

# Labor Market Data in the NLS



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September 17, 2015

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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**

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# Today's Game Plan

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

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

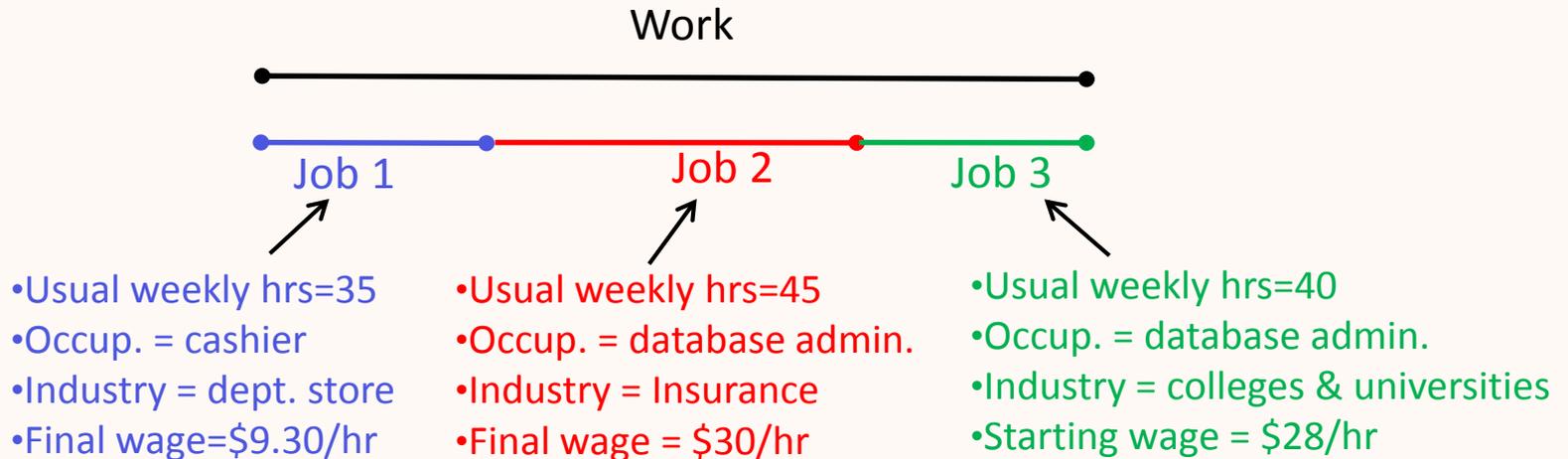


- Level of detail + precision varies across cohorts
- Data on “actual” X have been game-changing in many ways

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

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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

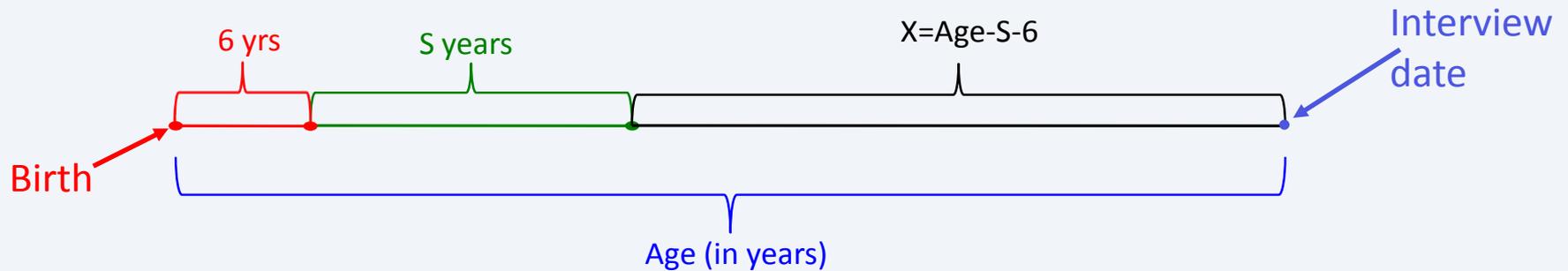
In the absence of data on actual  $X$ , the standard proxy is:

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

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

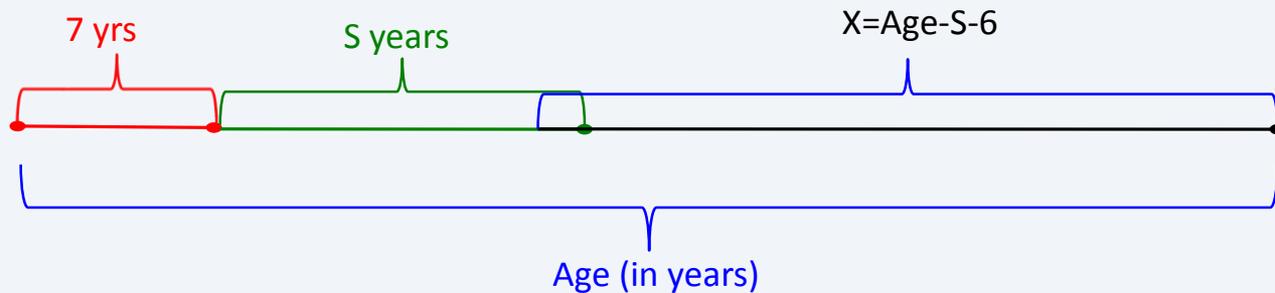
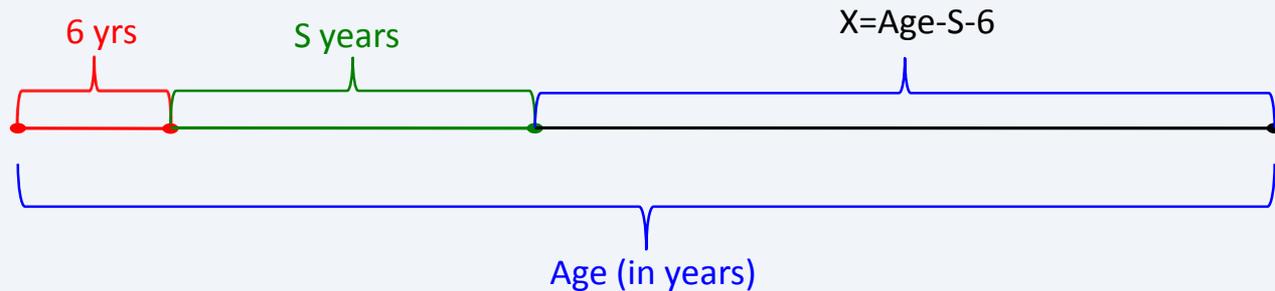
# Part 1: Measuring Work Experience

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



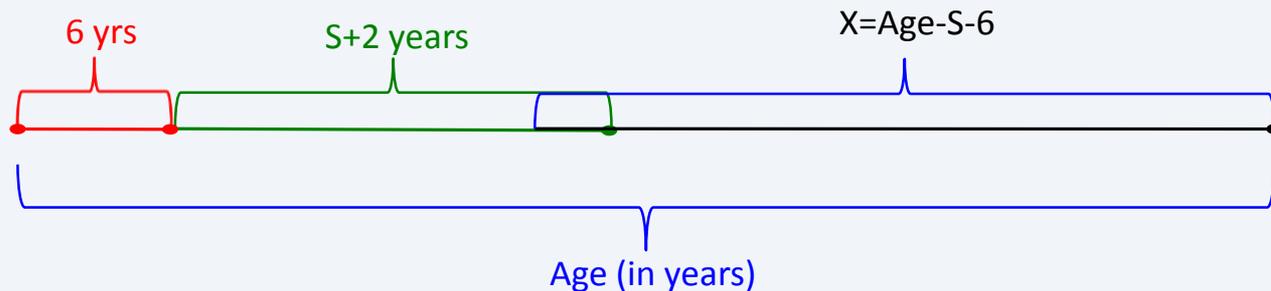
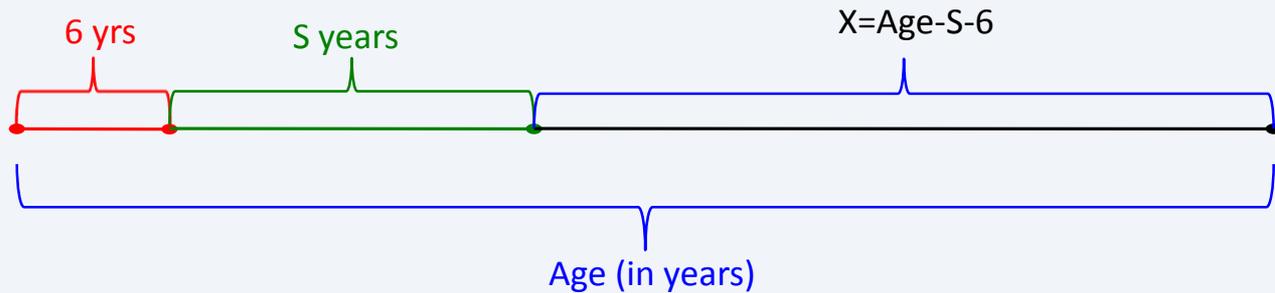
# Part 1: Measuring Work Experience

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



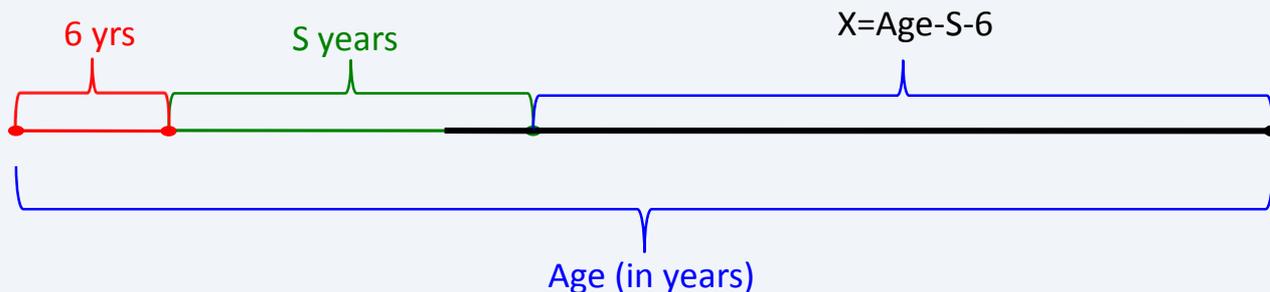
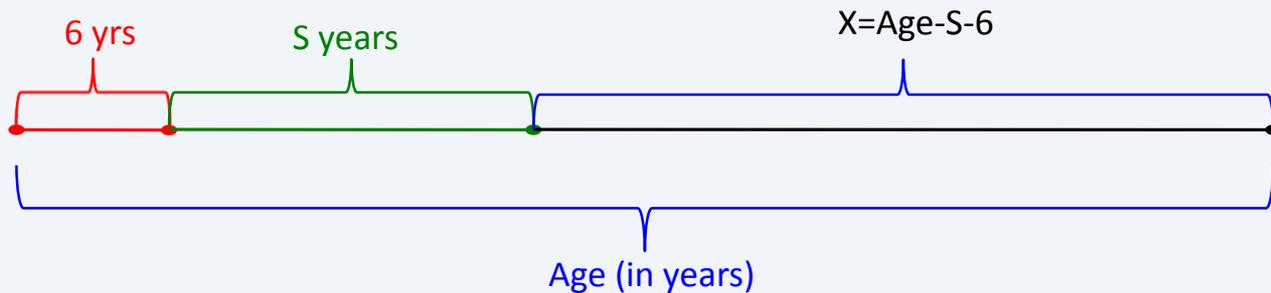
# Part 1: Measuring Work Experience

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



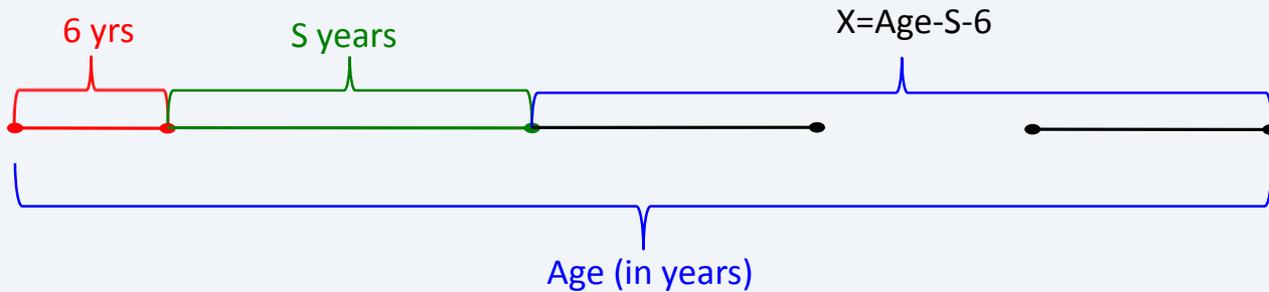
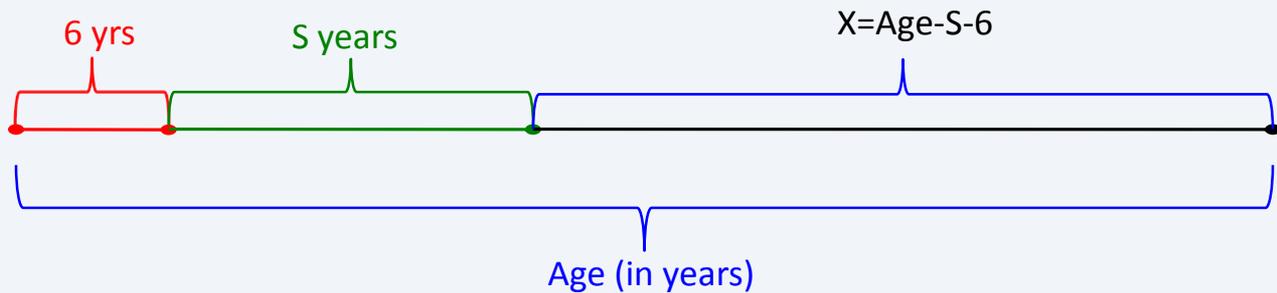
# Part 1: Measuring Work Experience

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



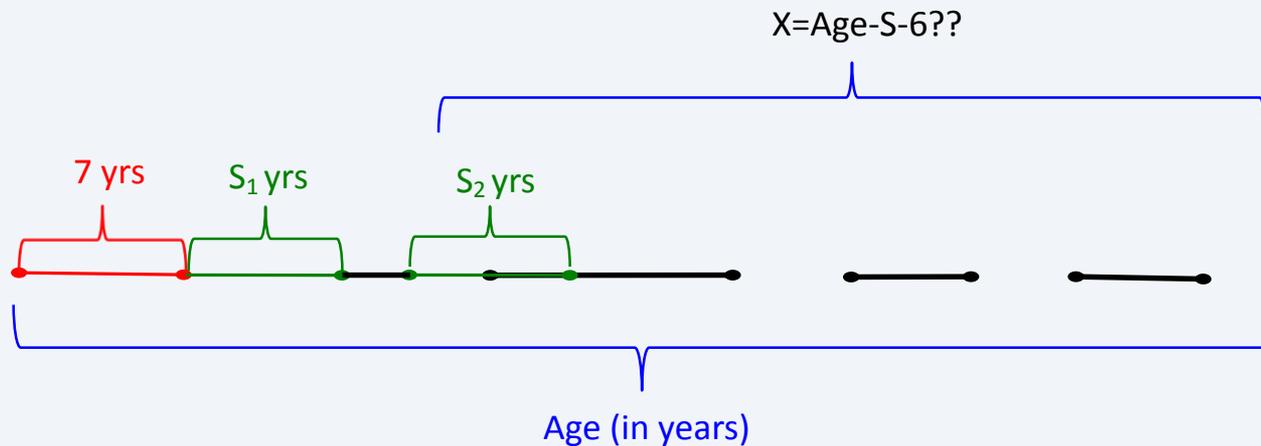
# Part 1: Measuring Work Experience

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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			Year	Age	Year	Age
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## □ Mature women were handled differently:

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

⇒ Fills in key parts of work history preceding the 1<sup>st</sup> interview

# Part 1: Measuring Work Experience

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	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

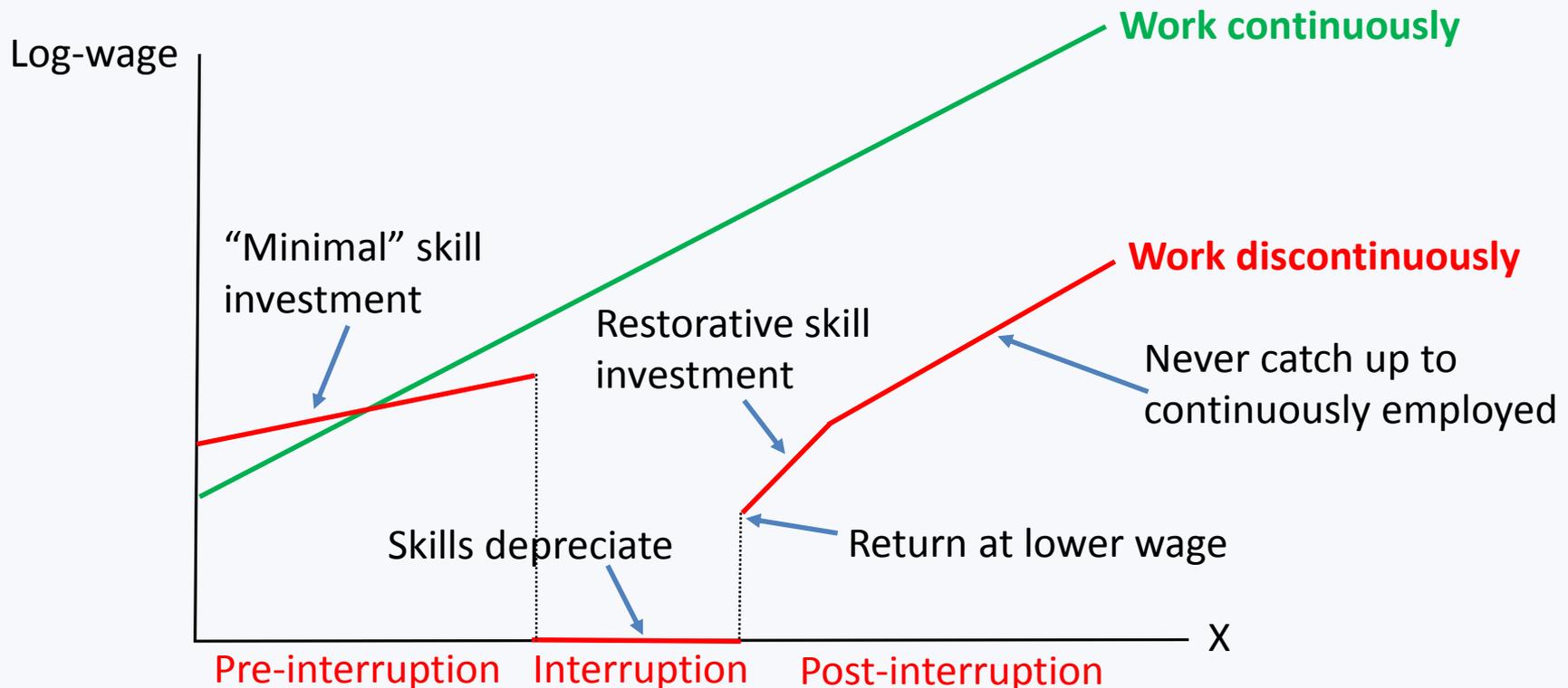
⇒ State-of-the-art work histories

# 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

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## 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)

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- ❑ 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)

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- ❑ 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)

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- 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)

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- ❑ 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

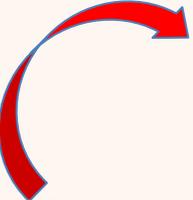
⇒ Jobs are classified as:

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)

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### ❑ 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)

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- ❑ 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)

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- 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)

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- How do verbatim job descriptions differ across job types?

	<b>Men</b>		
	<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%
	<b>Women</b>		
Works at home:	36%	22%	6%

## Part 2: Business Ownership (NLSY79)

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- ❑ 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