

Labor Market Data in the NLS



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NATIONAL LONGITUDINAL SURVEYS
SURVEY OF WORK EXPERIENCE
OF MEN 45 - 59
1966

| | |
|-----------------------|------------------------------|
| 1. Control number | 2. Line number of respondent |
| 3. Address | |
| 4. Name of respondent | |
| 5. Interviewed by: | 6. Date |

RECORD OF CALLS

| Date | Time | Comments |
|------|--------------|----------|
| 1. | a.m. p.m. | |
| 2. | a.m. p.m. | |
| 3. | a.m. p.m. | |
| 4. | a.m. p.m. | |

RECORD OF INTERVIEW

| Interview time | | Date completed | Comments |
|----------------|--------------|----------------|----------|
| Began | Ended | | |
| a.m. p.m. | a.m. p.m. | | |

NONINTERVIEW REASON

| |
|--|
| |
|--|

Today's Game Plan

(for summarizing 50 years of labor market data in 50 minutes)

Part 1: NLS data provide measures of “actual” work experience (X)

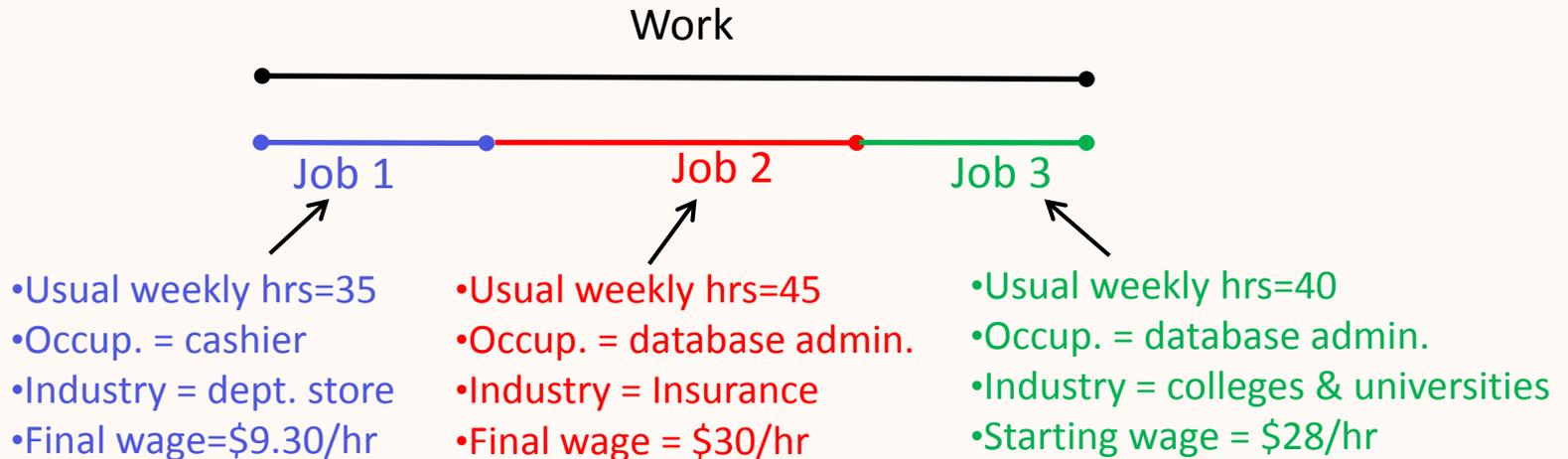


- Level of detail + precision varies across cohorts
- Data on “actual” X have been game-changing in many ways

I will highlight reasons for needing detailed data on X, and briefly describe a few key findings

Today's Game Plan (continued)

Part 2: NLS data provide *detailed* information on each job



- Detail with which jobs are tracked has improved with each cohort
- Ability to explore job mobility and within-job vs. between-job wage growth is unrivaled by any other survey.

I will highlight a job-specific detail that is new to the NLSY79:
whether the job is a *self-owned business*

Part 1: Measuring Work Experience

When interviewing, say, a 50 year old respondent

- ❑ It is exceedingly difficult to learn how much work experience she has accumulated since entering the labor market
- ❑ Especially if she has worked discontinuously
- ❑ Cross-sectional surveys (and even longitudinal surveys that start with “old” people) do not even try

In the absence of data on actual X , the standard proxy is:

- ❑ Years of experience = Age – Years of school – 6

$$(X = \text{Age} - S - 6)$$

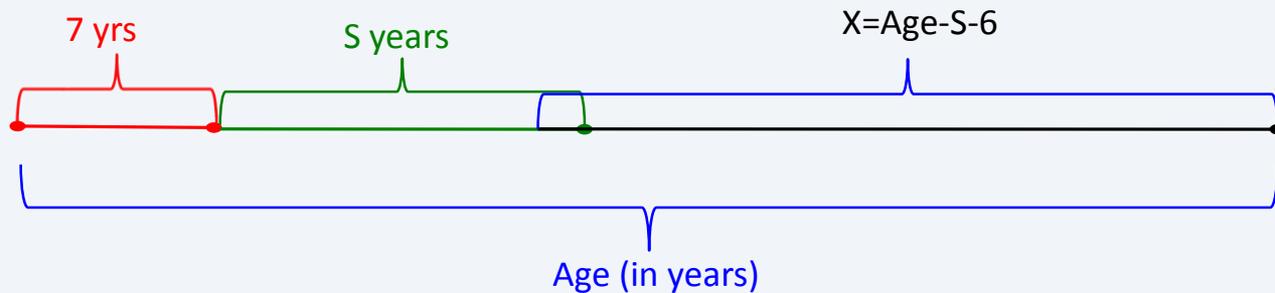
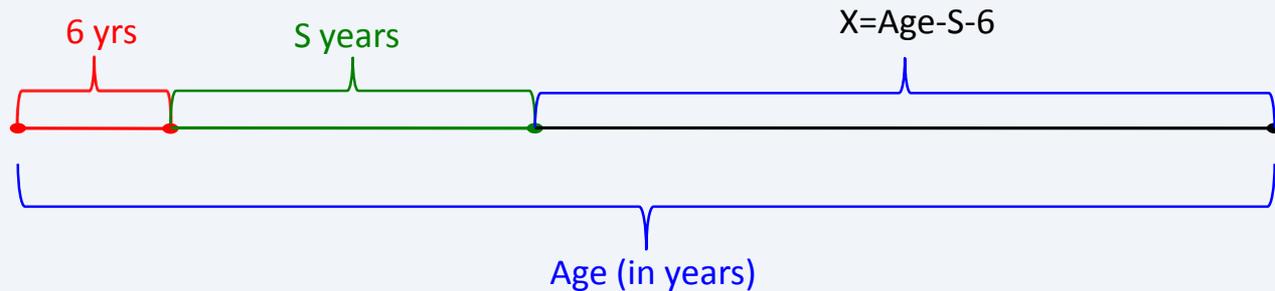
Part 1: Measuring Work Experience

Age - S - 6 is a good proxy for X as long as life is very simple:



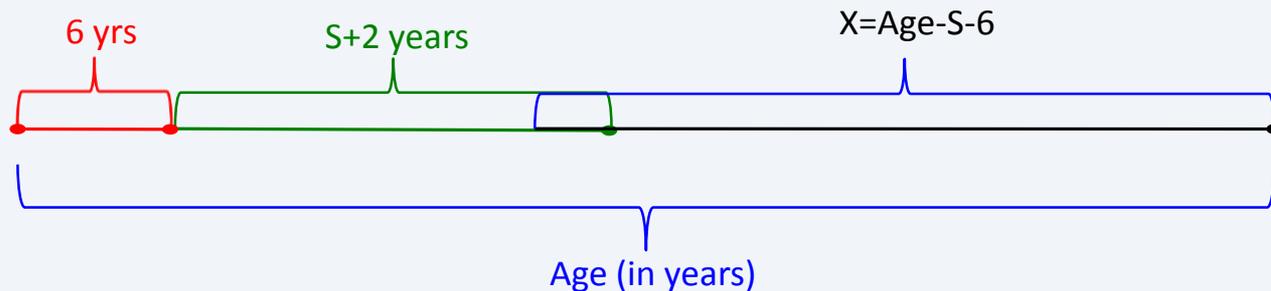
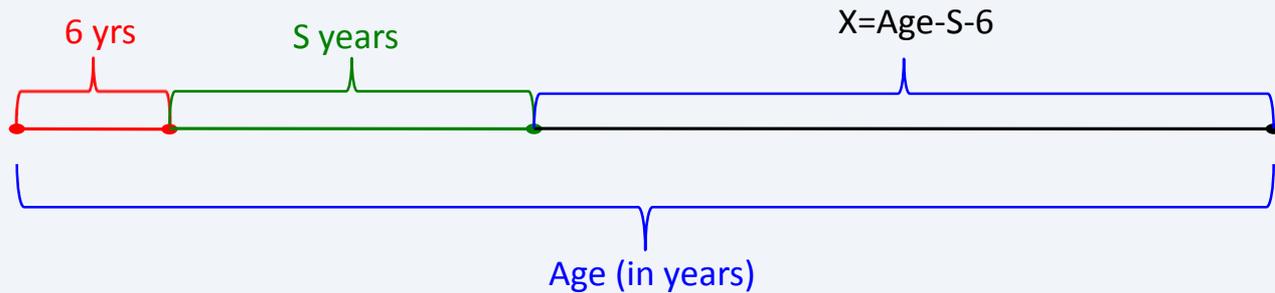
Part 1: Measuring Work Experience

Problems arise with **Age – S – 6** if you delay school entry:



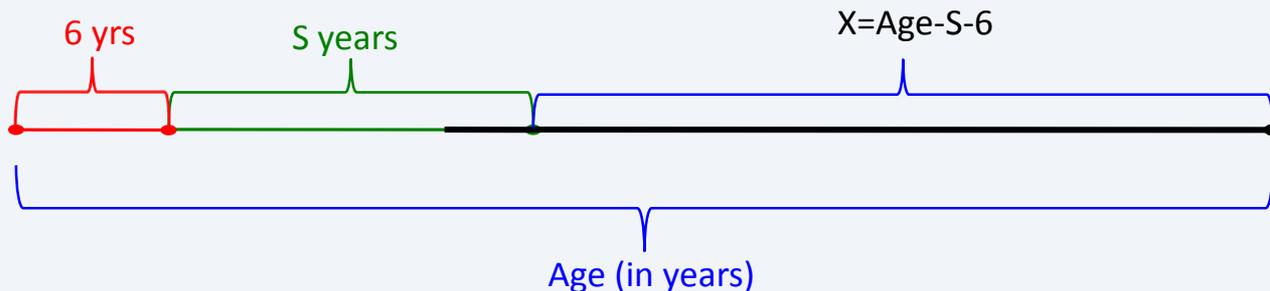
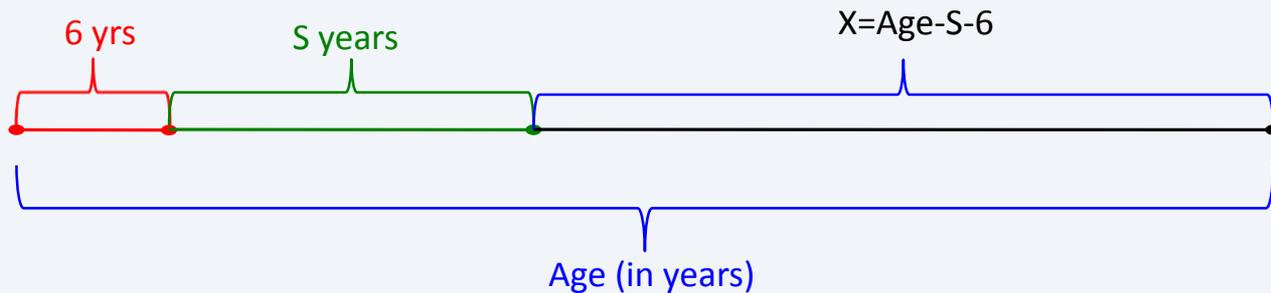
Part 1: Measuring Work Experience

Problems arise with **Age - S - 6** if you drag out school:



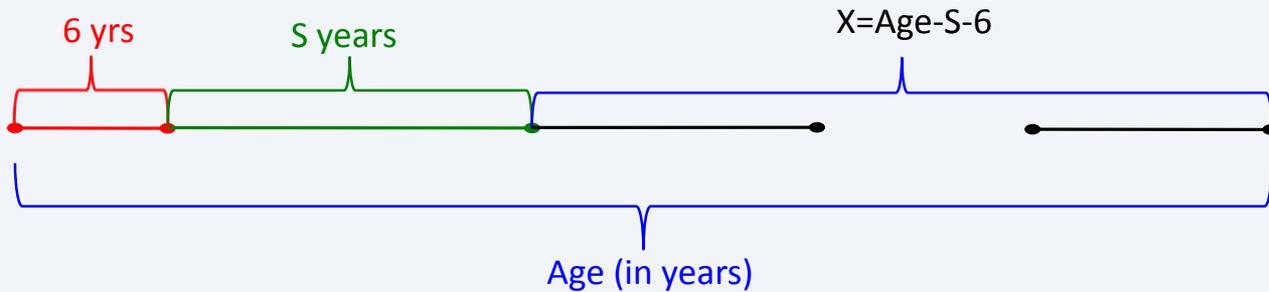
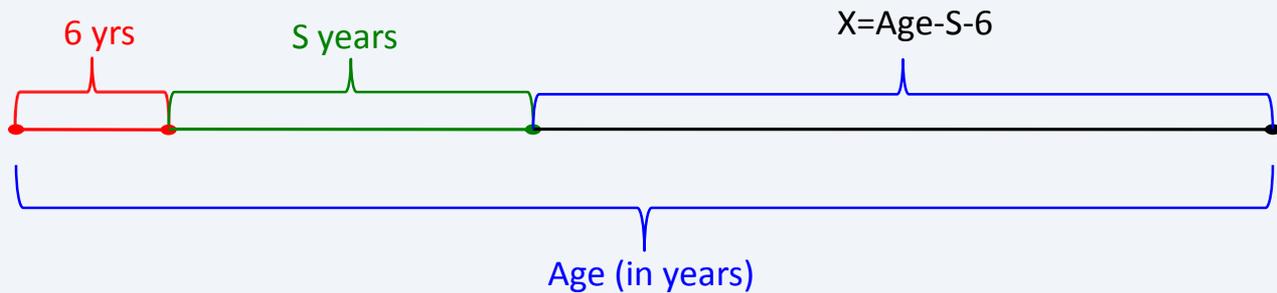
Part 1: Measuring Work Experience

Problems arise with **Age – S – 6** if you work while in school:



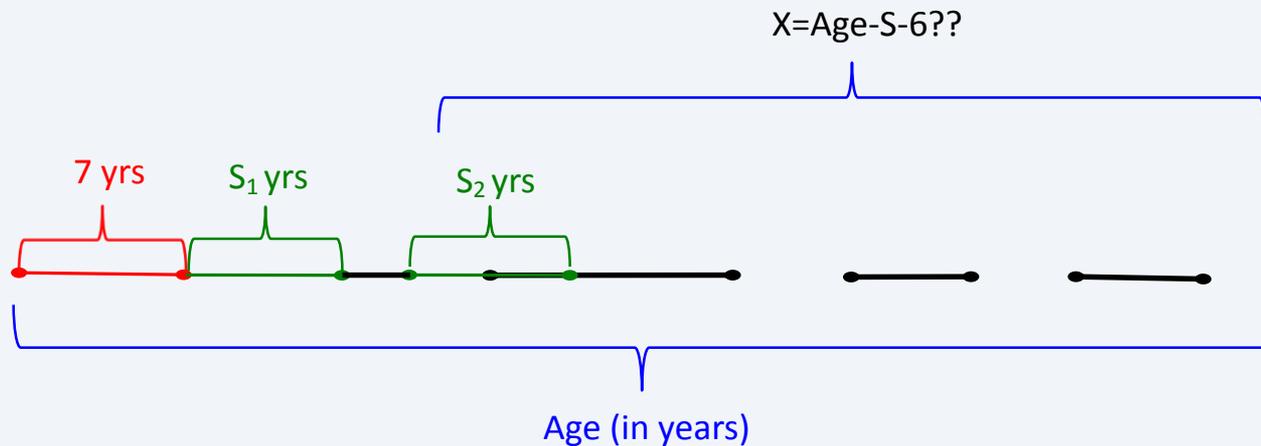
Part 1: Measuring Work Experience

Problems arise with **Age – S – 6** if you work discontinuously



Part 1: Measuring Work Experience

Big Problems arise with **Age – S – 6** if you do all those things:



Part 1: Measuring Work Experience

Each NLS cohort lets us “observe” actual X:

| Cohort | Birth years | First Interview | | Last Interview | |
|--------------|-------------|-----------------|-------|----------------|-------|
| | | Year | Age | Year | Age |
| Older Men | 1906-21 | 1966 | 45-59 | 1983 | 62-76 |
| Mature Women | 1922-37 | 1967 | 30-44 | 2003 | 66-80 |
| Young Men | 1941-51 | 1966 | 14-24 | 1981 | 29-40 |
| Young Women | 1943-53 | 1968 | 14-24 | 2003 | 49-59 |
| NLSY79 | 1957-65 | 1979 | 14-22 | 2015 | 51-58 |
| NLSY97 | 1980-84 | 1997 | 12-16 | 2014 | 29-33 |

Original cohorts

Ongoing cohorts

□ Original cohorts:

- Weeks worked vs. unemployed vs. OLF in *last year*
 - Details (including start/stop dates) on current or last job
 - Details on some (not all) “intervening” jobs
- ⇒ A reasonably complete work history is observed for YM & YW

Part 1: Measuring Work Experience

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|------------------|--------------|-------------|-----------------|-------|----------------|-------|
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| Ongoing cohorts | NLSY79 | 1957-65 | 1979 | 14-22 | 2015 | 51-58 |
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□ Mature women were handled differently:

- Retrospective information on pre-survey jobs
 - e.g., longest job between school exit & 1st marriage
 - " between 1st marriage & 1st birth
 - " since 1st birth

⇒ Fills in key parts of work history preceding the 1st interview

Part 1: Measuring Work Experience

| | Cohort | Birth years | First Interview | | Last Interview | |
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| Ongoing cohorts | NLSY79 | 1957-65 | 1979 | 14-22 | 2015 | 51-58 |
| | NLSY97 | 1980-84 | 1997 | 12-16 | 2014 | 29-33 |

□ NLSY79 and NLSY97 use an “event history” format:

- Details (including start/stop dates) on virtually all jobs
- Time spent not working within and between jobs

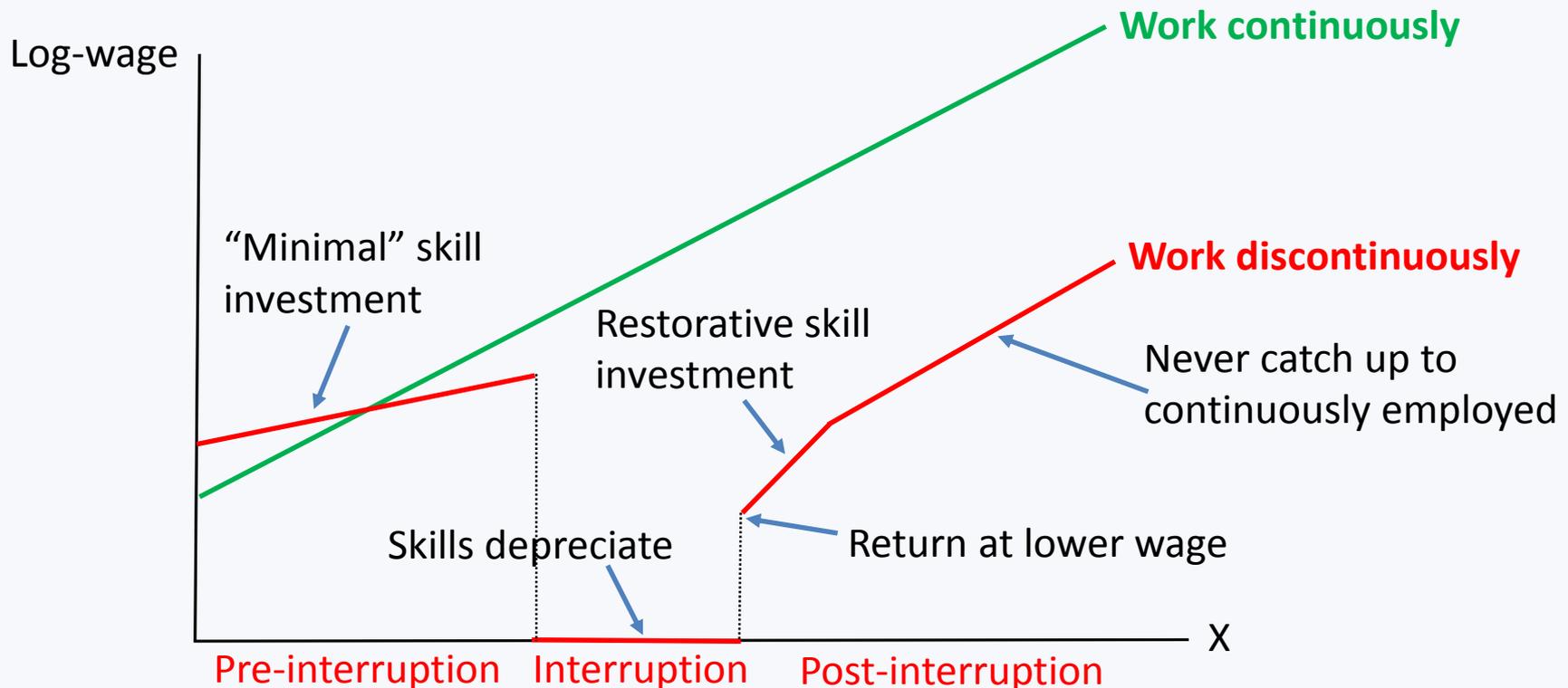
⇒ State-of-the-art work histories

Part 1: Measuring Experience

Q: How do women's career interruptions affect their earnings?

Using the NLS Mature Women:

Women alter on-the-job skill investments in *anticipation* of career interruptions (Mincer & Polachek 1974; Mincer & Ofek 1982)



Part 1: Measuring Experience

Other key findings:

- We can explain up to 50% of the wage gap between men and women with a highly detailed measure of actual work experience.
It helps to know the X pattern, and not just the cumulative amount
- Men are not as continuously employed as was once thought, especially when young and when old.
Age-S-6 is a bad measure for everyone
- Men suffer both skill depreciation and “stigma” when unemployed (or nonemployed) for long periods of time.
- School interruptions, dragged-out schooling, and in-school work experience are *very* common, especially among college-goers.
- Failure to control for X gained in school causes the estimated “college wage premium” to be overstated by 25-44%

Part 2: Business Ownership (NLSY79)

- Job-specific information collected for (almost) all jobs reported from 1979 onward includes “class of worker:”

Are/Were you employed by:

. . . government;

. . . a private company;

. . . a nonprofit organization;

or are/were you self employed?

- If COW = “self employed,” the follow-up question is:

Is/was your business incorporated or unincorporated?

⇒ Most jobs are (contemporaneously) classified as SE or not

Part 2: Business Ownership (NLSY79)

- ❑ Analyses of self-employment form an important subset of the NLS-based research on job mobility and wage growth
 - ❑ Why switch from wage employment to self-employment
 - ❑ Does self-employment lead to wage gains? Other gains?
- ❑ Many researchers assume that self-employed workers are both business owners and entrepreneurs.

Example from B. Hamilton, “Does Self-Employment Pay?” (JEP 2000):

“The empirical results suggest that the nonpecuniary benefits of *self-employment* are substantial: Most *entrepreneurs* enter and persist in *business* despite the fact that they have both lower initial earnings and lower earnings growth than in paid employment...”

- ❑ Recently, (some) analysts have questioned whether *self-employed* workers are necessarily *entrepreneurs*
- ❑ Using new NLSY79 data, Light & Munk (2014) ask:
 - ❑ Are *self-employed* workers necessarily *business owners*?

Part 2: Business Ownership (NLSY79)

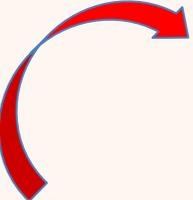
- In 2010 (or 2012), all respondents were asked retrospectively about business ownership since age 18:

*We would like to know whether you have ever owned a business. By business, we mean any activity operated with regularity for the purpose of generating income or profit. **We are interested in all incorporated companies and partnerships** in which you had any ownership share, **as well as unincorporated businesses that you may have operated as a sole proprietor, independent contractor, consultant, or free-lancer. This even includes informal businesses** such as cleaning services, gardening services, **and the selling of goods out of your home**, as long as they generated income and were operated on a regular basis. The only businesses we are not interested in are **those operated on a highly sporadic basis, those carried out purely as a hobby, and those in which you were merely a shareholder** or investor with no role in the operation of the company.*

Since you were 18 years old, have you ever owned a business that would be of interest to us according to this description?

Part 2: Business Ownership (NLSY79)

- ❑ For every business reported in 2010:
 - ❑ We learn start/stop date, size, how it was acquired, legal form (sole proprietorship, partnership, LLC, etc.)
 - ❑ NLSY79 staff linked each business to a previously-reported job using start/stop dates and company names
 - ✓ Links were verified during 2012 interviews
 - ✓ Almost 90% of businesses are linked to jobs
- ⇒ Jobs are classified as:
- Self-employment only
 - Business ownership only
 - Both
 - Neither (“wage employment”)



Q: How much agreement is there between SE vs. BO?

Part 2: Business Ownership (NLSY79)

❑ Sample:

- ❑ 7,777 individuals interviewed in 2010 and/or 2012
 - ❑ 3,809 men; 3,968 women
 - ❑ Median age 51
- ❑ 62,836 unique jobs from age 18 to last interview
- ❑ 5,176 jobs classified as self-employment
- ❑ 2,004 jobs classified as self-owned businesses

Part 2: Business Ownership (NLSY79)

□ Key findings:

| | <u>Men</u> | <u>Women</u> |
|---|------------|--------------|
| Hold at least one self-employed job: | 44% | 33% |
| Own at least one business: | 29% | 17% |
| SE jobs outnumber businesses by: | 2.3 to 1 | 2.9 to 1 |
| SE jobs also classified as businesses: | 35% | 29% |
| . . . if SE job is incorporated | 53% | 47% |
| . . . & individual is an “entrepreneur” | 61% | 66% |
| Businesses also classified as SE: | 83% | 86% |
| if business is incorporated | 74% | 78% |
| & individual is an “entrepreneur” | 79% | 81% |

Part 2: Business Ownership (NLSY79)

- ❑ Consider three “types” of jobs:
 - Self-employment *only*
 - Business ownership *only*
 - Self-employment *and* business ownership
- ❑ How do individual characteristics differ across these job types?

| | (Men only) | | |
|-------------------------------------|----------------|--------------|----------------|
| | <u>SE only</u> | <u>SE+BO</u> | <u>BO only</u> |
| Highest grade completed: | 11.9 | 12.6 | 12.8 |
| Percentile AFQT score: | 39.7 | 46.4 | 51.7 |
| Assets (\$10,000s) at start of job: | 5.7 | 12.9 | 22.3 |
| Age at start of job: | 30.7 | 37.2 | 34.2 |

Part 2: Business Ownership (NLSY79)

- We can also examine verbatim descriptions of each job:

What kind of work do/did you do for [employer]?

What are/were some of your main activities or duties?

What kind of business or industry is/was this?

Jobs that are self-employment but not business ownership:

Church pastor

Baseball umpire

Actor

Truck driver

Scrap metal collector

Baby sitter

Part 2: Business Ownership (NLSY79)

- How do verbatim job descriptions differ across job types?

| | Men | | |
|-----------------|----------------|---------------|-----------------|
| | <u>SE only</u> | <u>SE+biz</u> | <u>Biz only</u> |
| Own/run/manage: | 16% | 30% | 33% |
| Self-employed: | 4% | 1% | 1% |
| Independent: | 11% | 3% | 5% |
| Works at home: | 15% | 7% | 2% |
| | Women | | |
| Works at home: | 36% | 22% | 6% |

Part 2: Business Ownership (NLSY79)

- ❑ Conclusion: **SE ≠ BO**
- ❑ Self-employment and business ownership are *not* synonyms in the minds of respondents
- ❑ *Explicit* identification of business ownership (not via “class of worker”) is an important job-specific detail