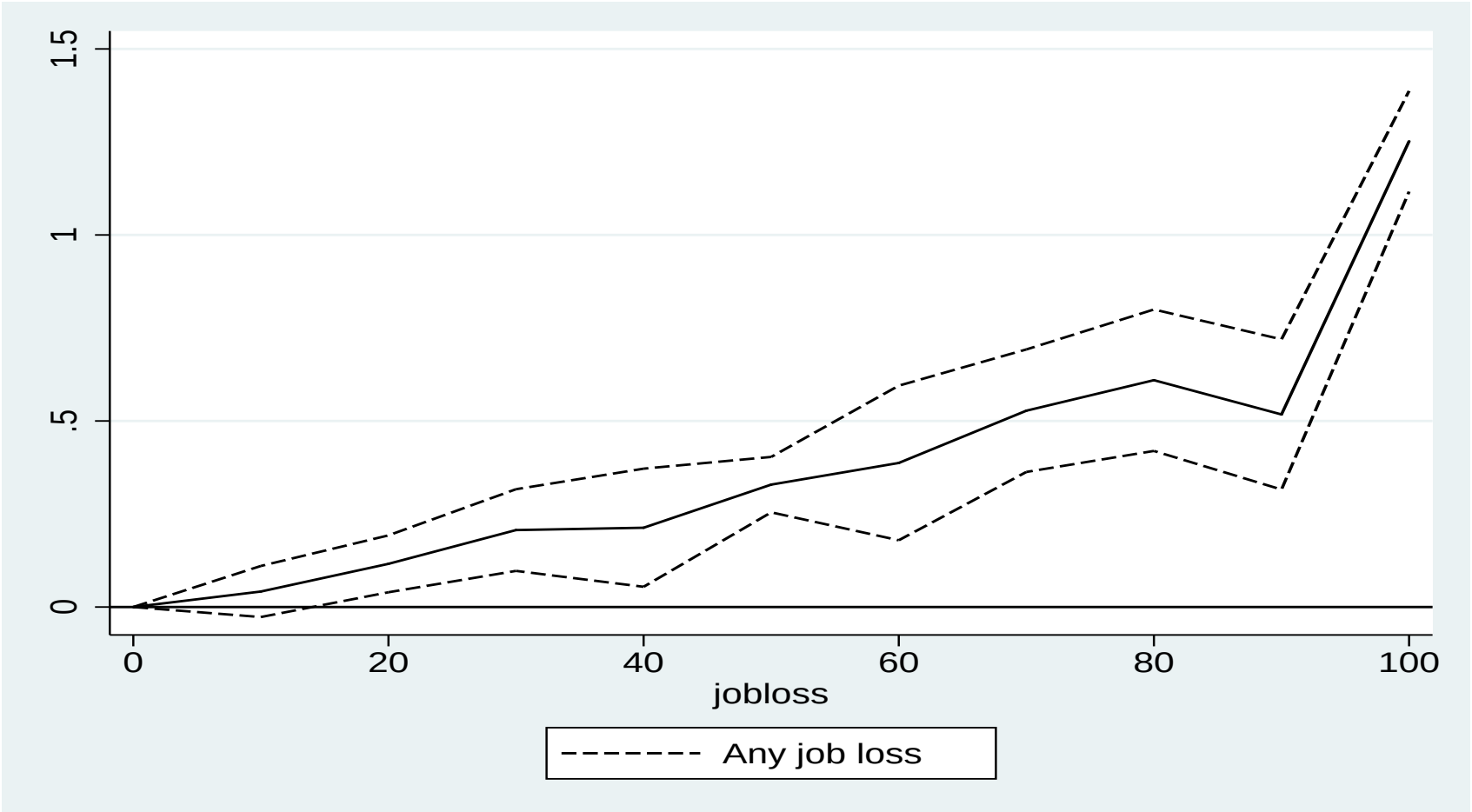


Figure: Other Job Loss

Plotted regression coefficients



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Plotted regression coefficients

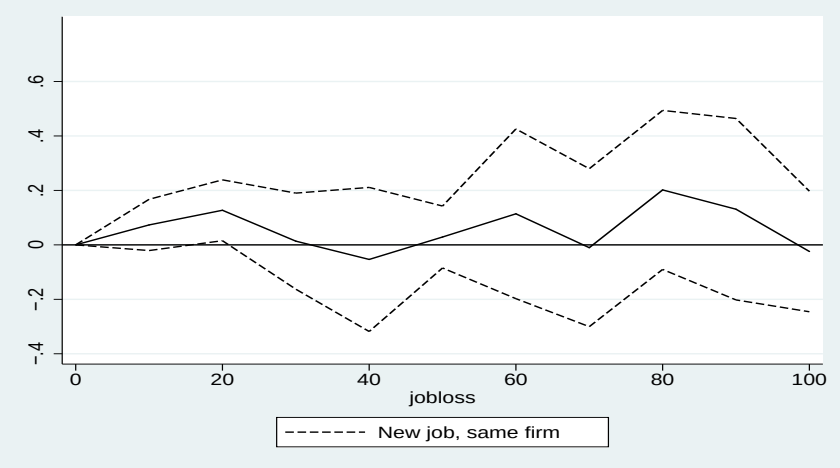


Figure: Unemployed

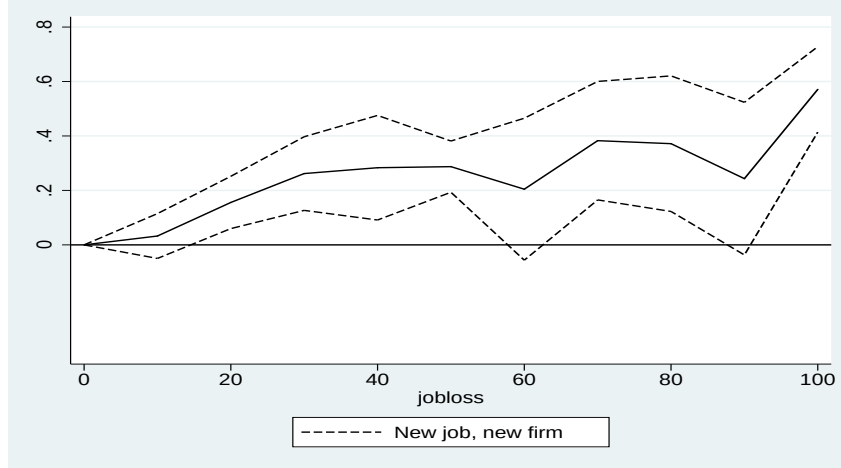
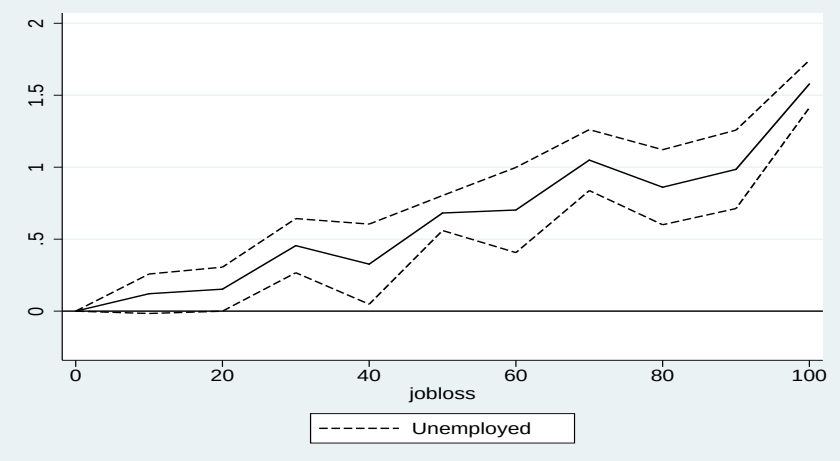
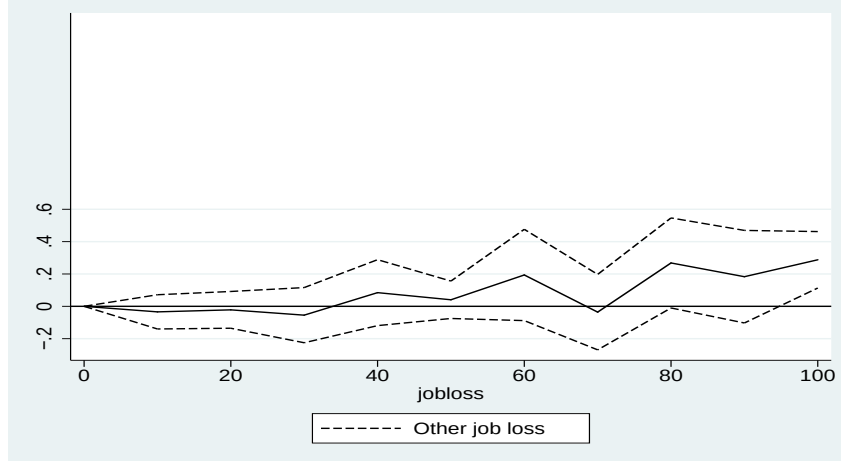


Figure: New Job, New Firm



Figure



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