Getting Back into Work after Job Loss: the Role of Partner Effects

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Added Worker Effect (AWE)

- As one partner looses his job
  the other partner will increase hours worked
  to maintain lifetime earnings (focus on women's reaction)
- The empirical evidence is mixed and the size of the effect is small

- We would not expect a strong AWE
  if job loss is anticipated (same expected lifetime earnings)
  and households can smooth consumption
- Households are unwilling to change their labour supply behaviour
- It is the partner who lost the job who is better placed to find a job

Job Search

- Focuses on individuals, but small literature looking at couples
- Individuals accept jobs when the wage offered exceeds their reservation wage
- Reservation wage increases with level of wealth
- Those with a working partner (more wealthy) should take long to find a new job but should find a better quality job
- Social capital (network, moral support, soft skills): those with a working partner should find a job more quickly and a better quality job

Research Question

- Effect of partner's employment on:
  - Speed of exit from unemployment
  - Quality of job found (employment/self-employment; temporary/permanent; part-time/full-time)
- Does having a working spouse shelters people from the negative impact of a recession?
- Separately analyse men and women

Related Literature

- Effect of Partner's Income on Unemployment Duration
  - When partner's income is higher women enter a job more slowly, while men find a job more quickly (Lentz and Tranaes, 2005; Marcassa 2014)
  - Effect on women but no effect on men (Bernasco et al., 1998)
  - No effect at all – in levels (Jacob and Kleinert, 2014)

- Effect of partner resources on career outcomes
  - Partner's education and occupation are negatively associated with working hours but positively associated with occupational level (Verbakel and de Graaf, 2009)
  - Partner's unemployment slows down the job re-entry (from unemployment, for both partners) and a woman's education raises the re-employment probability of her male partner (Jacob and Kleinert, 2014)

New Contribution

- Analysis of partner effects during a recession (when it is harder to find a – good – job)
- Recent recession has been characterised by an increase in marginal forms of employment

- Focus on people who recently lost their job (in work at t and unemployed at $t+1$)
- Does having a working spouse shelter job seekers from the negative impact of a recession?

Types of Jobs (UK)
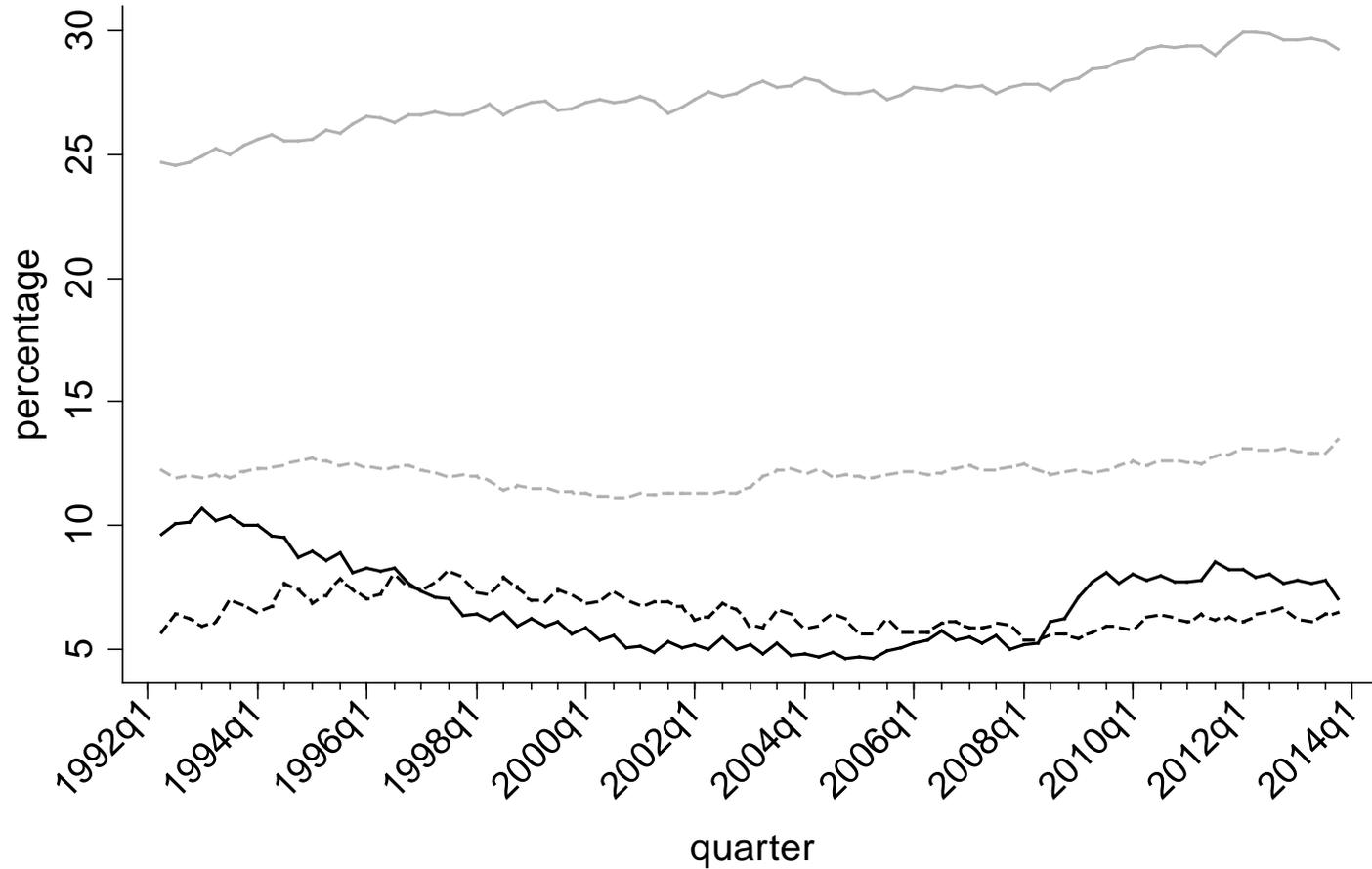
New Contribution

- Analysis of partner effects during a recession (when it is harder to find a – good – job)
- Recent recession has been characterised by an increase in marginal forms of employment

- Focus on people who recently lost their job (in work at *t* and unemployed at *t+1*)
- Does having a working spouse shelter job seekers from the negative impact of a recession?

Data

- UK Quarterly Labour Force Survey
- Household survey interviewing every adult member of the household
- Secure version (1992q2-2013q4)
  - Match people living in same household (couples)
  - 5 quarters longitudinal data
- Information on individual and job characteristics

- Focus on
  - Couples in which both are in working age but older than 23, no other adults
  - In which one of the two partners is observed loosing his/her job involuntarily

Data

- Outcomes (for partner observed loosing the job):
  - Length of search
  - Probability to find a job
  - Probability to start paid employment or self-employment compared to unemployment
  - Probability to find a full-time or a part-time job compared to unemployment
  - Probability to find a permanent or a temporary job compared to unemployment
- Explanatory variables of interest: spouse's characteristics and recession

Empirical Analysis

1. Kaplan-Meier survival estimates (differences by partner's employment status and recession)

2. Probability to find a job and job quality
   1. Modelling strategy
   2. Results for men who lost their job
   3. Results for women who lost their job

Kaplan-Meier survival estimates - men

Proportion surviving

analysis time

Growth, partner no job
Growth, partner has job
Recession, partner no job
Recession, partner has job

Kaplan-Meier survival estimates - women

Proportion surviving

analysis time
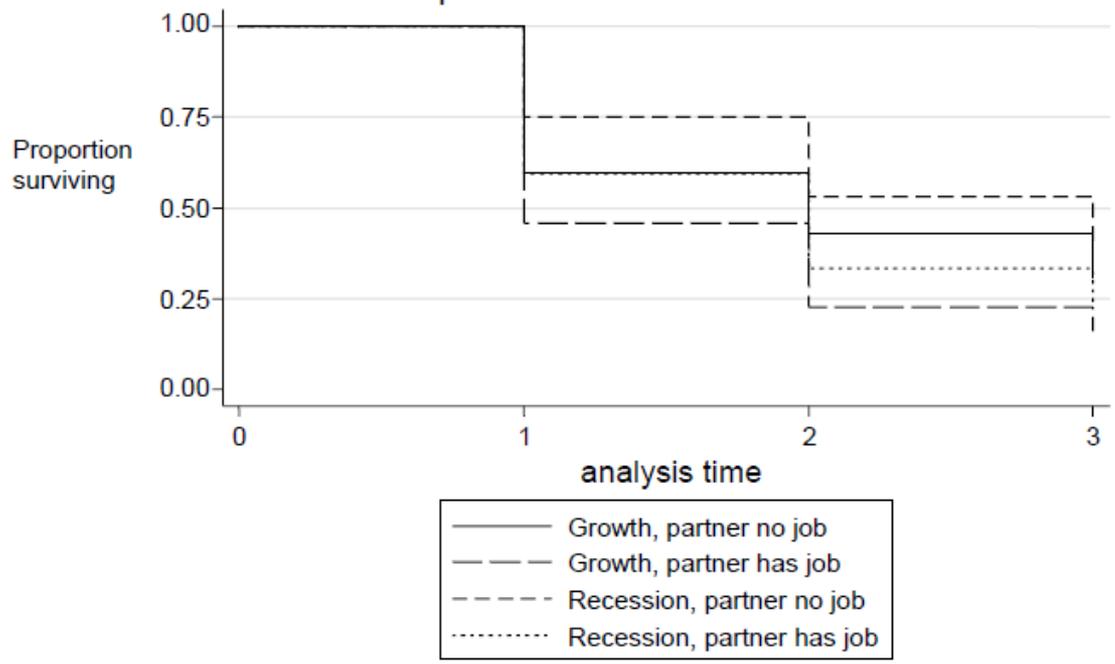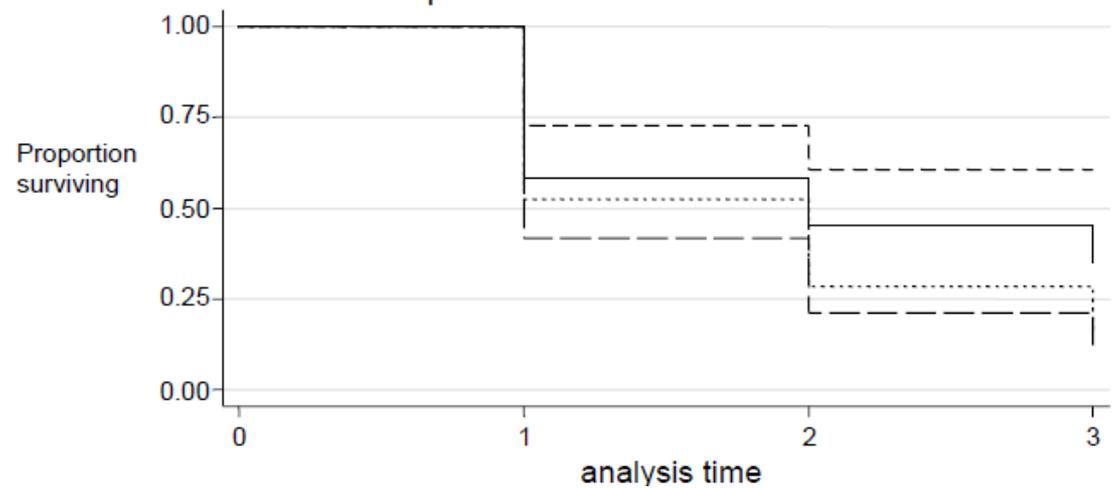
Survival Estimates – Men

- Indicates number of transitions is less than 10 (not reported to avoid statistical disclosure)

Time	Beginning total	Fail	Net lost	Survivor function	Std. Error
Growth, partner does not have a job					
1	769	309	233	0.598	0.018
2	227	64	101	0.430	0.022
3	62	17	45	0.312	0.029
Growth, partner has a job					
1	1281	693	251	0.459	0.014
2	337	170	98	0.228	0.014
3	69	20	49	0.162	0.016
Recession, partner does not have a job					
1	281	70	109	0.751	0.026
2	102	30	44	0.530	0.038
3	28	-	21	0.397	0.052
Recession, partner has a job					
1	578	234	178	0.595	0.020
2	166	73	61	0.333	0.026
3	32	-	23	0.240	0.032

Survival Estimates – Women

- Indicates number of transitions is less than 10 (not reported to avoid statistical disclosure)

Time	Beginning total	Fail	Net lost	Survivor function	Std. Error
Growth, partner does not have a job					
1	125	52	42	0.584	0.044
2	31	-	15	0.452	0.056
3	-	-	-	0.352	0.076
Growth, partner has a job					
1	856	498	173	0.418	0.017
2	185	91	51	0.213	0.018
3	43	18	25	0.124	0.019
Recession, partner does not have a job					
1	48	13	23	0.729	0.064
2	12	-	-	0.608	0.095
3	-	-	-	0.608	0.095
Recession, partner has a job					
1	363	172	101	0.526	0.026
2	90	41	28	0.286	0.031
3	21	-	12	0.164	0.036

Probability of Finding a Job

$$h(j, X) = 1 - exp[-exp(\beta' X + \gamma_j)$$

- Complementary log-log model (estimated separately for men and women)

- $h(j, X)$: whether the individual is at risk of finding a job
- γ_j: duration dependence
- X: age and its square, dummies for qualification levels, homeownership, whether there are dependent children in the household, dummies for region of residence
Dummies for whether the partner has a job, partner's qualification, age and its square, number of paid hours worked and job tenure
Dummy for recession (2008-2013) and interaction between recession dummy and dummy for whether the partner has a job

Type of Job Found

$$O_{ik}* = Z_i' \delta_k + \gamma_i + \eta_{ik}$$

- Multinomial logit models (separately for men and women)
- Outcomes (2 = high quality, 1 = low quality, 0 = no jo):
  a) Men only: Probability to start paid employment (2) or self-employment (1) compared to unemployment (0)
  b) Probability to find a full-time (2), or a part-time job (1) compared to unemployment (0)
  c) Probability to find a permanent (2) or a temporary job (1) compared to unemployment (0)
- Z_i and γ_i: same as in the complementary log log model + dummy for whether the previous job was part-time (in b for women)

Men

Reference: no job	(1) Finds job	(2) Finds self-empl.	Finds paid job	(3) Finds part-time job	Finds full-time job	(4) Finds temp. job	Finds perm. job
Qualification (Ref: no qualifications)							
NVQ4 or more	0.284*	0.982*	0.205	0.179	0.364*	0.338	0.176
NVQ3	0.365*	1.038*	0.336*	0.066	0.498*	0.455*	0.316*
NVQ2 or lower	0.381*	0.792*	0.409*	0.250	0.482*	0.445*	0.411*
Other qualification	0.372*	0.874*	0.383*	0.291	0.479*	0.527*	0.319*

Standard errors in parenthesis; * Significant at 10% or less; other explanatory variables: region dummies

Men

Reference: no job	(1) Finds job	Finds self-empl.	(2) Finds paid job	(3) Finds part-time job	Finds full-time job	(4) Finds temp. job	Finds perm. job
Age	0.106*	0.069	0.156*	0.127	0.148*	0.181*	0.160*
Age square	-0.001*	-0.001	-0.002*	-0.001	-0.002*	-0.002*	-0.002*
Children	-0.111	0.001	-0.203*	-0.168	-0.170*	-0.167	-0.215*
Home Owners	0.423*	0.745*	0.455*	0.026	0.575*	0.164	0.647*

Standard errors in parenthesis; * Significant at 10% or less; other explanatory variables: region dummies

Men

Reference: no job	(1) Finds job	Finds self-empl.	(2) Finds paid job	(3) Finds part-time job	Finds full-time job	(4) Finds temp. job	Finds perm. job
Partner's characteristics							
Has a job	0.402*	0.312	0.552*	0.585*	0.483*	0.401*	0.631*
Paid hours	-0.000	-0.004	-0.002	-0.016*	-0.000	0.006	-0.005
Job tenure	-0.009*	-0.014	-0.010	-0.000	-0.012*	-0.009	-0.013
NVQ4+	0.007	0.450*	-0.014	0.465*	-0.005	0.099	-0.092
NVQ3	0.084	0.507*	0.017	0.371	0.058	0.153	-0.048
NVQ2-	0.027	0.363	-0.025	0.145	0.020	-0.083	-0.014
Other	0.010	0.299	-0.031	0.297	-0.041	-0.154	0.016
Age	-0.039	-0.052	-0.057*	-0.149*	-0.037	-0.050	-0.066
Age sq.	0.001*	0.001	0.001*	0.002*	0.001	0.001	0.001*

Standard errors in parenthesis; * Significant at 10% or less; other explanatory variables: region dummies

Men

Reference: no job	(1) Finds job	Finds self-empl.	(2) Finds paid job	Finds part-time job	(3) Finds full-time job	Finds temp. job	(4) Finds perm. job
Search duration	0.961*	1.378*	1.461*	1.430*	1.447*	1.319*	1.443*
Recession	-0.420*	-0.135	-0.748*	0.046	-0.770*	-0.366*	-1.051*
Recess. x partner has job	0.183	0.035	0.375*	0.008	0.393*	-0.105	0.764*
Obs.	7,218	7,218		7,216		6,944	

Standard errors in parenthesis; * Significant at 10% or less; other explanatory variables: region dummies

Women

Reference: no job	(1) Finds job	(3) Finds part-time job	Finds full-time job	(4) Finds temp. job	Finds perm. job
Qualification (Ref: no qualifications)					
NVQ4 or more	0.142	0.182	0.226	0.773*	-0.321
NVQ3	-0.025	-0.160	0.140	0.425	-0.418
NVQ2 or lower	-0.017	0.111	0.011	0.145	-0.103
Other qualification	-0.096	0.067	-0.109	-0.005	-0.110

Standard errors in parenthesis; * Significant at 10% or less; other explanatory variables: region dummies

Women

Reference: no job	(1) Finds job	(3) Finds part-time job	Finds full-time job	(4) Finds temp. job	Finds perm. job
Age	-0.034	-0.092	0.019	0.018	-0.068
Age square	0.000	0.001	-0.000	-0.000	0.001
Previous job part-time		1.421*	-1.199*		
Children	-0.192*	0.174	-0.631*	-0.346*	-0.169
Home Owners	0.369*	0.428*	0.574*	0.587*	0.380*

Standard errors in parenthesis; * Significant at 10% or less; other explanatory variables: region dummies

Women

Reference: no job	(1) Finds job	(3) Finds part-time job	Finds full-time job	(4) Finds temp. job	Finds perm. job
Partner's characteristics					
Has a job	0.824*	0.981*	1.046*	0.957*	0.857*
Paid hours	-0.007	-0.001	-0.016*	-0.009	-0.005
Job tenure	0.001	0.004	-0.009	0.006	-0.004
NVQ4+	-0.086	-0.127	0.024	0.141	-0.137
NVQ3	0.201	0.073	0.359	0.433	0.136
NVQ2-	0.061	-0.130	0.249	0.041	0.111
Other	-0.094	-0.287	0.099	0.247	-0.338
Age	0.024	0.033	0.026	-0.030	0.080
Age sq.	-0.000	-0.000	-0.000	0.000	-0.001

Standard errors in parenthesis; * Significant at 10% or less; other explanatory variables: region dummies

Women

Reference: no job	(1) Finds job	(3) Finds part-time job	Finds full-time job	(4) Finds temp. job	Finds perm. job
Search duration	1.026*	1.725*	1.717*	1.658*	1.683*
Recession	-0.513*	-0.754	-0.594	-1.117*	-0.606
Recess. x partner has job	0.303	0.175	0.600	0.746	0.345
Obs.	3,133	3,131		3,097	

Standard errors in parenthesis; * Significant at 10% or less; other explanatory variables: region dummies

Summary

- 'Own' Worker Effect is an order of magnitude larger than the AWE
- Return to work is aided by the partner being in work
- For men an employment partner
  - Increases the probability to find permanent employment
  - Partially reverses the negative impact of a recession
- For women an employed partner has a positive impact on employment, but there is no differential over the recession

Effect of Income vs. Broader Resources

- Partner's wage LFS
  - Wage questions are asked only in 1st and 5th interview → Imputation
  - When partner's wage is included, results do not change: partner's job dummy has a positive and statistically significant impact, while partner's wage does not seem to play a role
  - Exception: men are less likely to find a full-time job (significance only 10%) → Negative income effect

- Partner's wage ASHE
  - Imputed based on partner's occupation (2-digit, 80 types of occupations) for period 1997-2013
  - Similar results as using LFS (including the results on full-time jobs)

Use of Networks

- Employed partners may have access to wider networks helpful in finding a job
- LFS gives information on methods used to search for a job
- Estimate two additional models:
  - Including dummies for use of newspapers or friends and family/networks as main search methods (reference: other search methods)
  - Including a dummy for use of networks as search method (reference: not using networks at all)
- Estimates are very imprecise but suggest that
  - Those who use either newspapers or networks as main search method exit unemployment faster
  - Networks mainly benefit those with an employed partner

Conclusions

- Dominant reaction of couples is for the original earner to get back into work rather than an AWE
- Some evidence of an income effect (of a working partner) but evidence is more consistent with social capital effect, which may work via employed partner's better networks
- Employed partners partly shelter men from the negative impact of a recession (but not women)
- The best insurance mechanism for couples is having a working partner (rather than a partner able to take up additional employment – AWE)
- Single earner families may be trapped in a low-quality job – no job cycle which may increase income differences with dual earner households