

## Job Lock Literature Review

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#### Literature Reviews:

- A number of comprehensive reviews of the literature have covered the majority of relevant scholarly activity with regard to job-lock

#### [Rashad and Sarpong, 2006 \(Georgia Health Policy Center Working Paper\)](#)

- Literature review and analysis from the National Health Interview Survey 1997-2003
- Findings:
  - “The major findings from the growing body of literature...have essentially been mixed”.
    - **Studies finding a job-lock effect:** [Madrian \(1994\)](#), [Monheit and Cooper \(1994\)](#), [Buchmueller and Valletta \(1996\)](#), [Rogowski and Karoly \(2000\)](#), [Okunade and Wunnava \(2002\)](#), [Bradley, Neumark, Luo, and Bednarek \(2005\)](#), [Stroupe, Kinney, and Kniesner \(2001\)](#), [Cutler and Madrian \(1998\)](#), [Dey and Flinn \(2005\)](#), [Stinson \(2002\)](#), [Johnson, Davidoff, and Perese \(2003\)](#), [Gruber and Madrian \(1997\)](#), [Sanz de Galdeano \(2006\)](#), [Farber and Levy \(2000\)](#)
    - **Studies findings little or no effect:** [Holtz-Eakin \(1994\)](#), [Kapur \(1998\)](#), [Gilleskie and Lutz \(2002\)](#), [Slade \(1997\)](#), [Penrod \(1994\)](#), [Berger, Black, and Scott \(2004\)](#), [Holtz-Eakin, Penrod, and Rosen \(1996\)](#), [Mitchell \(1982\)](#), [Spaulding \(1997\)](#)
  - “Although empirical and anecdotal evidence exists suggesting that mobility constraints in the labor market faced by individuals stemming from the fear of losing one’s coverage is endemic, the divide in the literature indicates that there is still some question as to whether job-lock actually persists in the workplace”.
  - Using their own sample of employed, unmarried individuals, authors found “some evidence of job-lock...particularly for males”.
- Authors published a similar [2008 literature review in Expert Review of Pharmacoeconomics & Outcomes Research](#)
  - In the authors’ own analysis, found that individuals with employment-provided health insurance stayed at their jobs **16%** longer and were **60%** less likely to voluntarily leave their jobs than those with insurance from elsewhere
  - See last page for authors’ summary of key studies looking at job lock
- Gruber and Madrian conducted their own [literature review](#) in 2002, and concluded:
  - There is “clear and unambiguous evidence that health insurance is a central determinant of retirement decisions”
  - There is “fairly clear evidence that health insurance is not a major determinant of the labor supply and welfare exit decisions of low income mothers”
  - There is “fairly compelling evidence that health insurance is an important factor in the labor supply decisions of secondary earners”
  - Despite “division in the literature”, the “most compelling evidence suggests that health insurance plays an important role in job mobility decisions”
  - There is “virtually no evidence in the literature on the welfare implications of these results”
    - By author’s rudimentary analysis, welfare costs of job lock are estimated to be “modest”
  - General conclusion that “health insurance has important effects on both labor force participation and job choice, but that it is not clear whether or not these effects result in large losses of either welfare or efficiency”.

#### [GAO-12-144R – “Job Lock and PPACA” \(2011\)](#)

- GAO report commissioned by Senate to examine prior research on job lock, and PPACA potential to mitigate

- Systematic review of 31 studies over prior 10 years, and input from HHS/CRS/outside experts regarding effect of ACA
- Findings from lit review:
  - “empirical research generally indicates that certain types of workers are more likely to remain in jobs they would otherwise leave in order to keep their employer-sponsored health coverage, although research does not allow for a definitive answer on the prevalence or implications of this phenomenon for the overall labor market”
  - Workers who rely on employer coverage are “less likely to change jobs, leave labor market, become self-employed, or retire when eligible compared to those who have access to alternative sources of coverage”
    - Phenomenon may be “particularly acute for individuals with certain pre-existing conditions”
  - “Because study results and approaches used vary widely, it is difficult to quantify the overall prevalence of job lock”
    - Literature provides “little empirical basis for assessing the aggregate labor market implications of job lock”
- Findings from experts regarding ACA effect:
  - Experts “generally agreed that expanded access to health coverage under PPACA may help mitigate job lock, but had differing views or were less certain about other possible effects of the law on job lock”
    - ACA will help to the extent that individuals can seek health care in marketplace if they leave job, especially those with preexisting conditions
    - Impact on premiums and employer willingness to offer coverage would also have job-lock implications”
      - Differing opinions on whether ACA will actually decrease premiums or successfully encourage employers to offer more coverage – hence, uncertainty as to whether ACA will actually change job-lock

## Selection of Key Articles

### Cooper & Monheit, 1993 (Inquiry)

- **Study focus:** job mobility
- **Study population:** Wage earners 25-54 not covered by public health insurance, not self-employed
- First (?) major publication addressing the job-lock hypothesis –effect of employer health insurance on likelihood of workers voluntarily changing jobs
- Used data from 1987 National Medical Expenditure Survey
- Findings:
  - Employer health care reduced likelihood of changing jobs by **25%** among married men and by **38%** for married women
  - Concluded that “employer-related health insurance inhibits job mobility”
- Some criticized these findings on basis that health insurance also correlates with other valuable employer benefits, like pensions and paid vacations – thereby difficult to disentangle specific effect of health insurance.
  - Madrian (below) attempted to compensate for these effects

### Madrian, 1994 (The Quarterly Journal of Economics)

- **Study focus:** job mobility
- **Study population:** employed married men ages 20-55, excluding self-employed
- Much-cited empirical study of the impact of employer-provided health insurance on job mobility
- Used data from 1987 National Medical Expenditure Survey
- Estimated job-lock by comparing differences in turnover rates for individuals with high and low medical expenses in jobs that do and don’t provide insurance

- DD estimates comparing groups was an attempt to isolate specific effect of health insurance following criticism of Cooper & Monheit's methodology
- Findings:
  - Estimates that job-lock reduces voluntary turnover by **25%**
    - stated another way, individuals with "other" insurance experience 25% greater job mobility than individuals with employer-provided coverage
  - Individuals with larger families were less likely to leave jobs if they had health insurance
  - Men with pregnant spouses had their mobility reduced by **30%-40%**.

### Kapur, 1998 (Industrial and Labor Relations Review)

- **Study focus:** job mobility
- **Population:** employed married men 20-55
- Re-analysis of Madrian's data using adjusted analytic approach and additional data
- Cites "conflicting evidence" on job-lock as study impetus
  - Cooper/Madrian studies found significant evidence of job-lock using NMES data, while other studies found insignificant evidence of job lock among married men using the Panel Study of Income Dynamics ([Holtz-Eakin, 1994](#)) and the Survey of Income and Program Participation ([Buchmeuller & Valletta, 1996](#)) (the latter did find effect for women, though)
- Used NMES data to answer question of whether varying findings are result of differences in data or methodology
  - Incorporated data on medical conditions, health utilization, and medical expenses to estimate sickness, since sick individuals hypothesized to have more job lock
  - Used "more comparable control and experiment groups" in DD analysis
- Findings:
  - Found similar results as Madrian's when replicating her study; after incorporating additional data on sickness proxies into DD methodology, job lock effect became "small and statistically insignificant"

### Gilleskie & Lutz, 2002 (The Journal of Human Resources)

- **Study focus:** job mobility
- **Population:** Males ages 24-35, excluding: those in school or armed forces, self-employed
- Methodological departure from previous job-lock studies by using a structural modeling approach
  - Assert that this approach "allows for improved estimates of job-lock by explaining dynamic employment transitions over time, including important (often omitted) job characteristics, modeling the endogeneity of the offer and acceptance of health insurance, and (unrestrictively) controlling for unobserved heterogeneity.
- Used data from National Longitudinal Survey of Youth from 1989-1993, allowing for "longitudinal, dynamic analysis of employment behavior as well as inclusion of important job characteristics...that have been omitted from previous studies"
- Findings:
  - No evidence of job-lock found among married men
  - Job-lock estimate of **10-15%** for unmarried men
    - Estimate shrinks further when model accounts for possibility that holding/offer of employer health insurance is "endogenous to employer transitions"

### Berger, Black & Scott, 2003 (Southern Economic Journal)

- **Study focus:** job mobility (length of employment duration)
- **Study population:** All US households, excluding individuals in military barracks and institutions
- Used discrete time hazard models of employment duration and logarithmic wage equations for 1987/1990 Survey of Income and Program Participation to estimate job-lock pre-HIPAA
- DD analysis of individuals with and without employer insurance, and family members with/without health problems

- Findings:
  - No statistically significant evidence of job-lock on employment duration or wages using this approach
  - some evidence of shorter employment periods for those with employer insurance and spouse-provided insurance versus longer employment for those with employer insurance and large families
    - “other have interpreted these findings as job-lock...however, the wage equation results using these measures are not consistent with job lock”
  - Results “do not suggest that this phenomenon is pervasive in the US economy”

#### [Akosa Antwi, Moriya & Simon, 2013 \(American Economic Journal: Economic Policy\)](#)

- **Study focus:** Labor market participation
- **Study population:** Young adults aged 16-29
- Used data from Survey of Income and Program Participation (SIPP) to study labor market effects of ACA’s provision allowing young adults to remain on parents’ health plans
  - Used DD regressions to compare 19-25 year olds with individuals slightly younger and older
- Findings:
  - Large uptake of parental coverage among individuals 19-25
    - ACA provision had an “immediate impact on parental ESI coverage of young adults” – estimate **2.06 million** added parental insurance over roughly one year
  - Preliminary evidence of “increased labor market flexibility in the form of reduced work hours”
    - No statistically significant difference in probability of employment among young adults, or in rates of job status change
    - Reduced prevalence of full-time work among young adults (**5.8%** difference relative to pre-ACA)
    - **3%** reduction in hours of work
  - Note that labor market results “should be interpreted with caution” due to lack of extensive robustness testing

#### [Bradley, Neumark & Barkowski, 2013 \(Journal of Health Economics\)](#)

- **Study focus:** labor market participation
- **Study population:** employed married women
- Study of effect of employment-contingent insurance on married women with breast cancer diagnoses
  - Comparison of women who are dependent on their own employment for insurance vs women who are less dependent on employer (e.g. receive/eligible through spouse)
  - Study of labor supply changes among participants
- Findings:
  - Women who depend on their job for health insurance reduce their labor supply less than non-dependent women following breast cancer diagnosis
    - Estimated **8-11%** smaller reduction in hours among these women

#### [Fairlie, Kapur & Gates, 2011 \(Journal of Health Economics\)](#)

- **Study focus:** job mobility
- **Study population:** male workers ages 55-75 (for primary analysis)
- Study of the specific issue of “entrepreneurship lock” – effect of non-portability of health insurance for individuals considering leaving their current job to start a new business
- Used data from 1996-2006 Annual Demographic and Income Surveys from the Current Population Survey to compare probability of turnover in “otherwise observationally equivalent employees who differ only in value they are likely to place on a current employer’s health insurance policy”
  - Constructed DD models for transition from wage-based employment to self-employed as a function of access to alternative sources of health insurance
  - Also looked specifically at individuals in the months before and after turning 65, compared to individuals in months before/after turning other ages from 55-75

- Findings:
  - Business ownership rates increase in the months after turning 65 compared to the months before, from **24.6%** to **28.0%**; no such change noted for any other age
    - Find no evidence of confounding factors from retirement, social security or pension eligibility
  - Business creation rates are “substantially lower” among salaried workers who have employer insurance compared to workers who have coverage through a spouse or who have no insurance
  - Entrepreneurship lock estimated at ~**1%** (relative to overall base annual business creation rate of 3%)
- Concludes that bundling of health insurance and employment “may create an inefficient level of business creation”

### Key Study summary from Rashad & Sarpong, 2008

Table 1. Key studies in the job-lock literature.				
Study (year)	Main dataset used	Method	Effect on job-lock	Ref.
<i>Studies finding an effect</i>				
Madrian (1994)	NMES (1987)	Probit, DD, spousal health insurance and family size as comparison groups	Yes (married males aged 20–55 years)	[16]
Monheit and Cooper (1994)	NMES (1987)	Probit (job change), after wage and insurance offer equations	Yes (males and females aged 25–54 years)	[2]
Buchmueller and Valletta (1996)	SIPP (1984–1988)	Probit, DD, spousal health insurance as comparison group	Yes, although stronger for both single and married females (males and females aged 25–54 years)	[18]
Gruber and Madrian (1997)	SIPP (1984–1988)	Probit (transition out of employment with insurance)	Yes; coverage mandates through COBRA increased worker mobility (males aged 25–54 years)	[1]
Okunade and Wunnava (2002)	NLSY (1979; 1996 wave used)	OLS, tenure as dependent variable	Yes	[5]
Sanz de Galdeano (2006)	SIPP (1996–2000)	Probit, fixed effects	Yes	[19]
<i>Studies finding no effect</i>				
Berger, Black and Scott (2004)	SIPP (1987, 1990)	Probit, DD, without health insurance as comparison group; wage equations	No, although evidence of shorter employment spells for those with EPHI (males and females aged 18 years and over)	[20]
Kapur (1998)	NMES (1987)	Probit, DD, predicted health sickness measures used	No (married males aged 20–55 years)	[4]
<i>Studies finding a mixed effect</i>				
Holtz-Eakin (1994)	PSID (1984)	Probit, DD, spousal health insurance as comparison group	Yes, but insignificant for married males (males and females 25–54)	[3]
Gilleskie and Lutz (2002)	NLSY (1979; 1989–1993 used)	Logit (employment transitions)	Yes, although insignificant for married males	[21]
COBRA: Consolidated Omnibus Budget Reconciliation Act; DD: Difference in differences; EPHI: Employer-provided health insurance; NLSY: National Longitudinal Survey of Youth; NMES: National Medical Expenditure Survey; OLS: Ordinary least squares; PSID: Panel Study of Income Dynamics; SIPP: Survey of Income and Program Participation.				