

Experience, Tenure, and Leave-taking of American Women

[Preliminary, do not cite]

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This presentation is released to inform interested parties of ongoing research and to encourage discussion of work in progress. This presentation reports the results of research and analysis undertaken by Census Bureau staff using the completed Gold Standard File. It has undergone more limited review than official publications.

Does Human Capital Accumulation Explain Why Women are Working Longer?

- Document trends in employment and experience with matched survey-administrative data for birth cohorts 1920-1979
 - To what extent does early-life experience influence working at older ages?
- Examine labor market experiences of women surrounding birth of first child
 - Follow up to 10 years after birth
 - Explore use of paid/unpaid leave
- Construct new measure of job tenure 1988-2012
 - Increase in job tenure found for both older women and men in recent years

Data

- SIPP Gold Standard File (GSF)
 - 1984w8, 1996w2, 2001w2, 2004w2, 2008w2 Fertility History Topical Modules
 - Linked to summary earnings records (1957-1977) and detailed job-based earnings records (1978-2012) from SSA
 - Further linked via employer id to Census Business Register and Longitudinal Business Database (LBD)

Sample Restrictions

- U.S. Born, 1920-1979, with valid PIK

Birth Cohort	SIPP Panel(s)	Approximate N (Men and Women)
1920-1924	1984	1,000
1925-1929	1984	1,000
1930-1934	1984	1,000
1935-1939	1984, 1996	4,000
1940-1944	1984, 1996, 2001	7,000
1945-1949	1984, 1996, 2001, 2004	13,000
1950-1954	1984, 1996, 2001, 2004, 2008	21,000
1955-1959	1996, 2001, 2004, 2008	21,000
1960-1964	1996, 2001, 2004, 2008	20,000
1965-1969	2001, 2004, 2008	13,000
1970-1974	2004, 2008	9,000
1975-1979	2008	4,000

Definitions of Key Variables

- Work defined as positive earnings in a year
- Full-time full-year (FTFY) work defined as earnings greater than or equal to 1500 hours times federal minimum wage in that year
- College plus defined as at least 16 years of completed school in 1984 panel and BA degree or higher for 1996-2008 panels

Limitations

- Only observe covered social security earnings 1957-1977
 - Federal civilian, plus some state and local are largest excluded categories
- Topcoding at social security taxable maximum 1957-1977 (minor issue)
- Sample weights adjusted for selection into PIK sample, but not adjusted for mortality
- Combining multiple panels
- Have not incorporated marital history data as yet

Sample Means 1920-1939

Birth Cohort		White non-hisp.	Black	Hispanic	HS Drop	HS Grad	Some College	College Plus
1920-1924	Female	0.86	0.10	0.03	0.37	0.37	0.13	0.13
	Male	0.89	0.08	0.02	0.39	0.28	0.16	0.17
1925-1929	Female	0.86	0.09	0.04	0.31	0.43	0.15	0.11
	Male	0.85	0.10	0.04	0.29	0.34	0.15	0.22
1930-1934	Female	0.87	0.09	0.03	0.28	0.42	0.19	0.12
	Male	0.86	0.10	0.03	0.28	0.37	0.16	0.19
1935-1939	Female	0.83	0.12	0.04	0.21	0.42	0.22	0.15
	Male	0.87	0.10	0.03	0.21	0.34	0.21	0.24

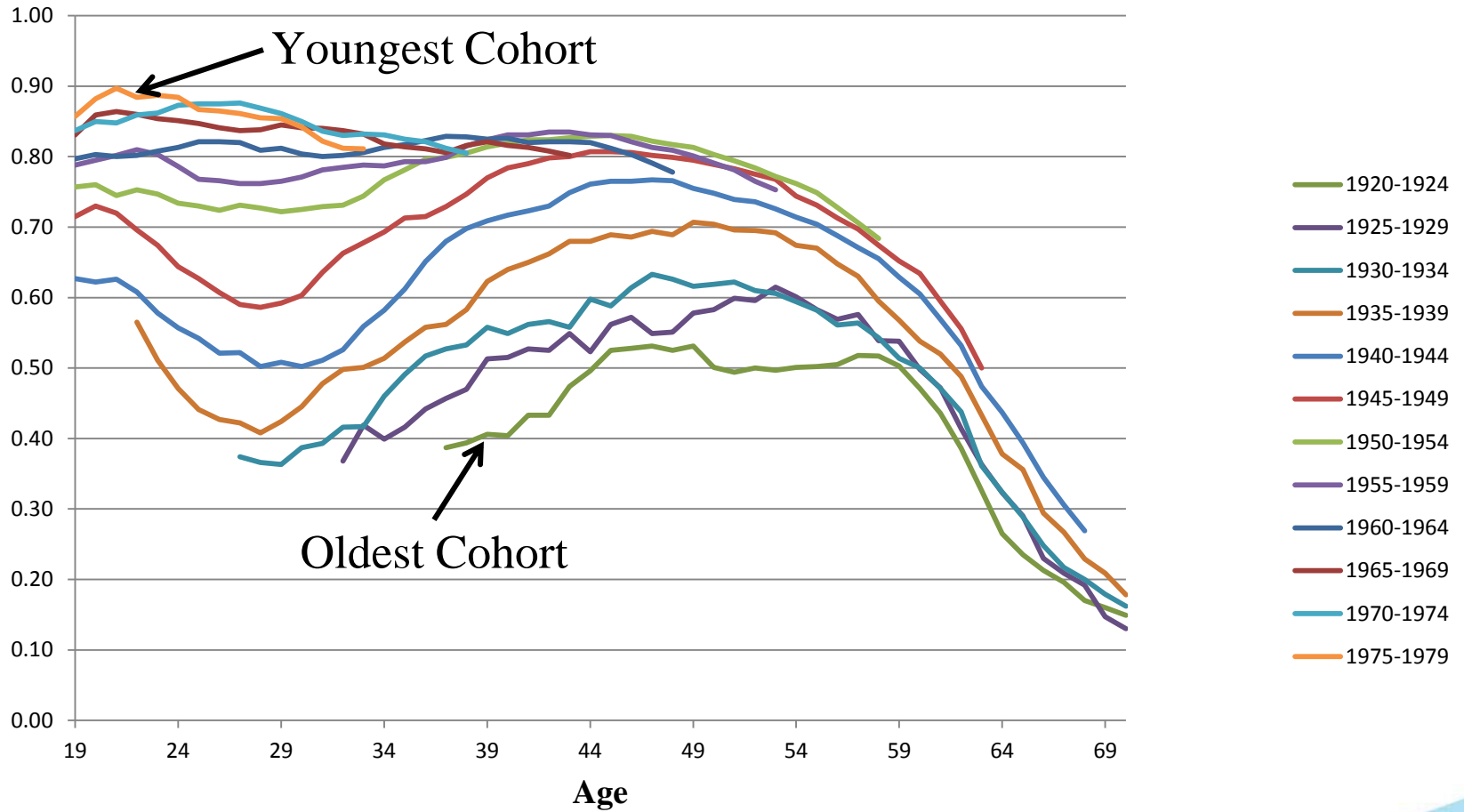
Sample Means 1940-1959

Birth Cohort		White non-hisp.	Black	Hispanic	HS Drop	HS Grad	Some College	College Plus
1940-1944	Female	0.84	0.11	0.03	0.14	0.38	0.27	0.21
	Male	0.86	0.10	0.03	0.14	0.33	0.24	0.29
1945-1949	Female	0.83	0.11	0.04	0.09	0.34	0.33	0.25
	Male	0.85	0.09	0.04	0.08	0.27	0.32	0.33
1950-1954	Female	0.81	0.12	0.05	0.06	0.31	0.35	0.29
	Male	0.83	0.10	0.05	0.06	0.29	0.34	0.31
1955-1959	Female	0.80	0.12	0.05	0.05	0.30	0.36	0.29
	Male	0.81	0.11	0.05	0.06	0.33	0.34	0.27

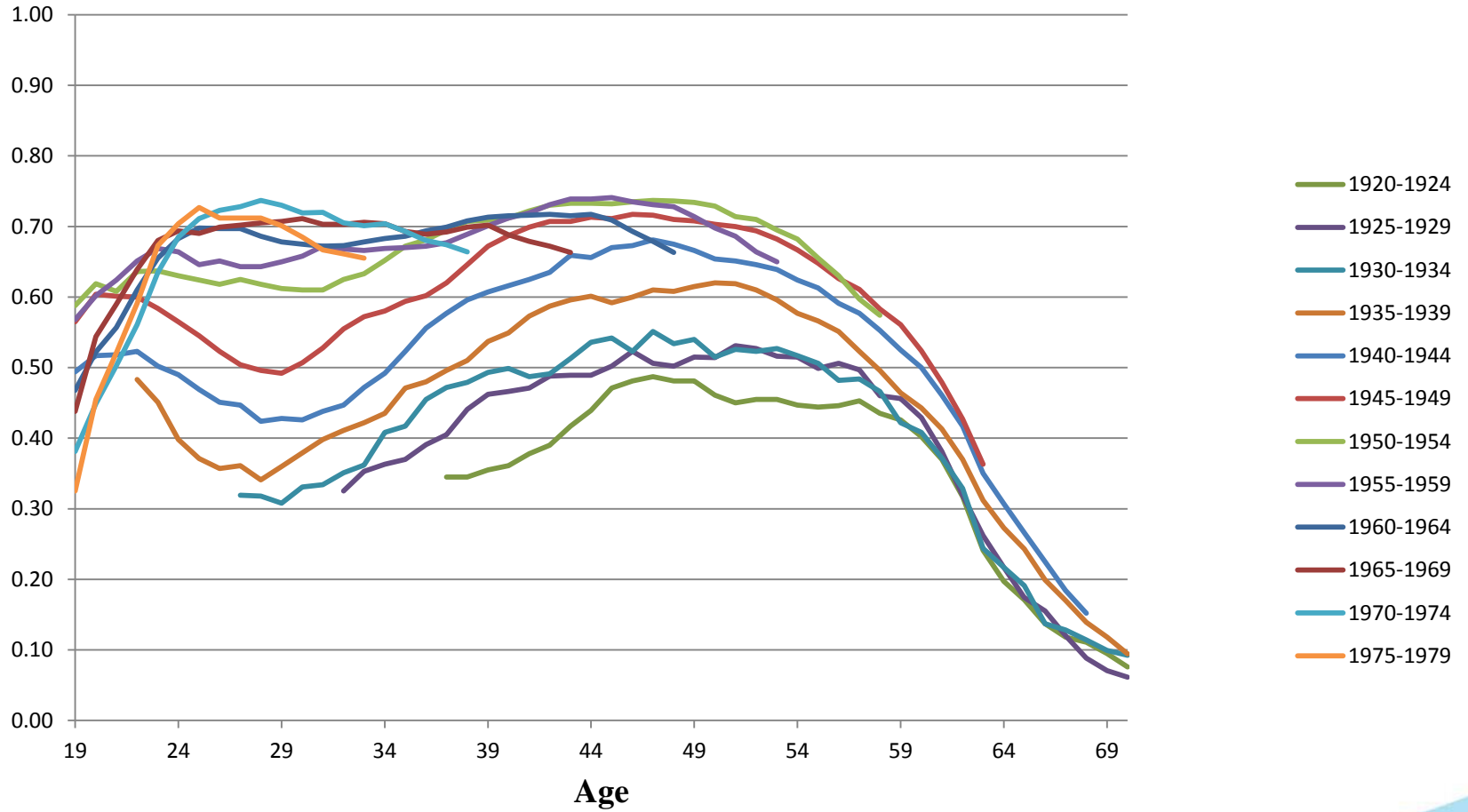
Sample Means 1960-1979

Birth Cohort		White non-hisp.	Black	Hispanic	HS Drop	HS Grad	Some College	College Plus
1960-1964	Female	0.77	0.14	0.07	0.05	0.30	0.37	0.28
	Male	0.80	0.11	0.06	0.06	0.33	0.33	0.28
1965-1969	Female	0.75	0.14	0.08	0.04	0.24	0.39	0.33
	Male	0.77	0.11	0.08	0.05	0.28	0.35	0.32
1970-1974	Female	0.71	0.14	0.10	0.03	0.21	0.39	0.37
	Male	0.72	0.11	0.13	0.03	0.27	0.38	0.32
1975-1979	Female	0.70	0.15	0.11	0.03	0.20	0.37	0.40
	Male	0.71	0.11	0.13	0.04	0.23	0.40	0.33

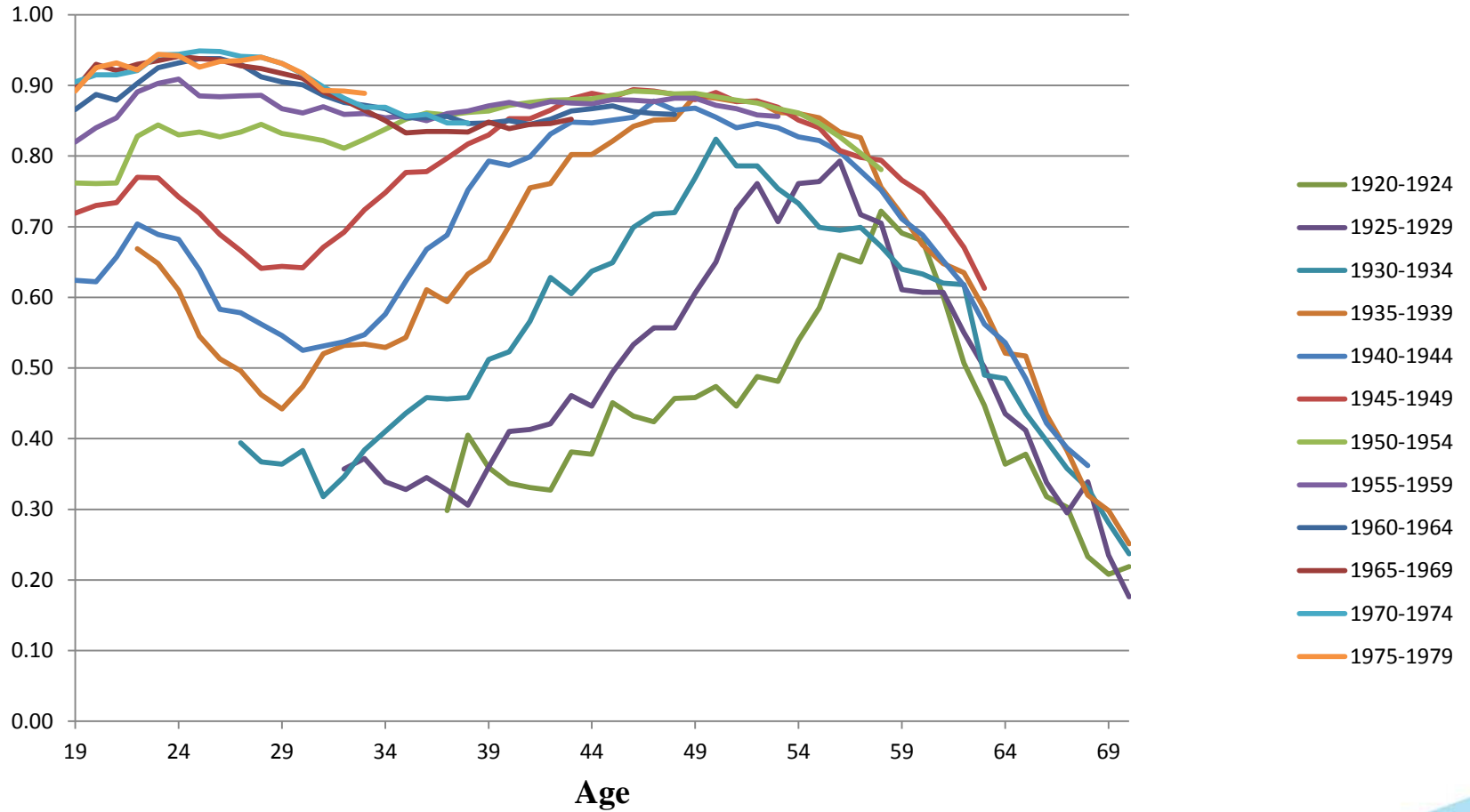
Female EPOP



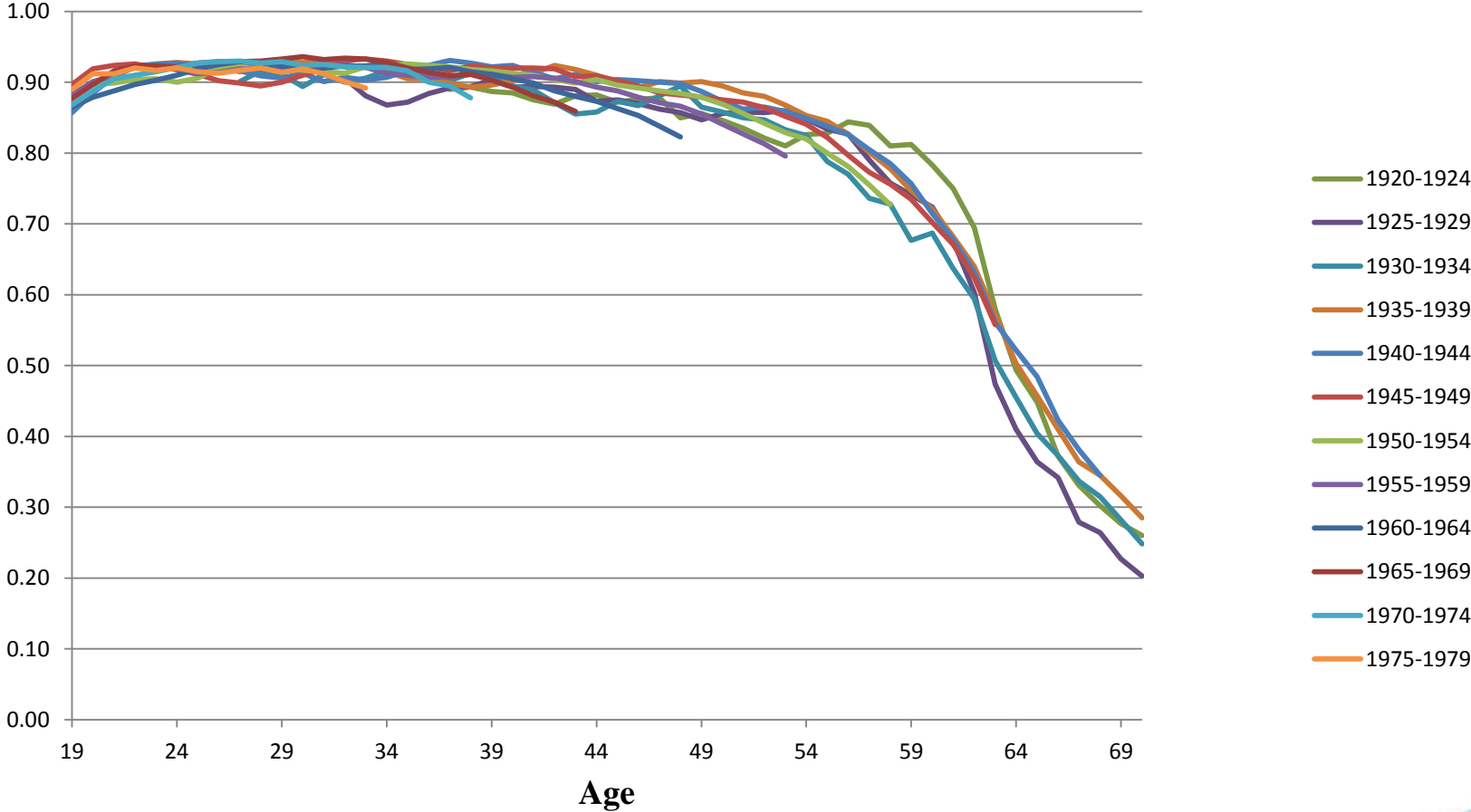
Female FTFY EPOP



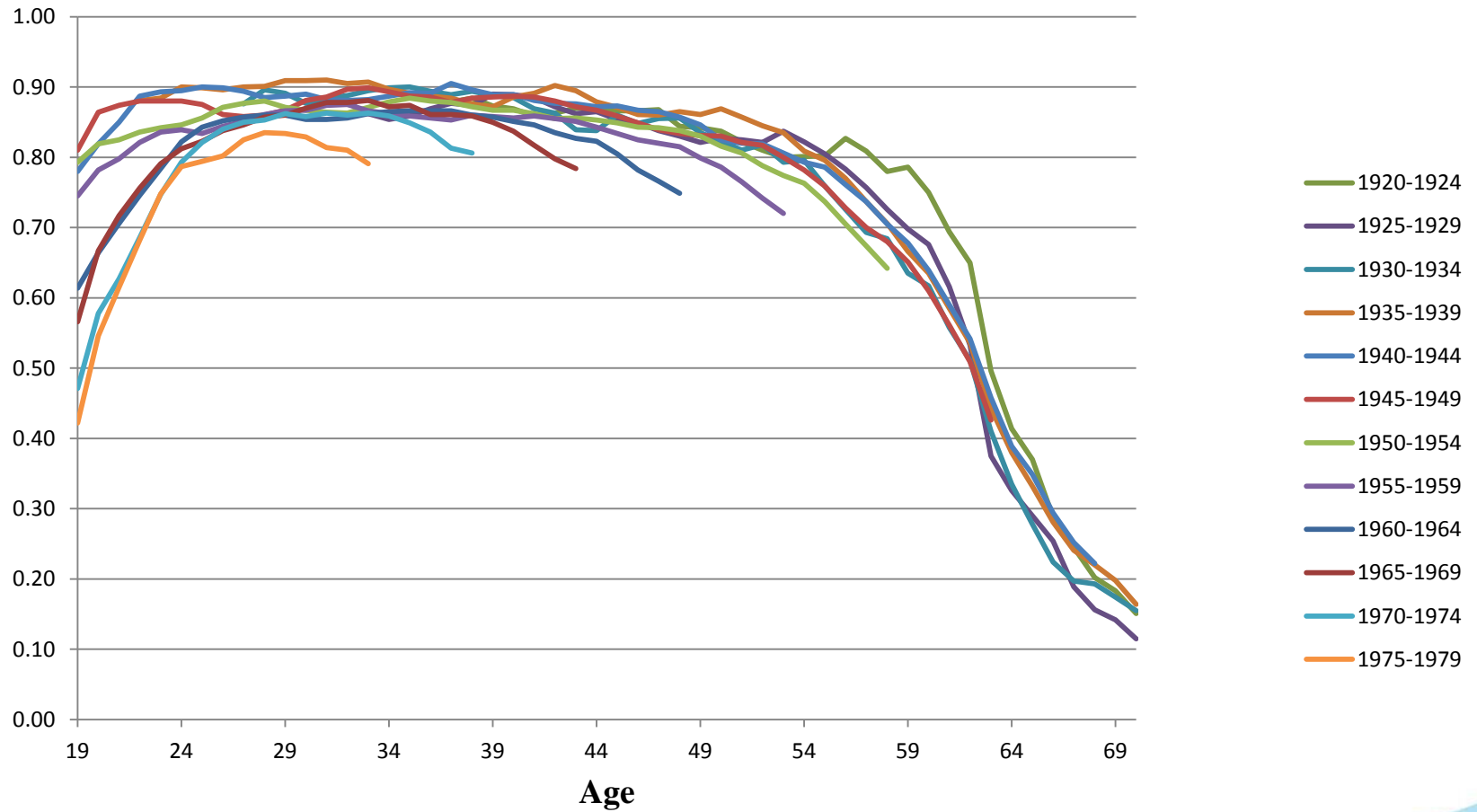
Female EPOP--College Plus (Coverage Issues!)



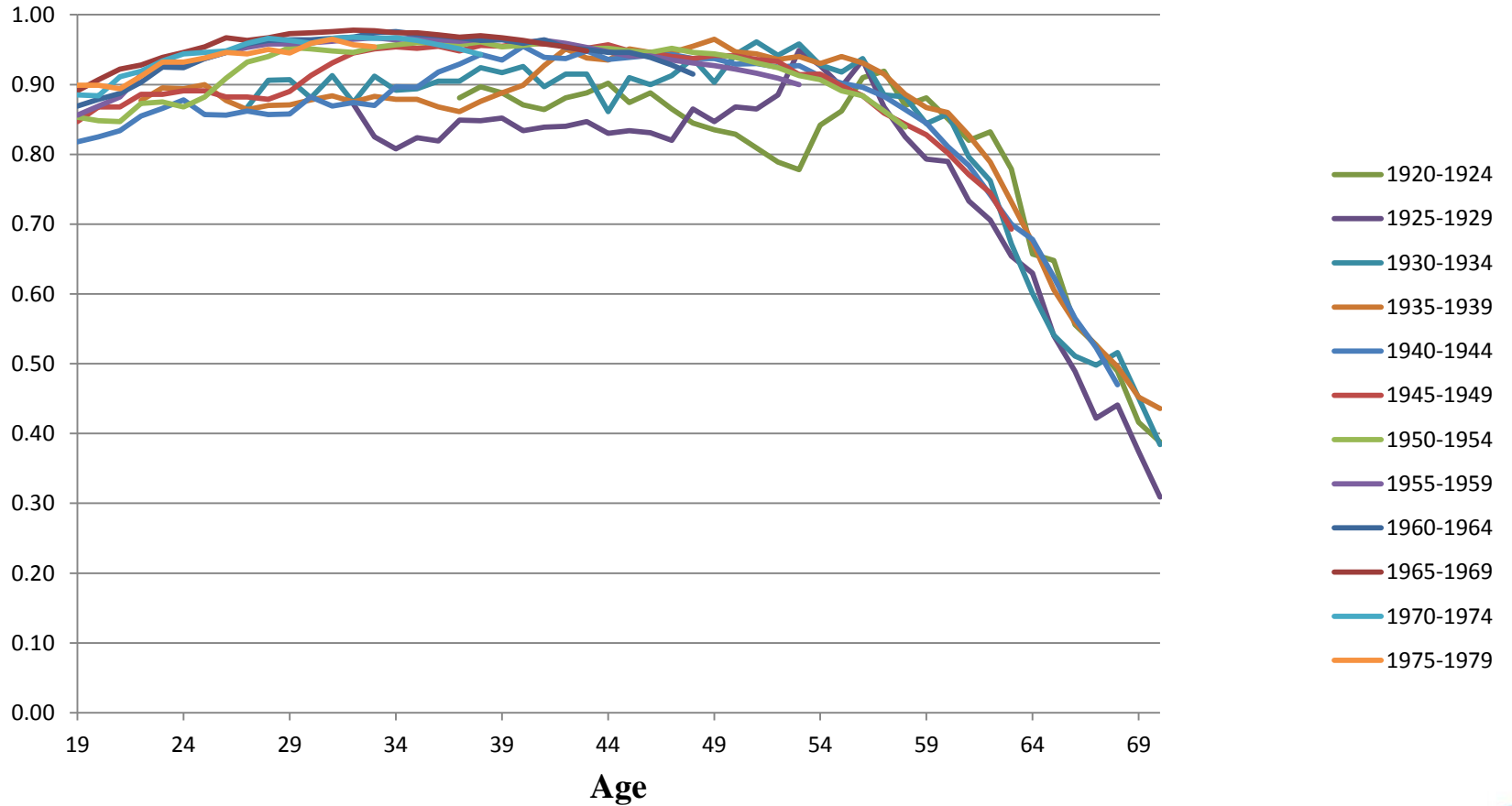
Male EPOP



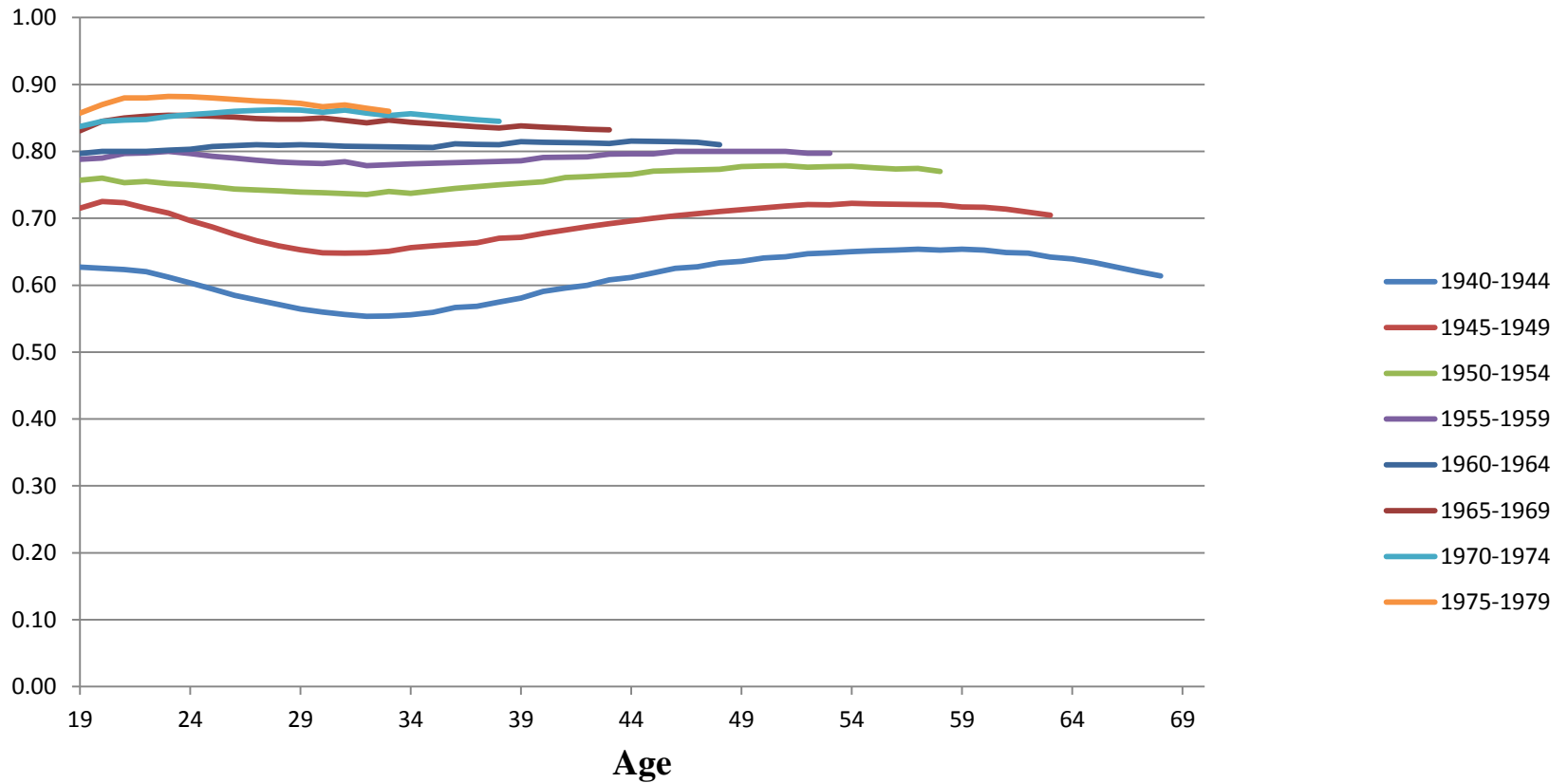
Male FTFY EPOP



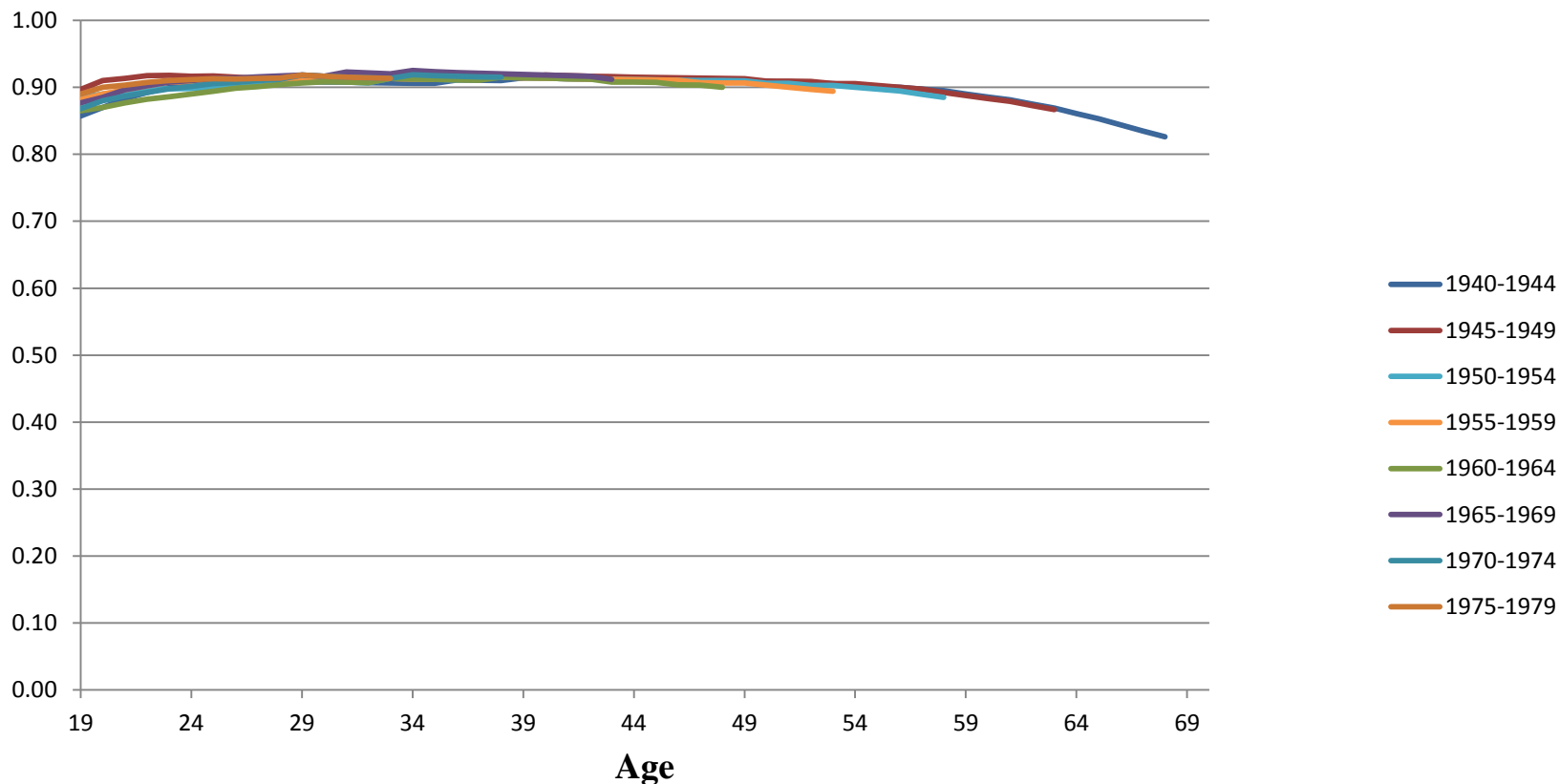
Male EPOP--College Plus



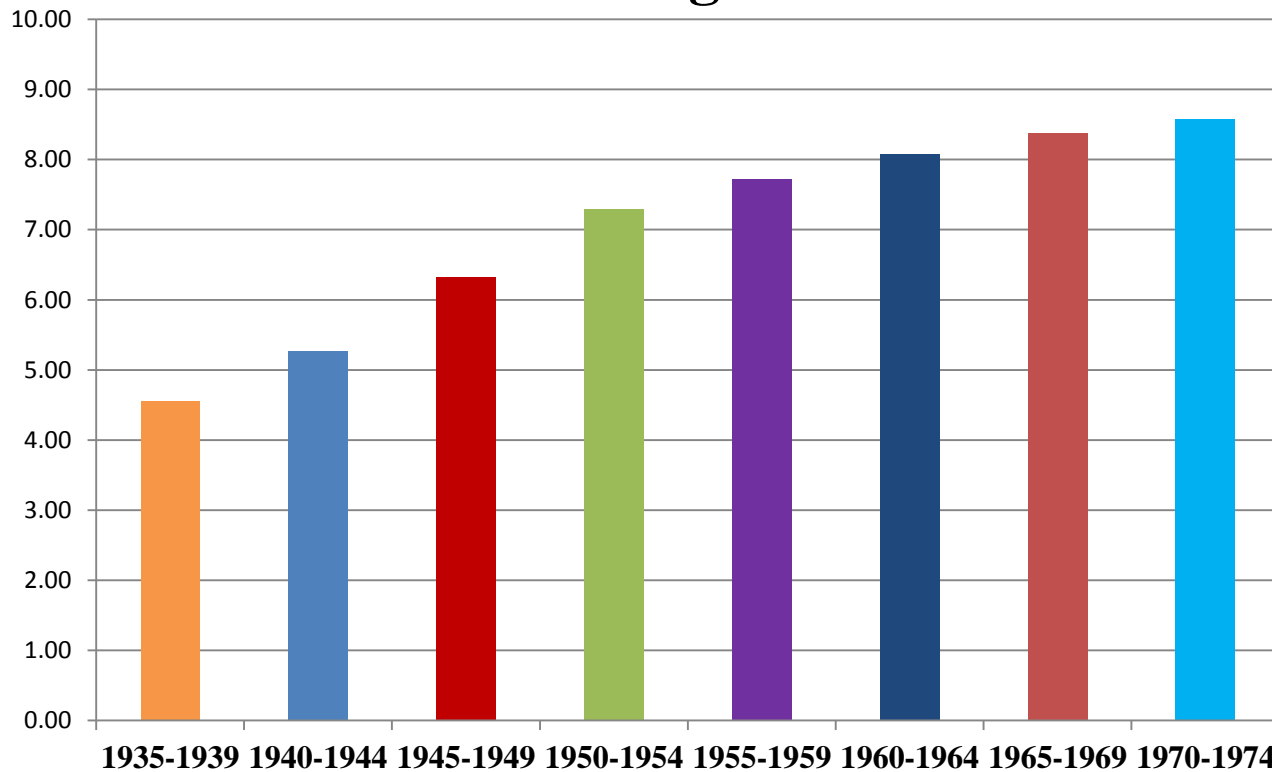
Female Cumulative Experience (Share of Years Worked since Age 19)



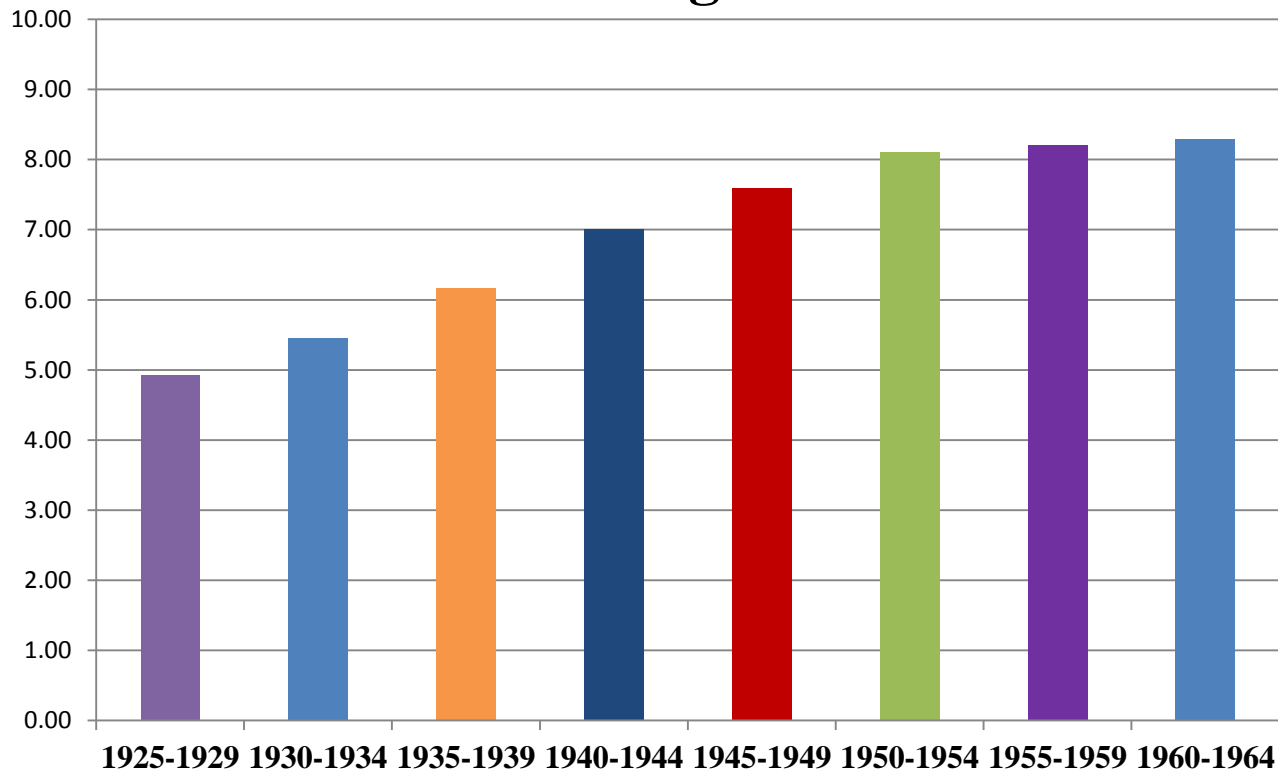
Male Cumulative Experience (Share of Years Worked since Age 19)



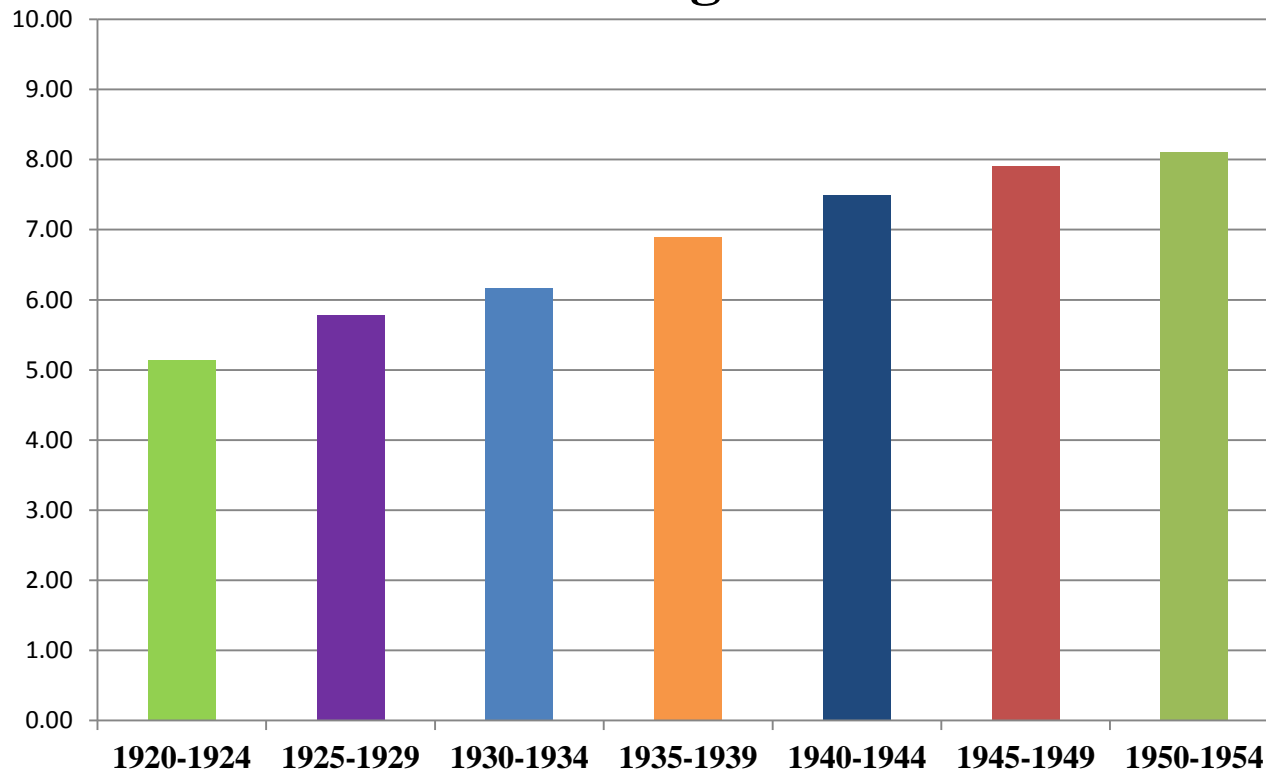
Female Mean Years of Cumulative Experience Age 25-34



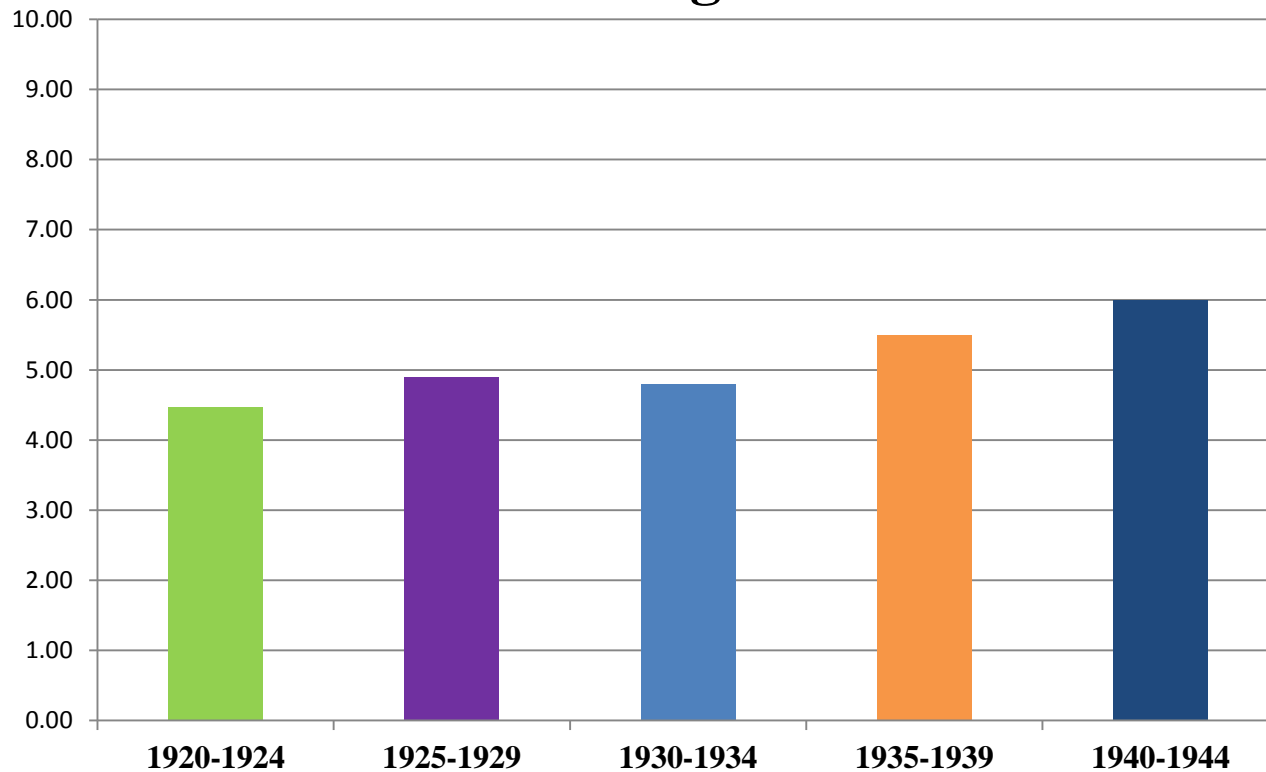
Female Mean Years of Cumulative Experience Age 35-44



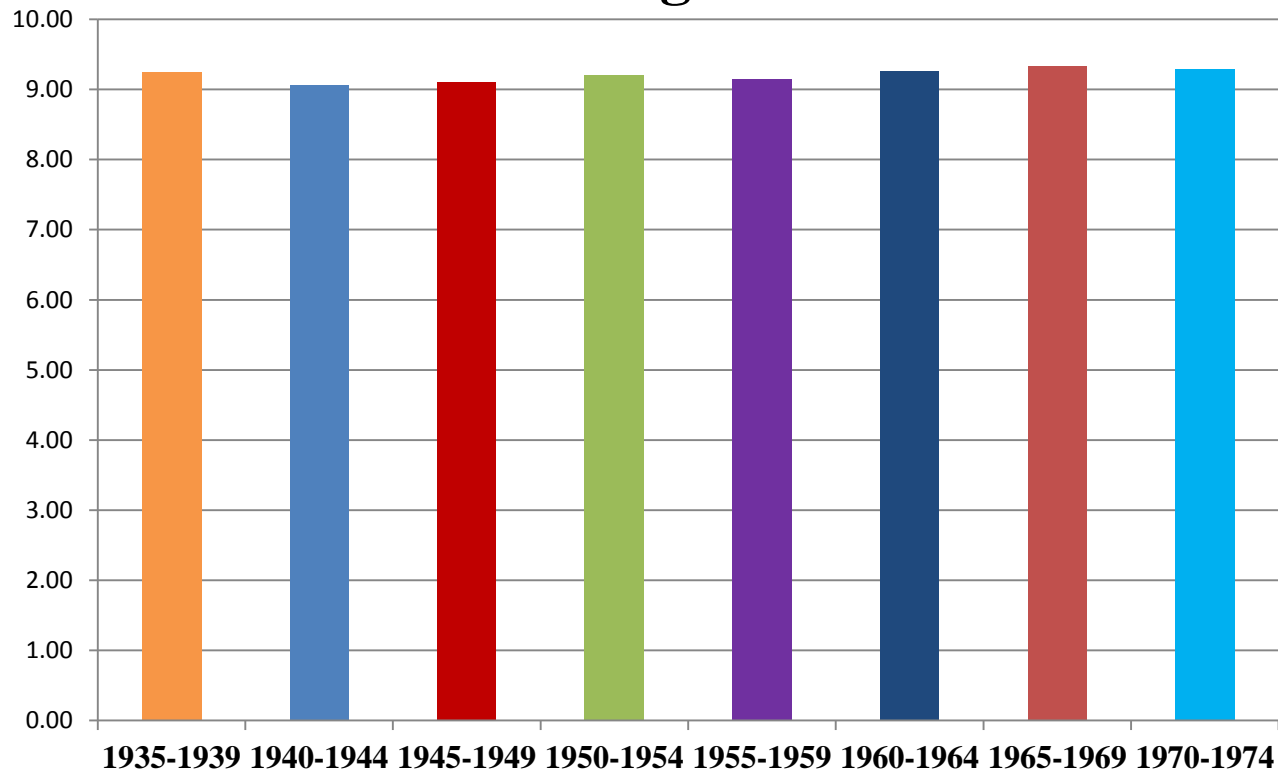
Female Mean Years of Cumulative Experience Age 45-54



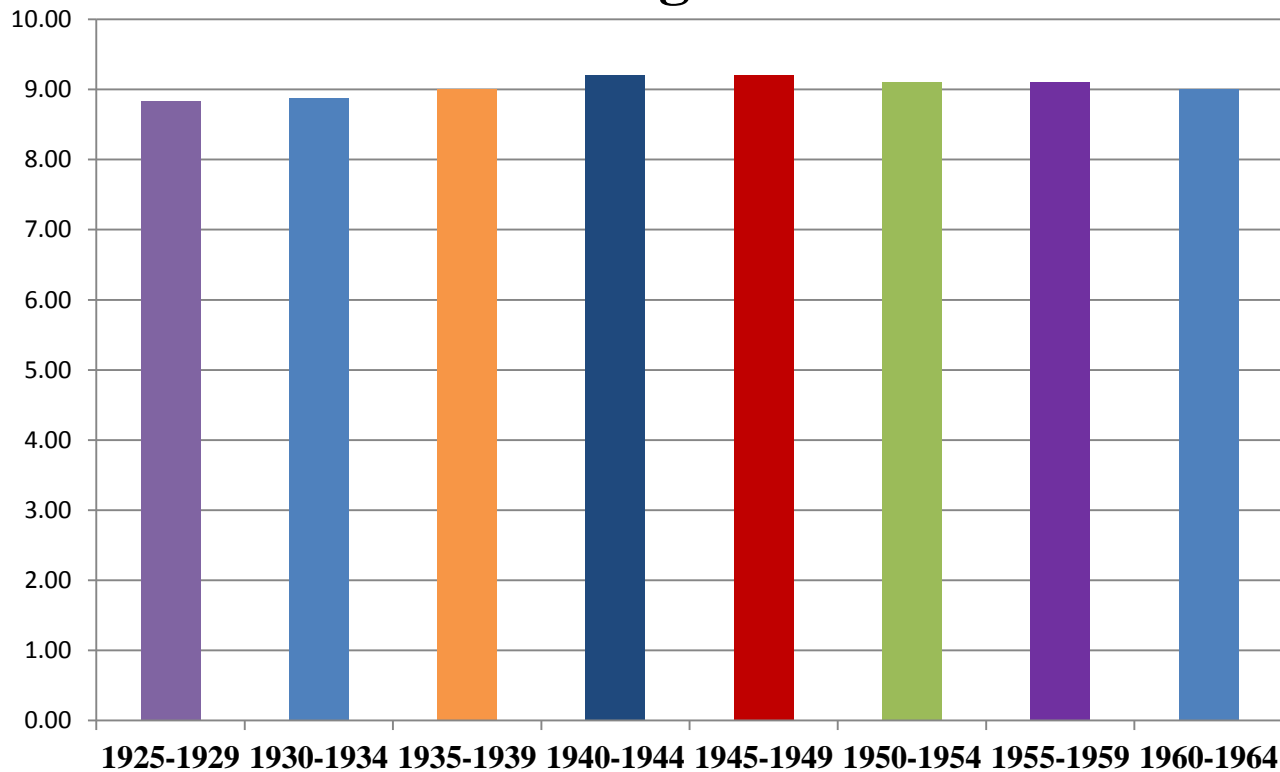
Female Mean Years of Cumulative Experience Age 55-64



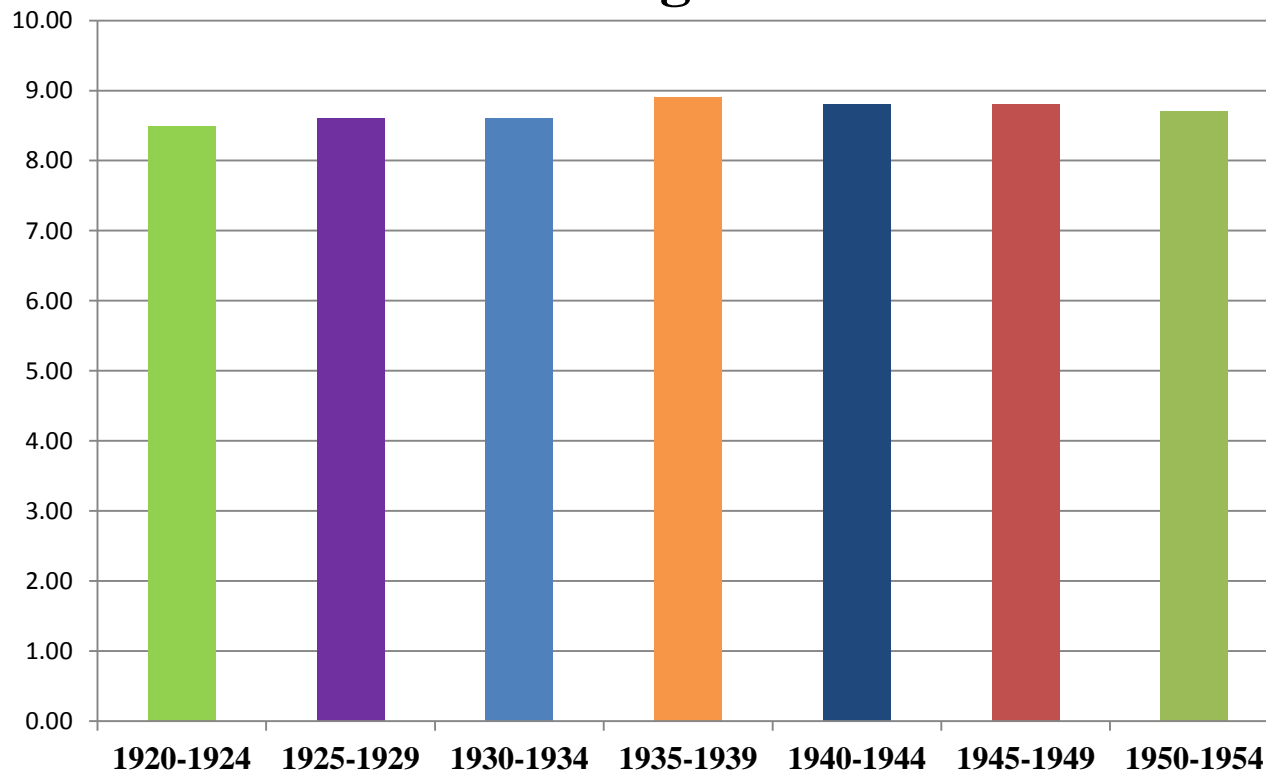
Male Mean Years of Cumulative Experience Age 25-34



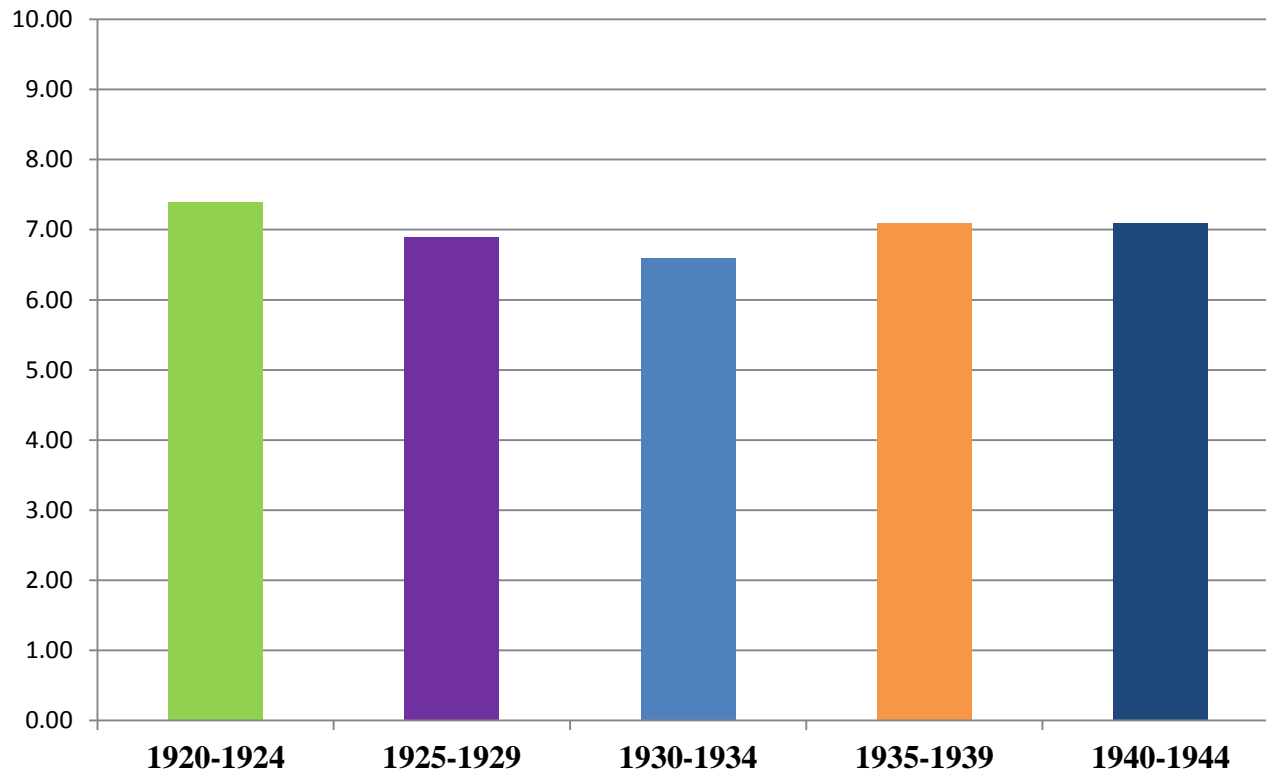
Male Mean Years of Cumulative Experience Age 35-44



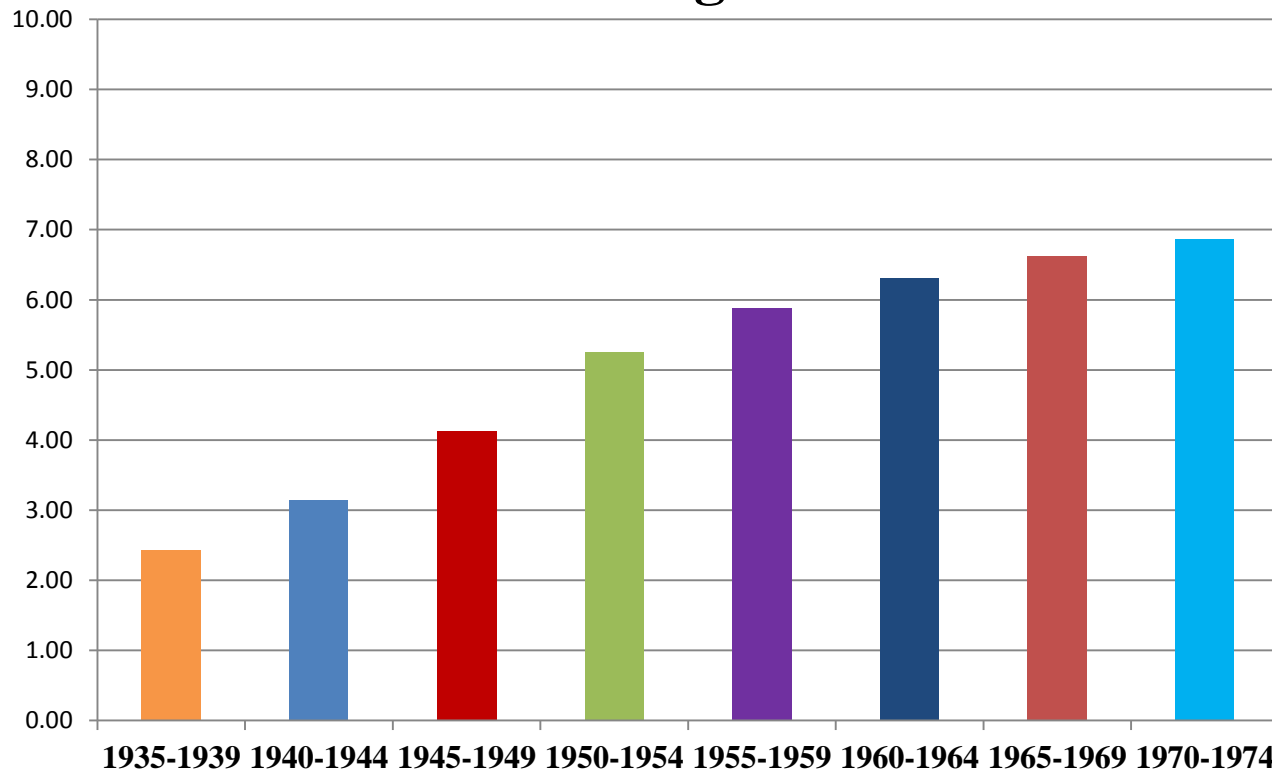
Male Mean Years of Cumulative Experience Age 45-54



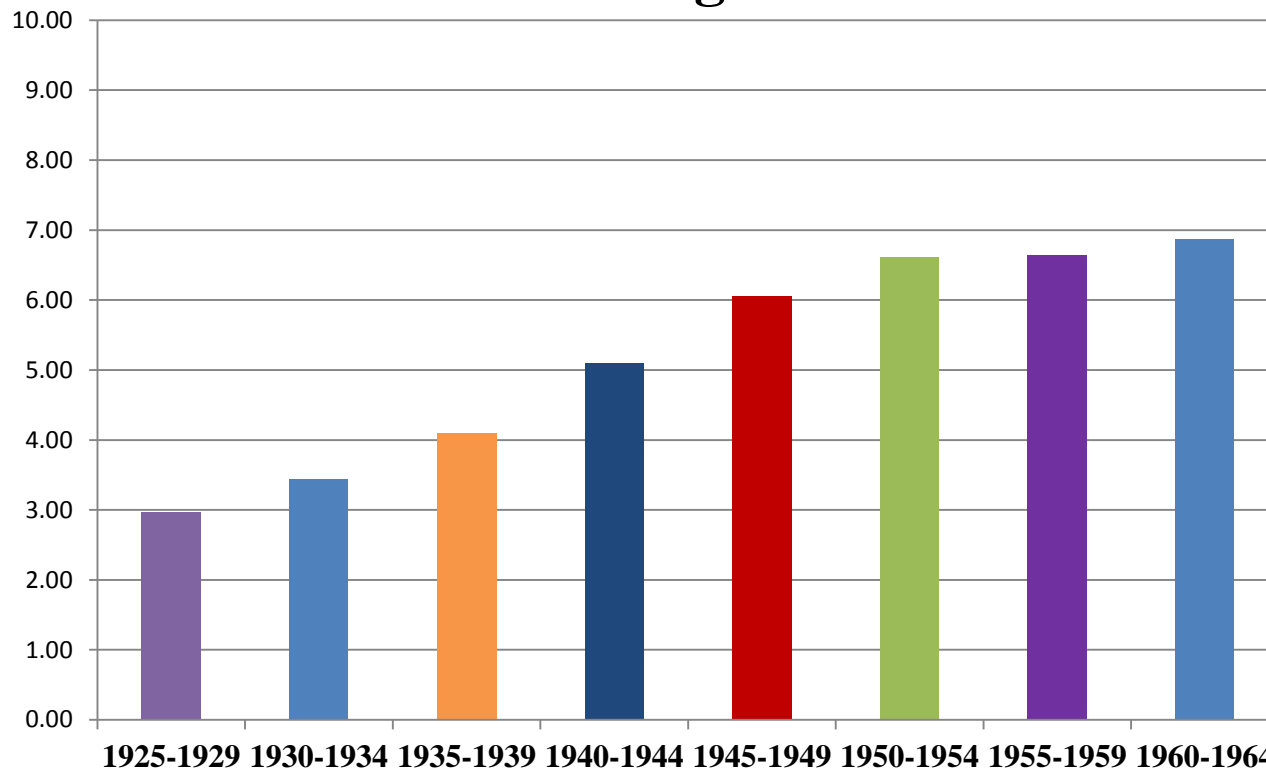
Male Mean Years of Cumulative Experience Age 55-64



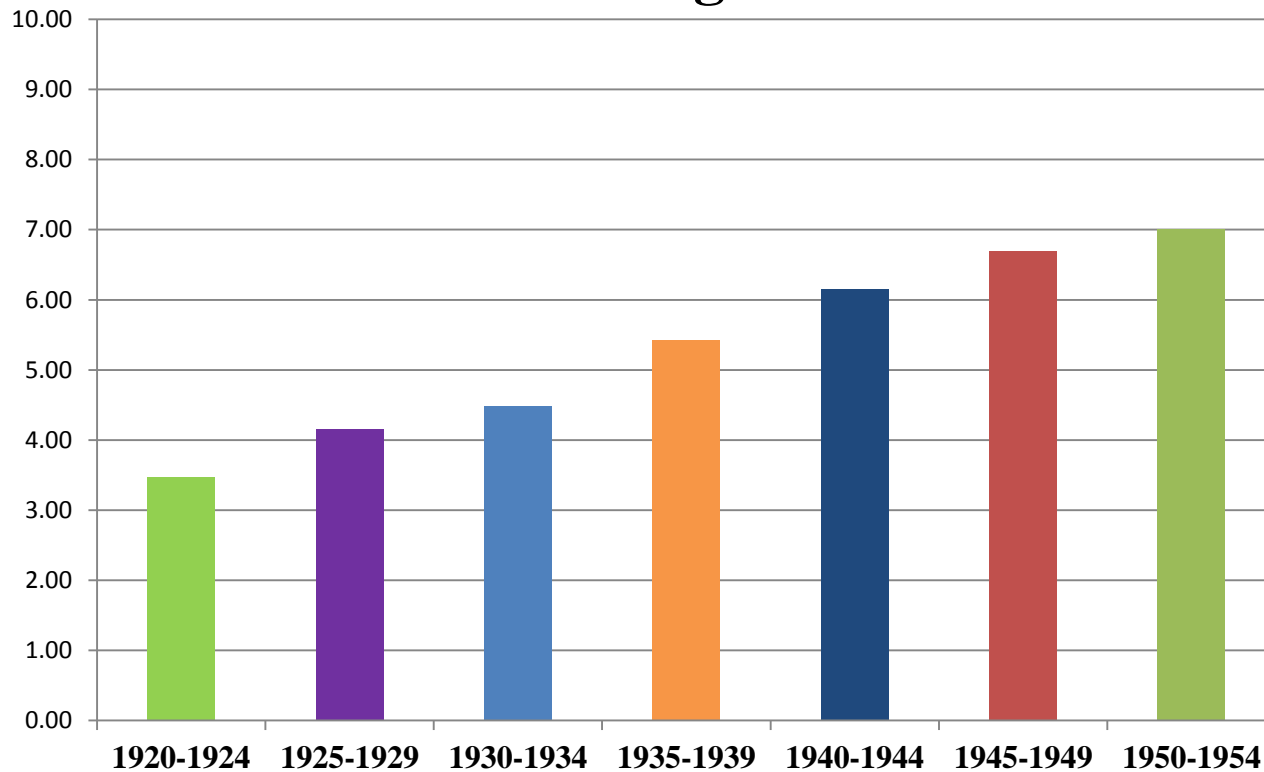
Female Years of FTFY Cumulative Experience Age 25-34



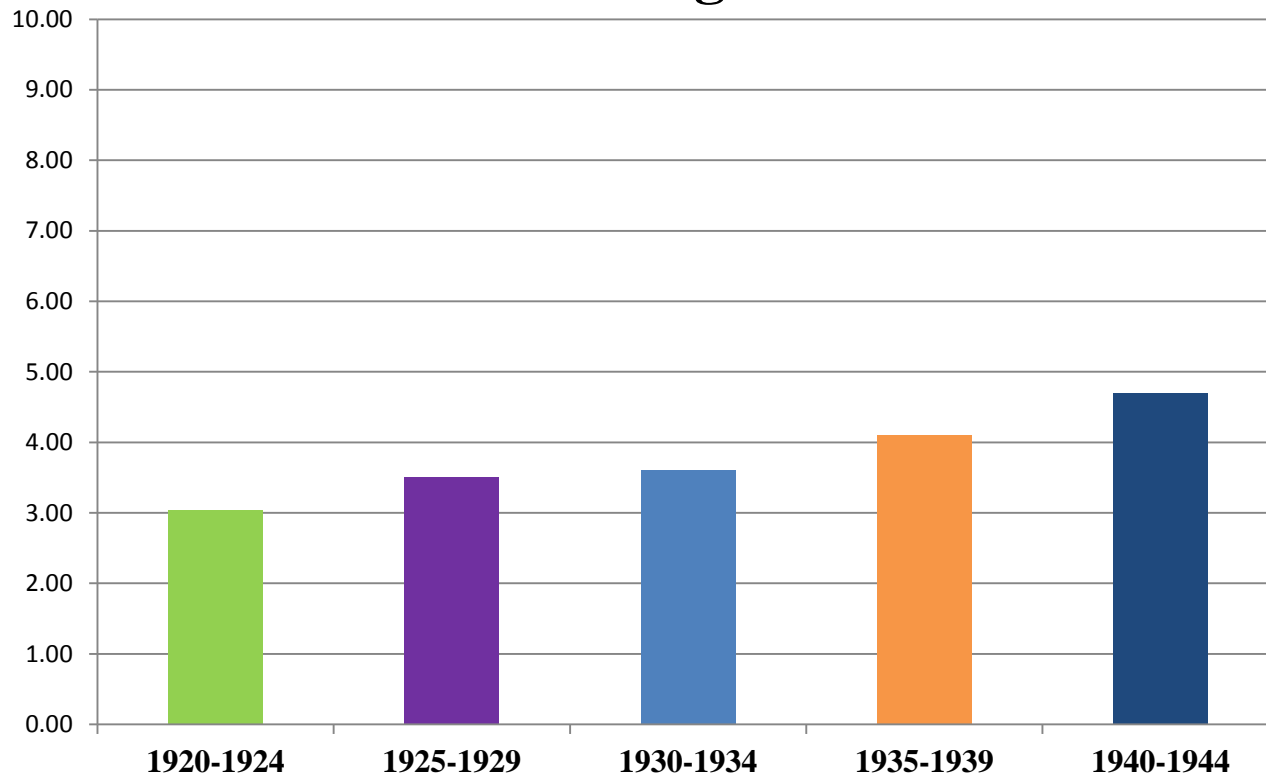
Female Years of FTFY Cumulative Experience Age 35-44



Female Years of FTFY Cumulative Experience Age 45-54



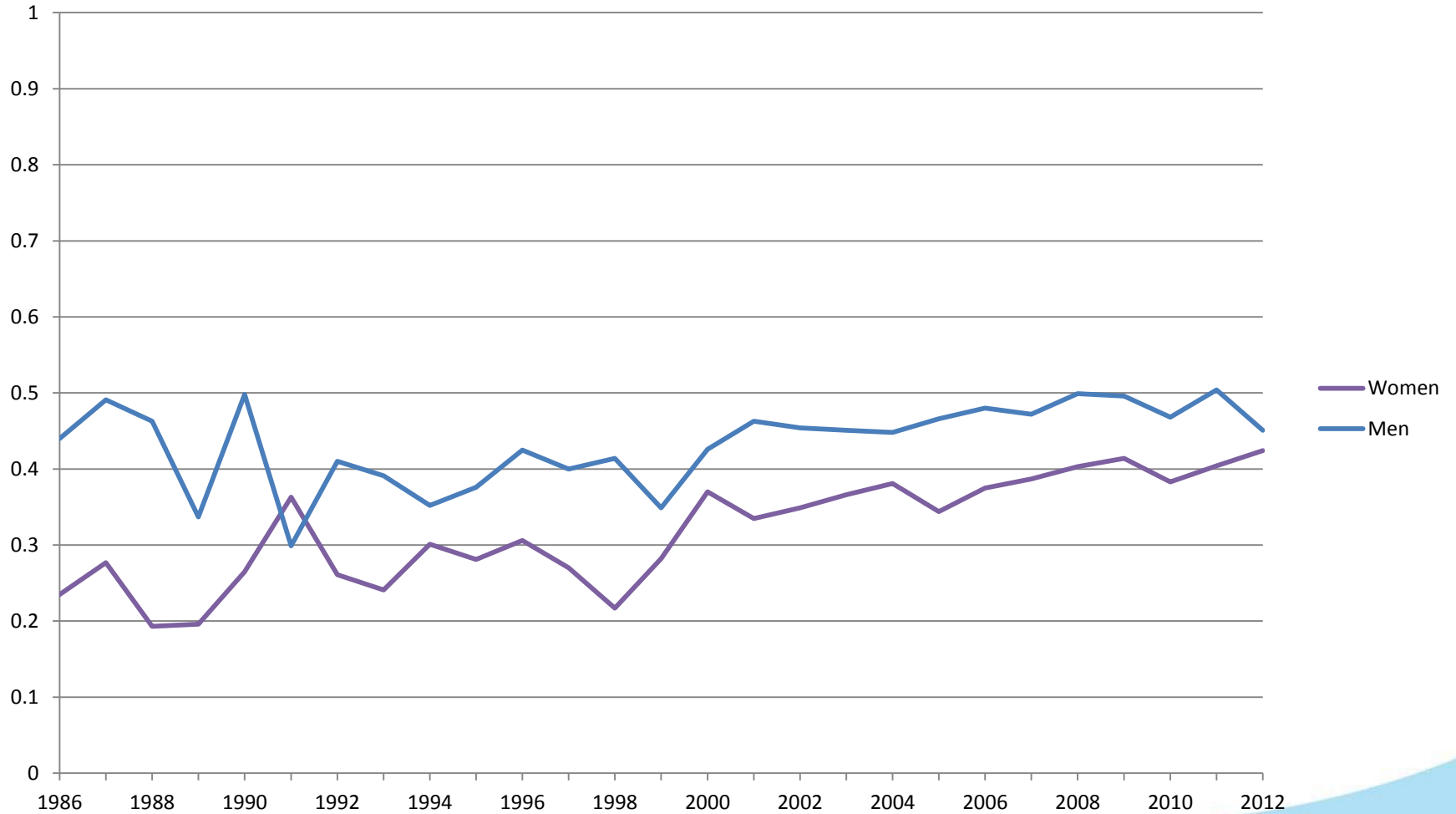
Female Years of FTFY Cumulative Experience Age 55-64



How does early-life experience relate to working longer?

- Dips in EPOP graphs suggest childbearing years may be important
- Run LPM for working at age 65 for cohorts 1932-1947
- Include cohort linear trend and add controls for share of years worked between 25-34

Work at Age 65



Work Age 65--All Females (1932-1947)

	(1)	(2)	(3)
Cohort Trend	0.008*** [0.001]	0.005*** [0.001]	0.005*** [0.001]
EXP 25-34		0.176*** [0.015]	
EXP FT 25-34			0.184*** [0.015]

Work Age 65--Female College Plus

	(1)	(2)	(3)
Cohort Trend	0.004 [0.003]	0.002 [0.003]	0.002 [0.003]
EXP 25-34		0.120*** [0.035]	
EXP FT 25-34			0.101*** [0.033]

Work Age 65--Female < College

	(1)	(2)	(3)
Cohort Trend	0.007*** [0.001]	0.005*** [0.001]	0.005*** [0.001]
EXP 25-34		0.181*** [0.016]	
EXP FT 25-34			0.187*** [0.017]

Work Age 65--All Males (1932-1947)

	(1)	(2)	(3)
Cohort Trend	0.003** [0.001]	0.003** [0.001]	0.003** [0.001]
EXP 25-34		0.151*** [0.027]	
EXP FT 25-34			0.203*** [0.020]

Work Age 65--Male College Plus

	(1)	(2)	(3)
Cohort Trend	0.001 [0.003]	0.001 [0.003]	0.001 [0.003]
EXP 25-34		0.068 [0.049]	
EXP FT 25-34			0.094** [0.037]

Work Age 65--Male College Plus

	(1)	(2)	(3)
Cohort Trend	0.001 [0.003]	0.001 [0.003]	0.001 [0.003]
EXP 25-34		0.068 [0.049]	
EXP FT 25-34			0.094** [0.037]

Work Age 65--Male < College

	(1)	(2)	(3)
Cohort Trend	0.001 [0.002]	0.002 [0.002]	0.001 [0.002]
EXP 25-34		0.240*** [0.031]	
EXP FT 25-34			0.276*** [0.022]

Female labor market experiences surrounding birth of first child

- SIPP fertility topical history modules
 - Questions about number of children and year first child born
 - Subsample includes questions about taking time off before/after first child born, use of paid/unpaid leave, and experiences returning to work
 - Opportunity to validate responses with administrative data

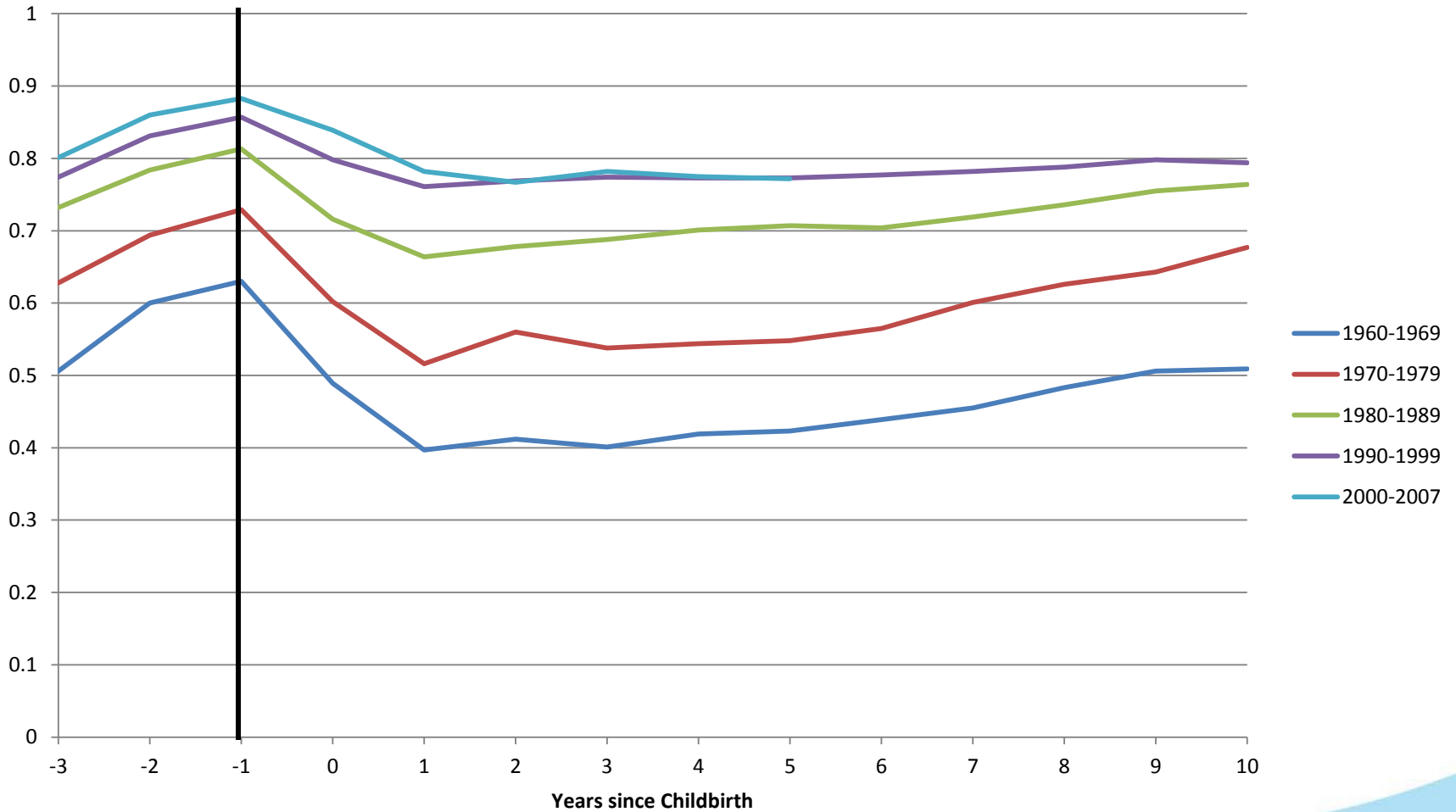
Fertility History Topical Module Stats

	Age First Child Born	College Plus	Work while Pregnant	N
1960-1969	21.61	0.14	0.47	600
1970-1979	21.94	0.16	0.58	800
1980-1989	23.61	0.21	0.67	2800
1990-1999	24.66	0.28	0.73	9300
2000-2007	25.30	0.36	0.74	3000

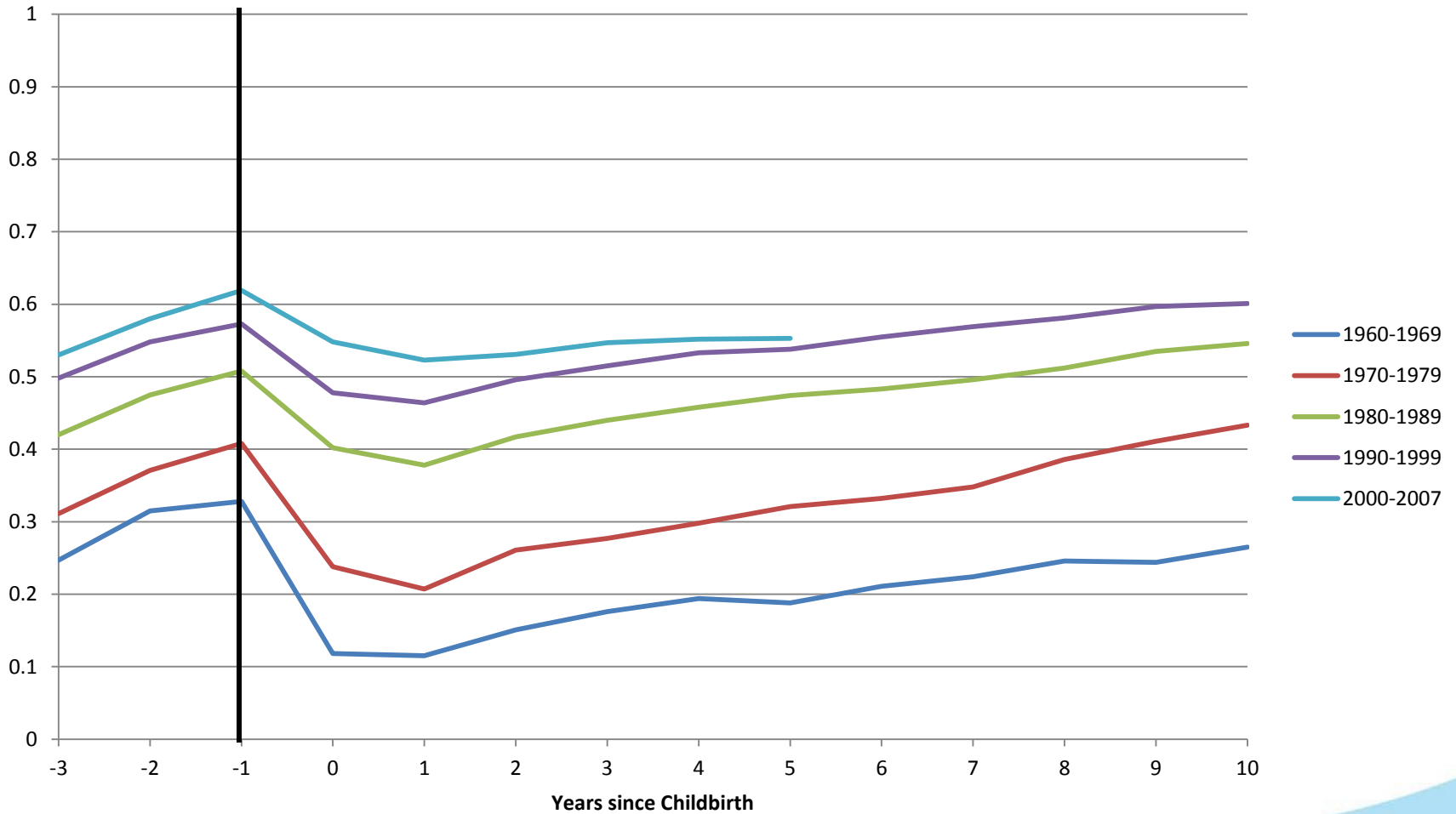
Fertility History Topical Module Stats II

	Take Paid Leave	Take Unpaid Leave	Quit	Work After Birth
1960-1969	0.16	0.16	0.62	0.84
1970-1979	0.29	0.20	0.48	0.85
1980-1989	0.40	0.36	0.30	0.89
1990-1999	0.46	0.36	0.25	0.93
2000-2007	0.49	0.39	0.22	0.90

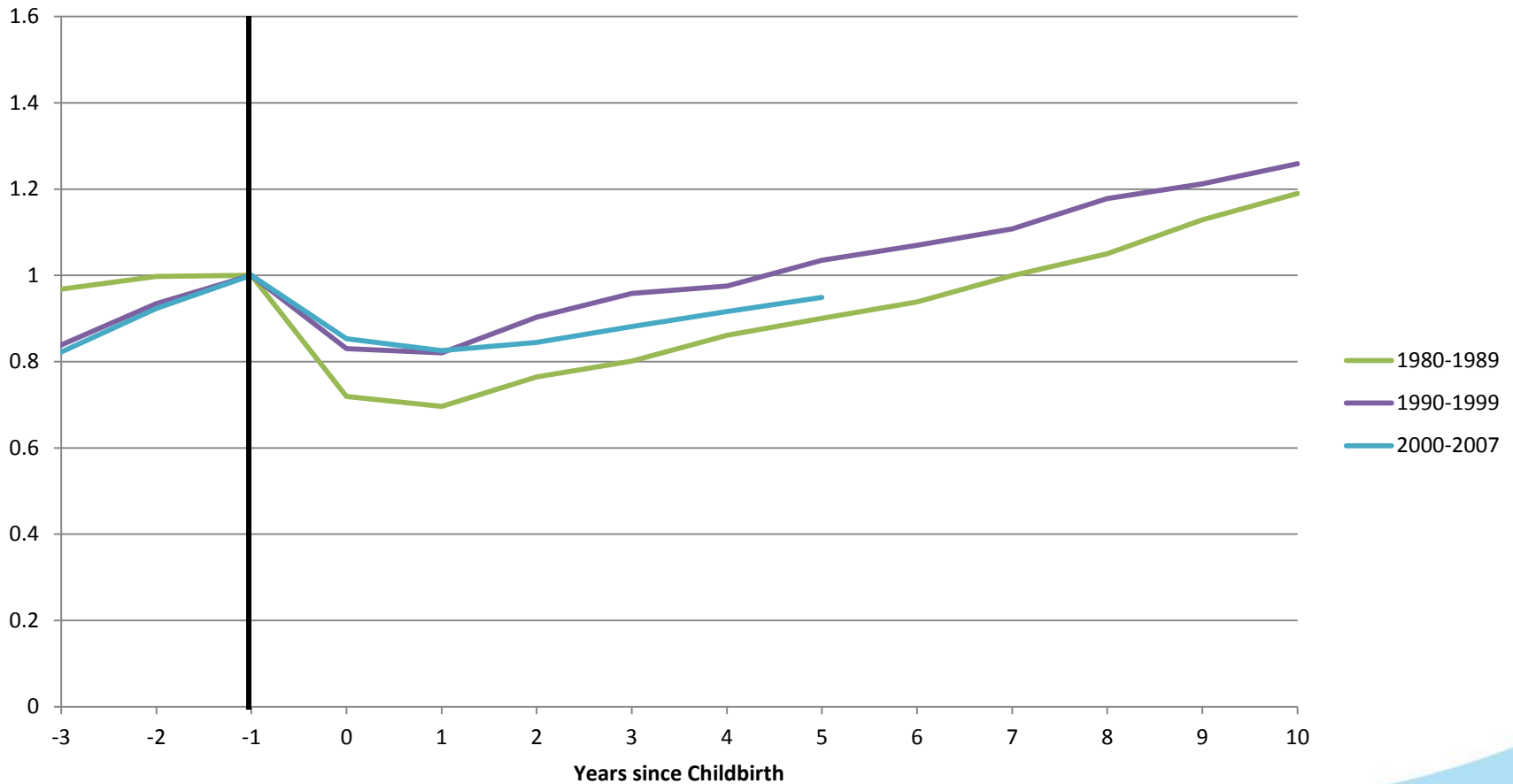
Work since Year First Child Born



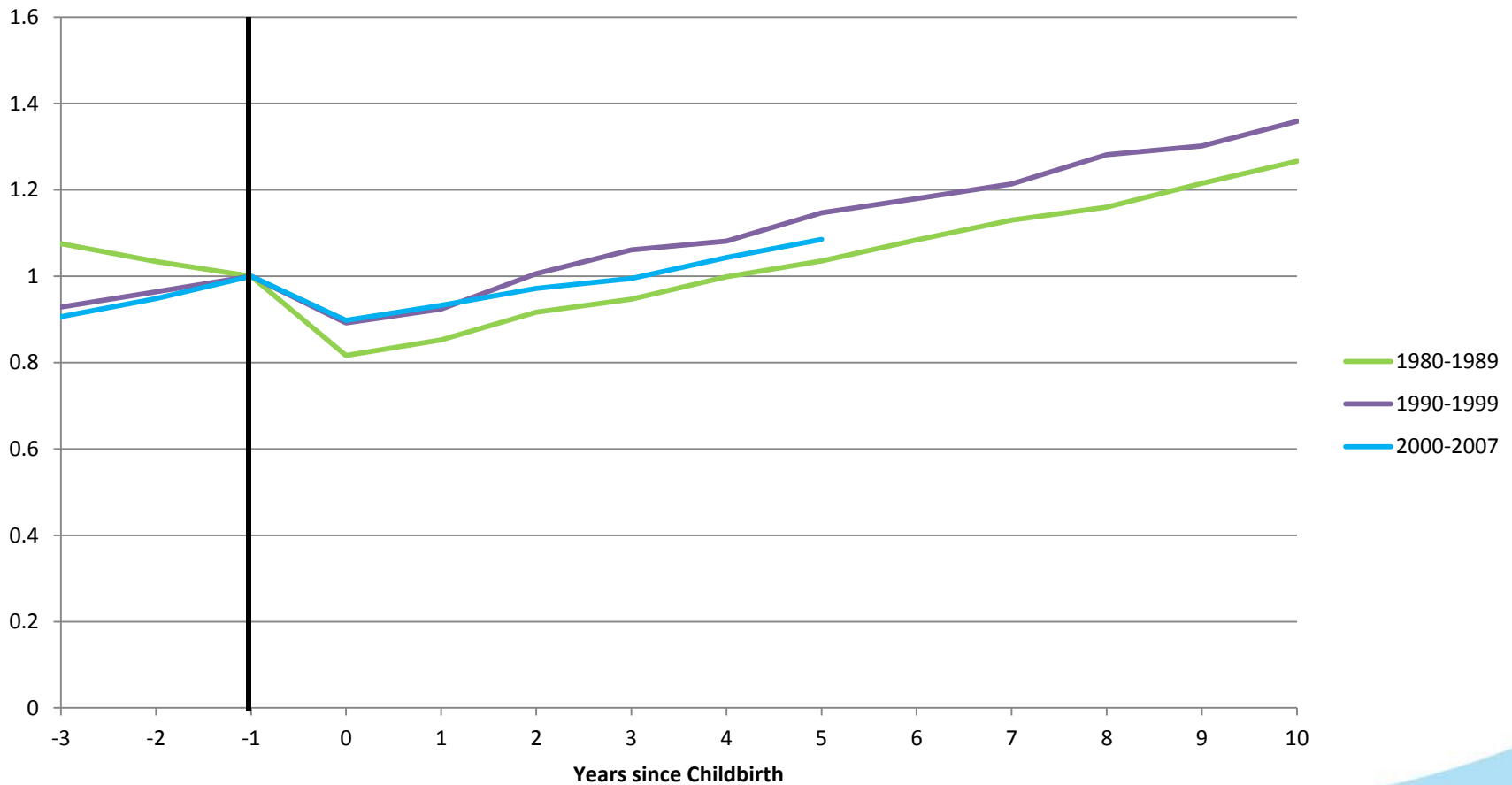
FTFY Work since Year First Child Born



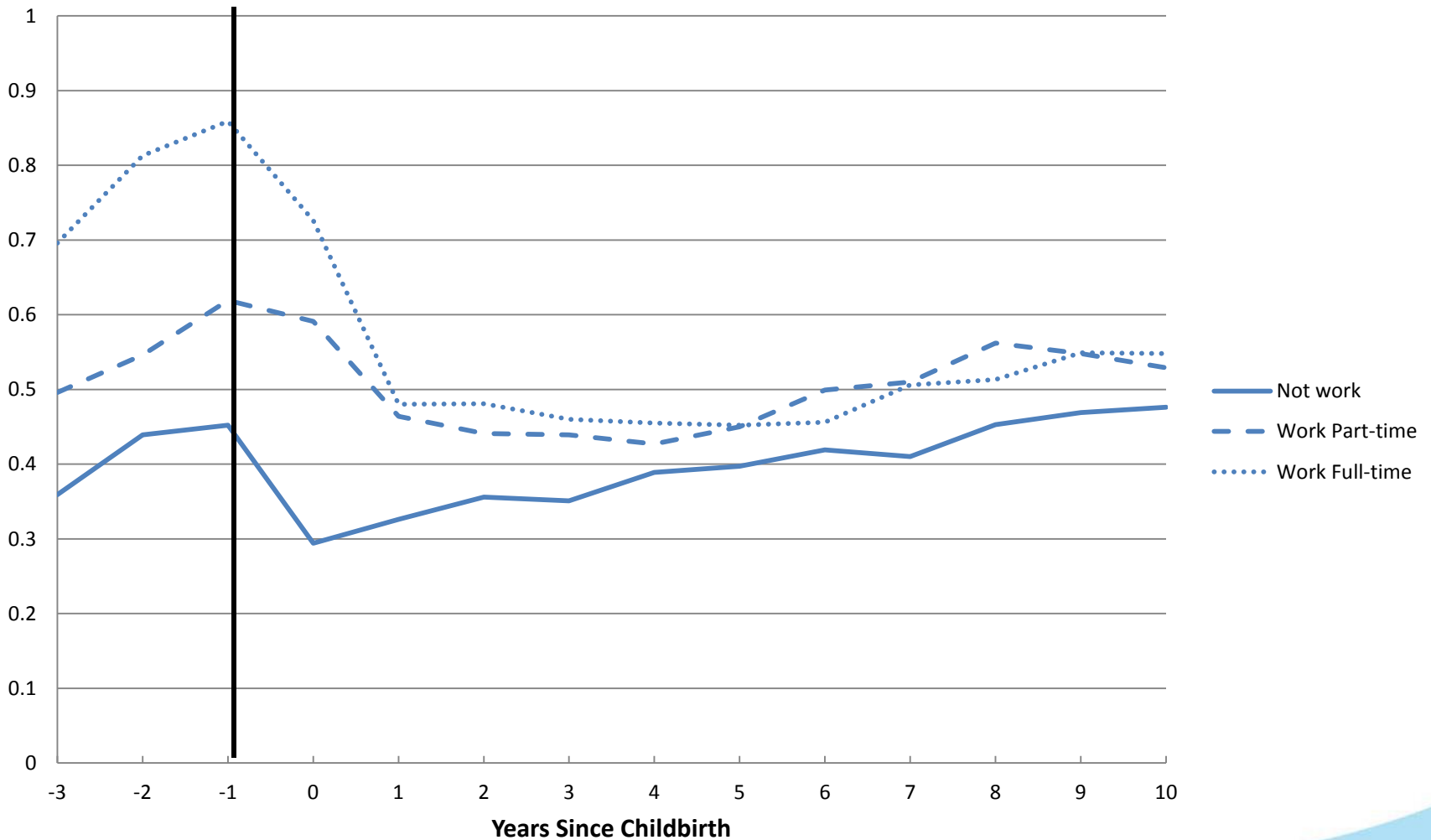
Relative Earnings since Year First Child Born (Unconditional)



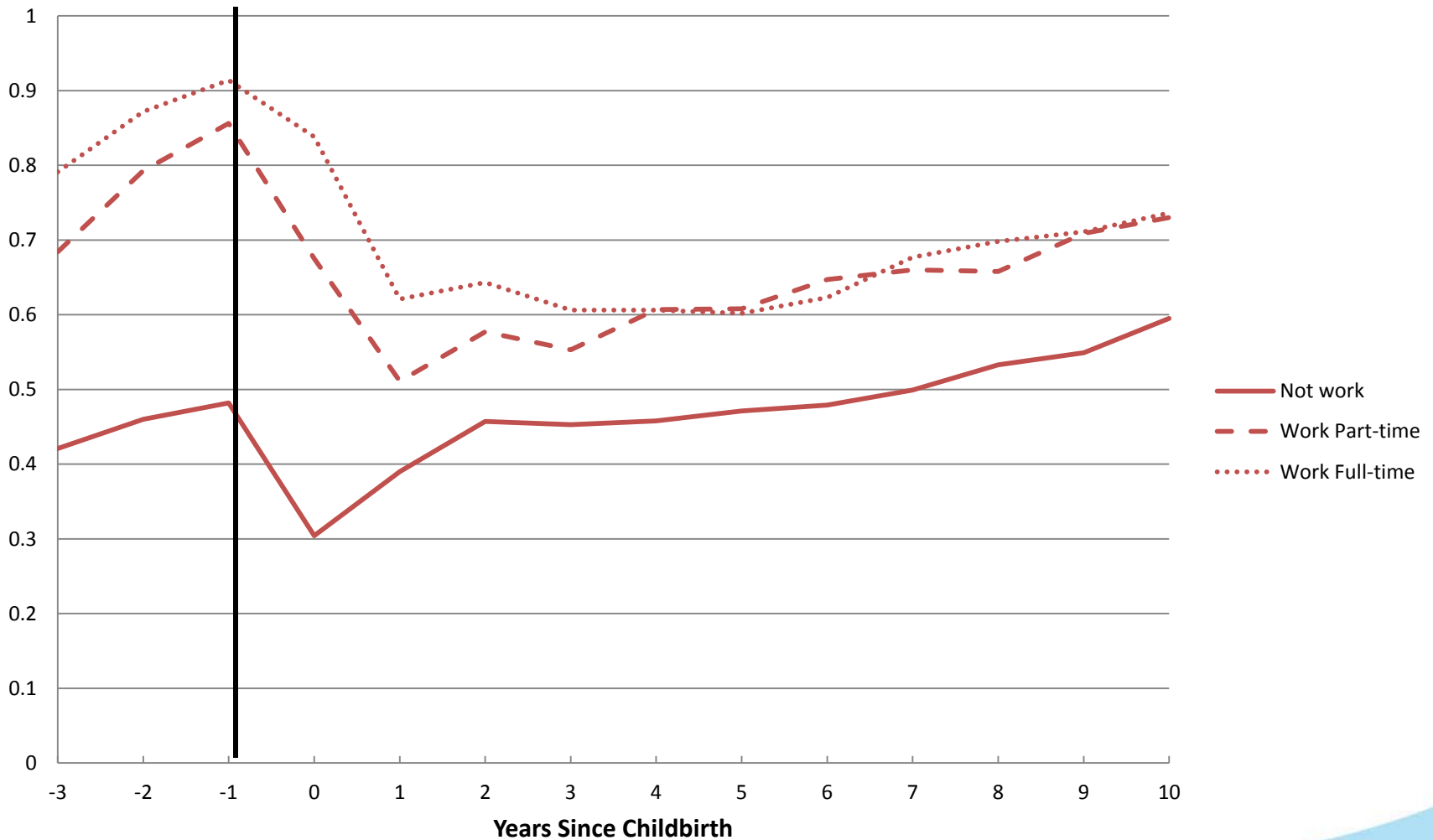
Relative Earnings since Year First Child Born (Conditional on Working)



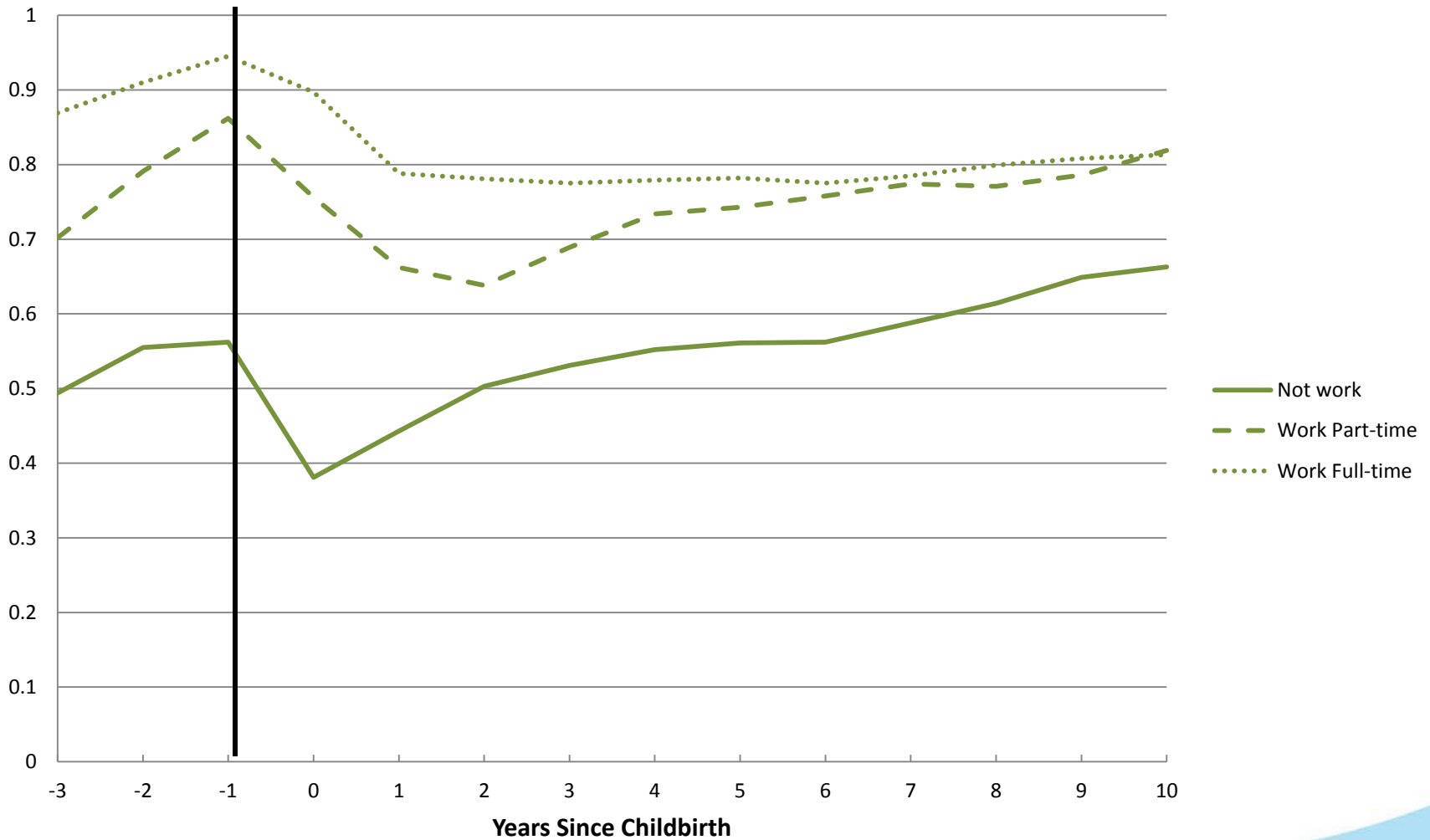
1960s Work since Year First Child Born by SIPP Work While Pregnant Status



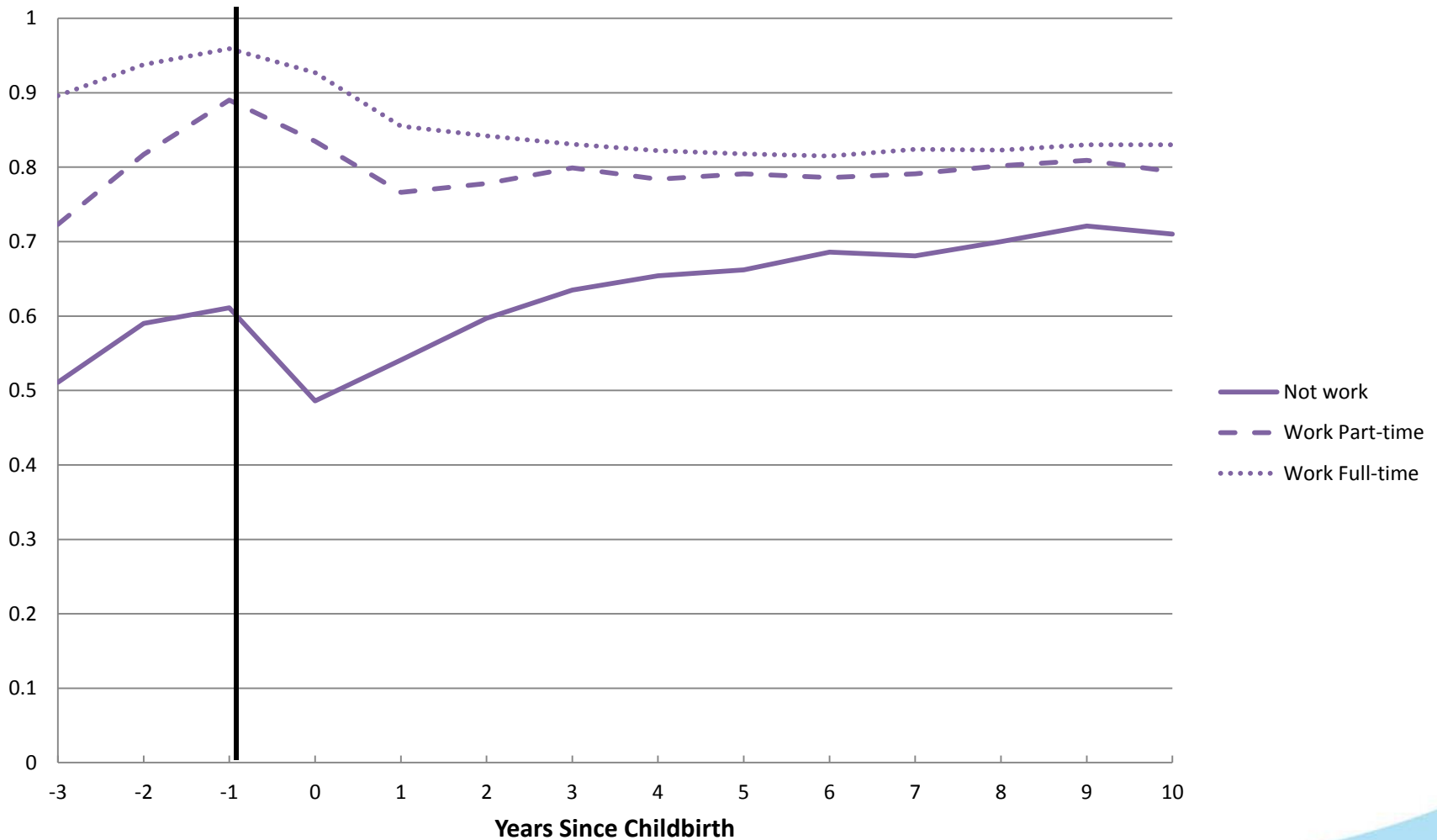
1970s Work since Year First Child Born by SIPP Work While Pregnant Status



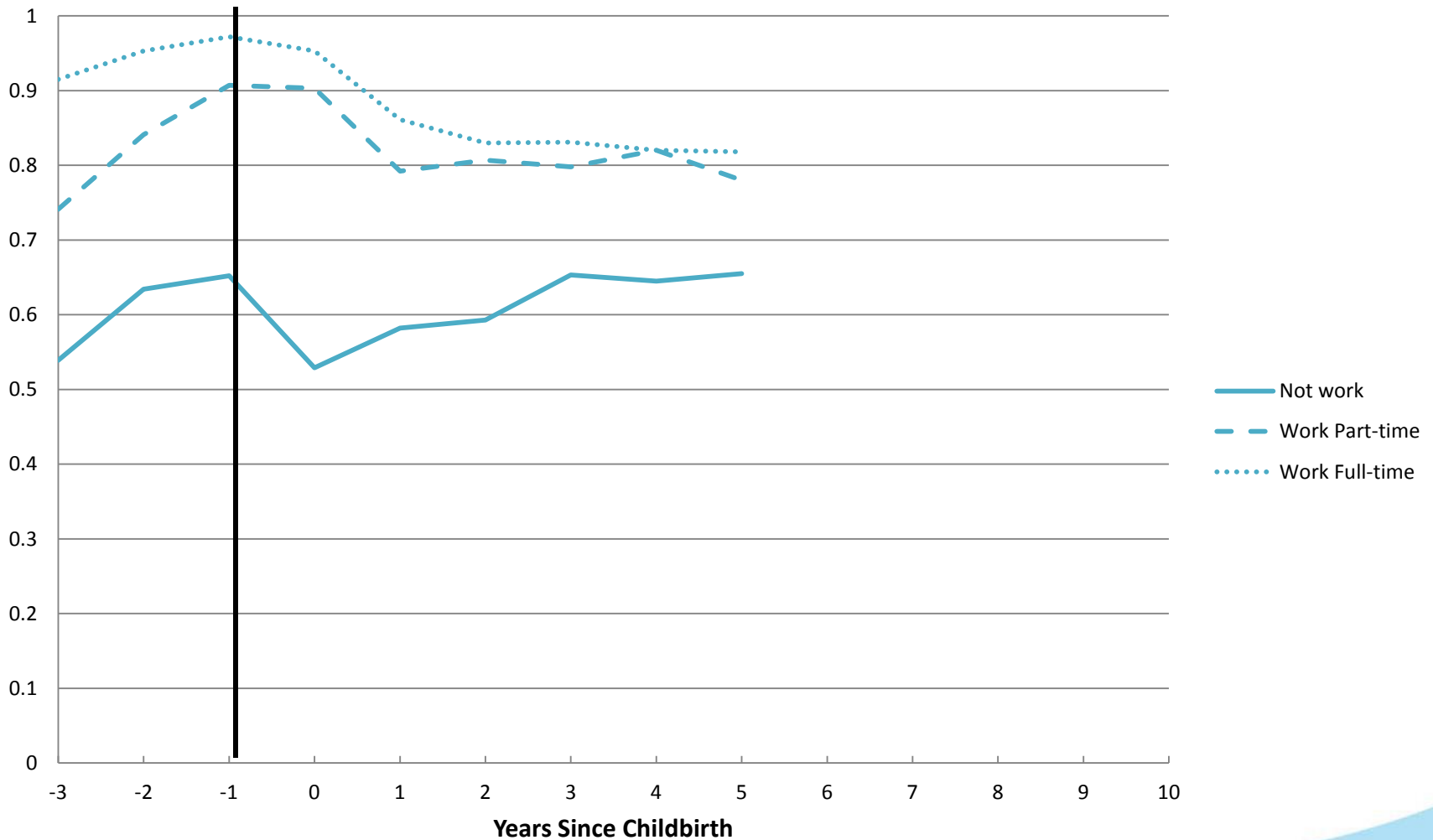
1980s Work since Year First Child Born by SIPP Work While Pregnant Status



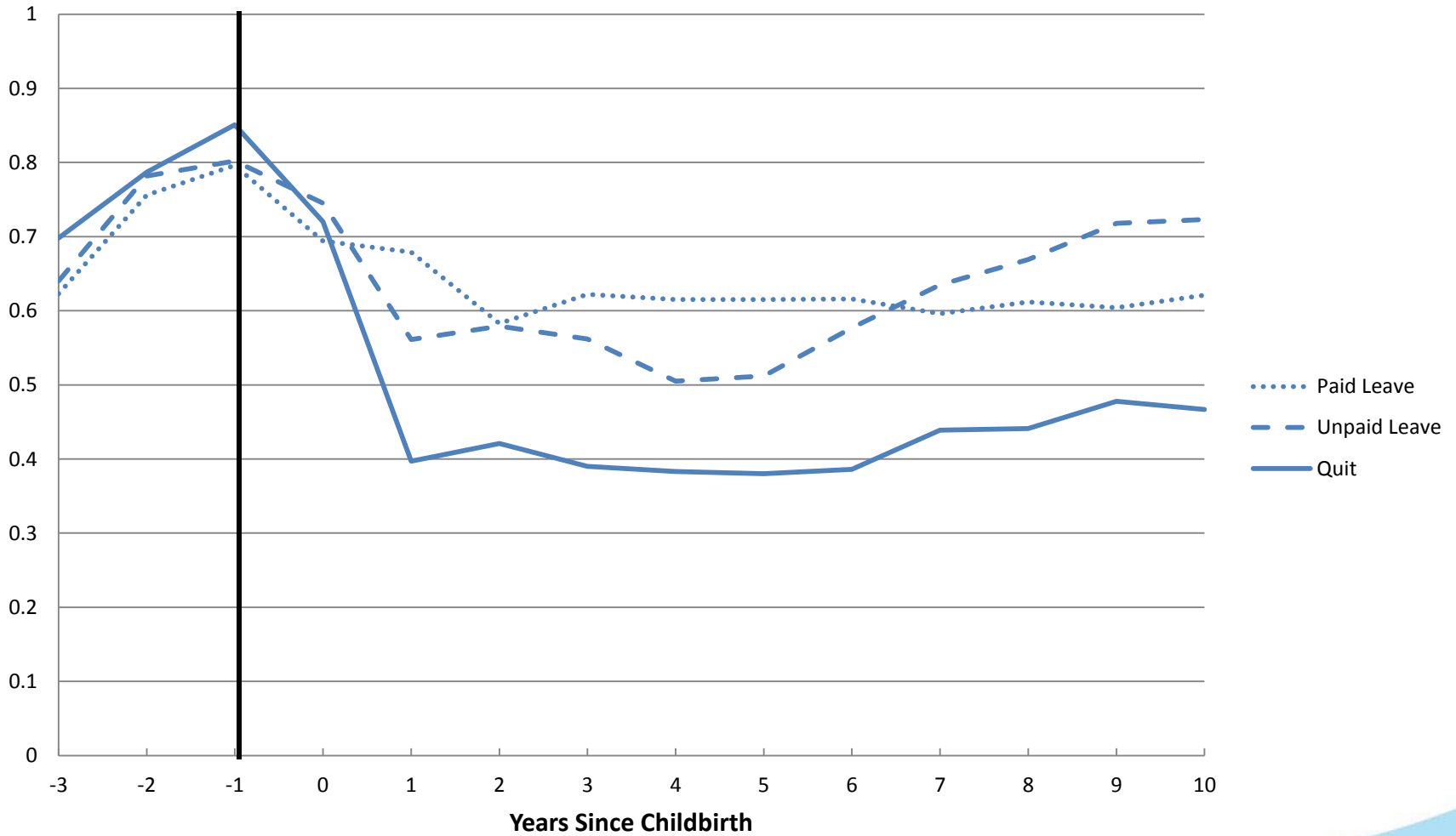
1990s Work since Year First Child Born by SIPP Work While Pregnant Status



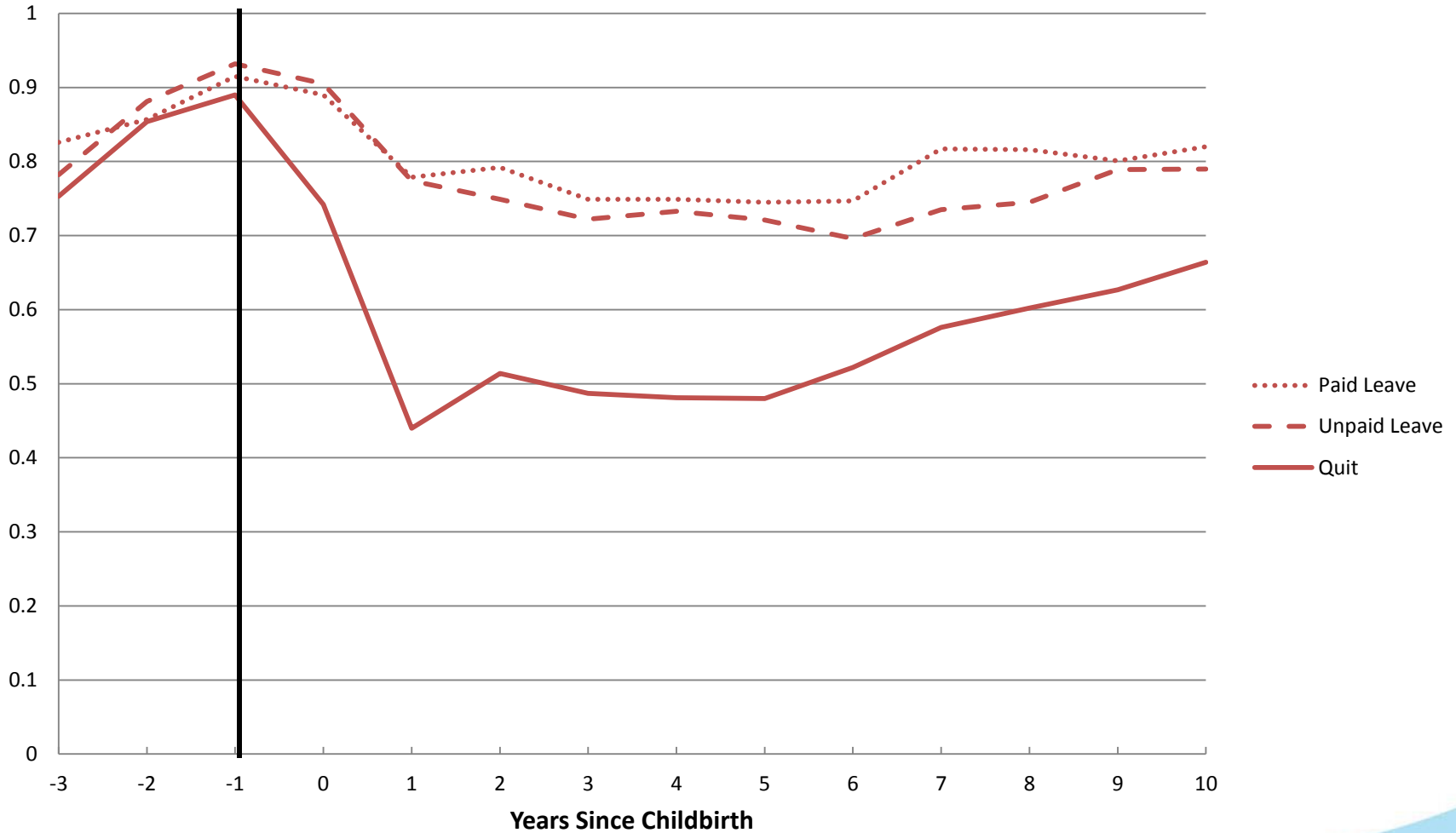
2000s Work since Year First Child Born by SIPP Work While Pregnant Status



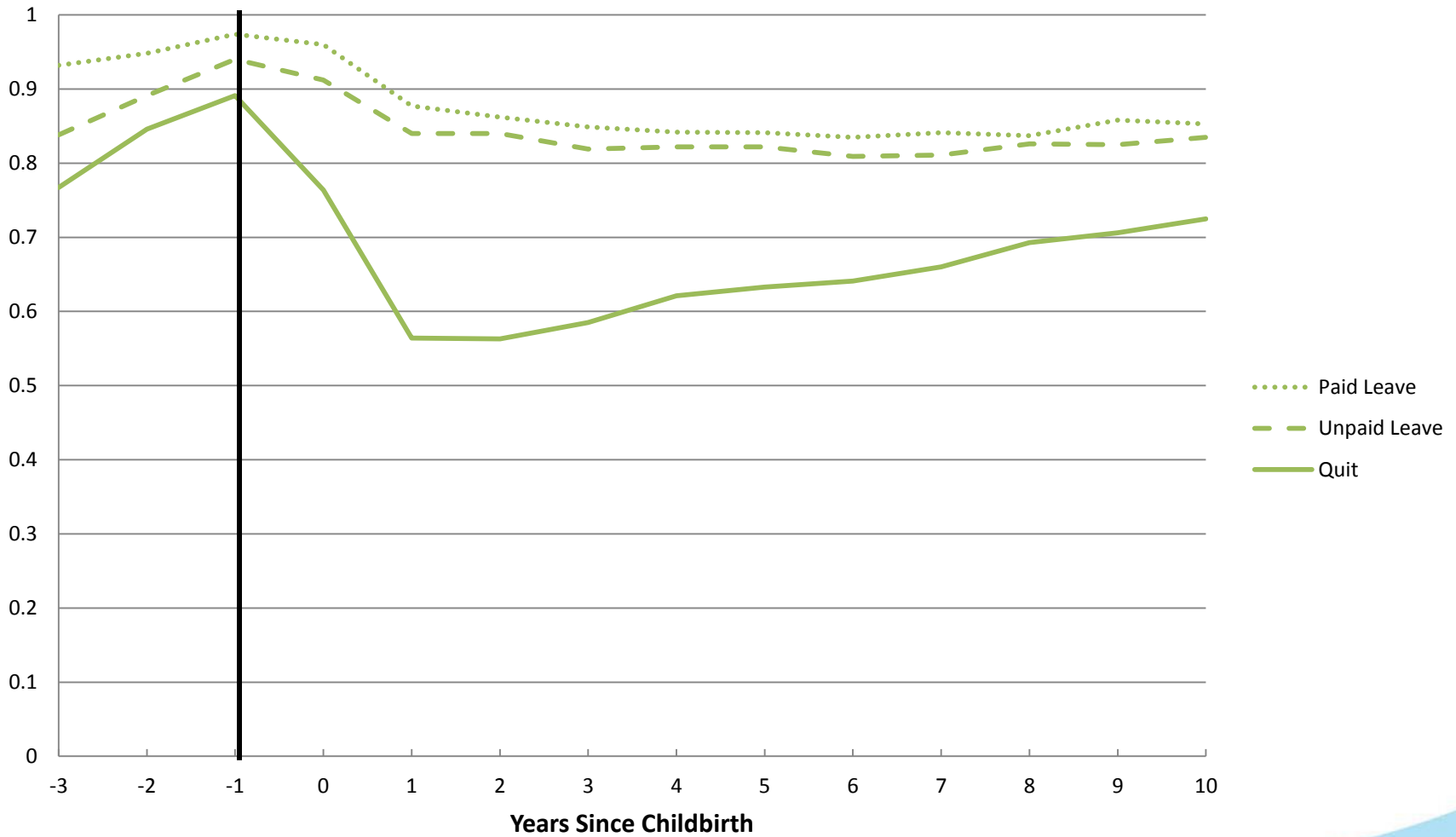
1960s Work since Year First Child Born by SIPP Leave Status



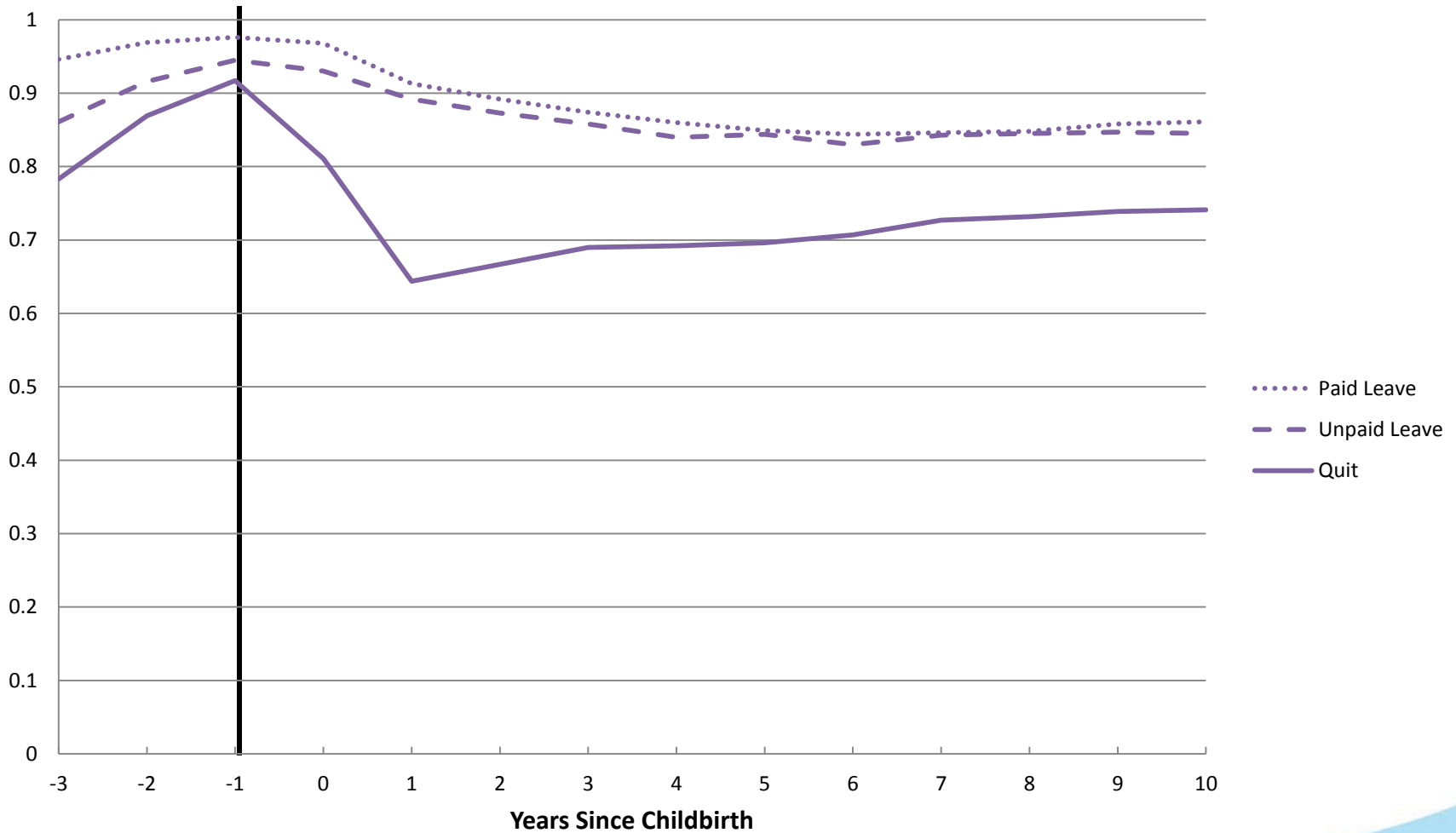
1970s Work since Year First Child Born by SIPP Leave Status



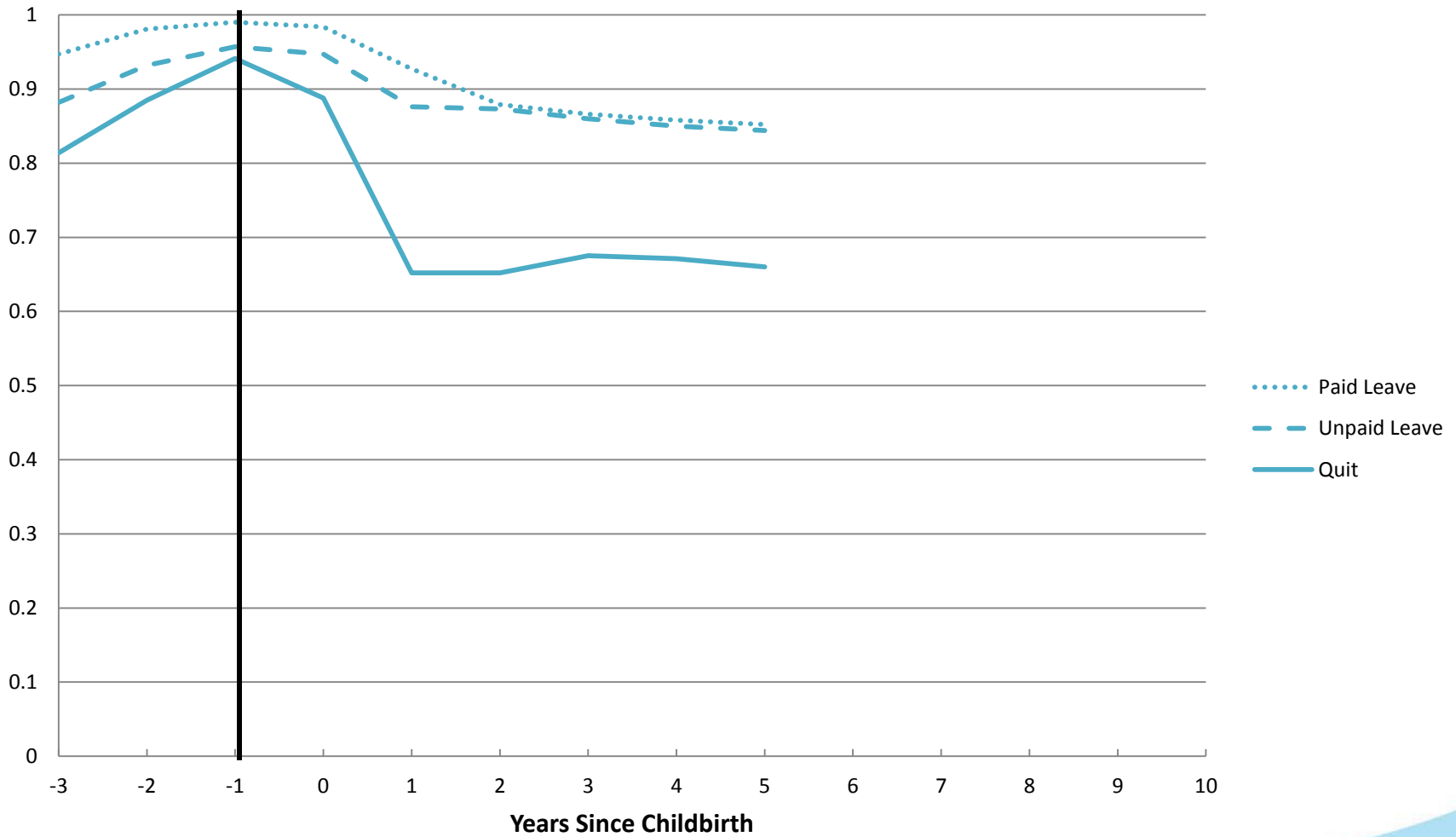
1980s Work since Year First Child Born by SIPP Leave Status



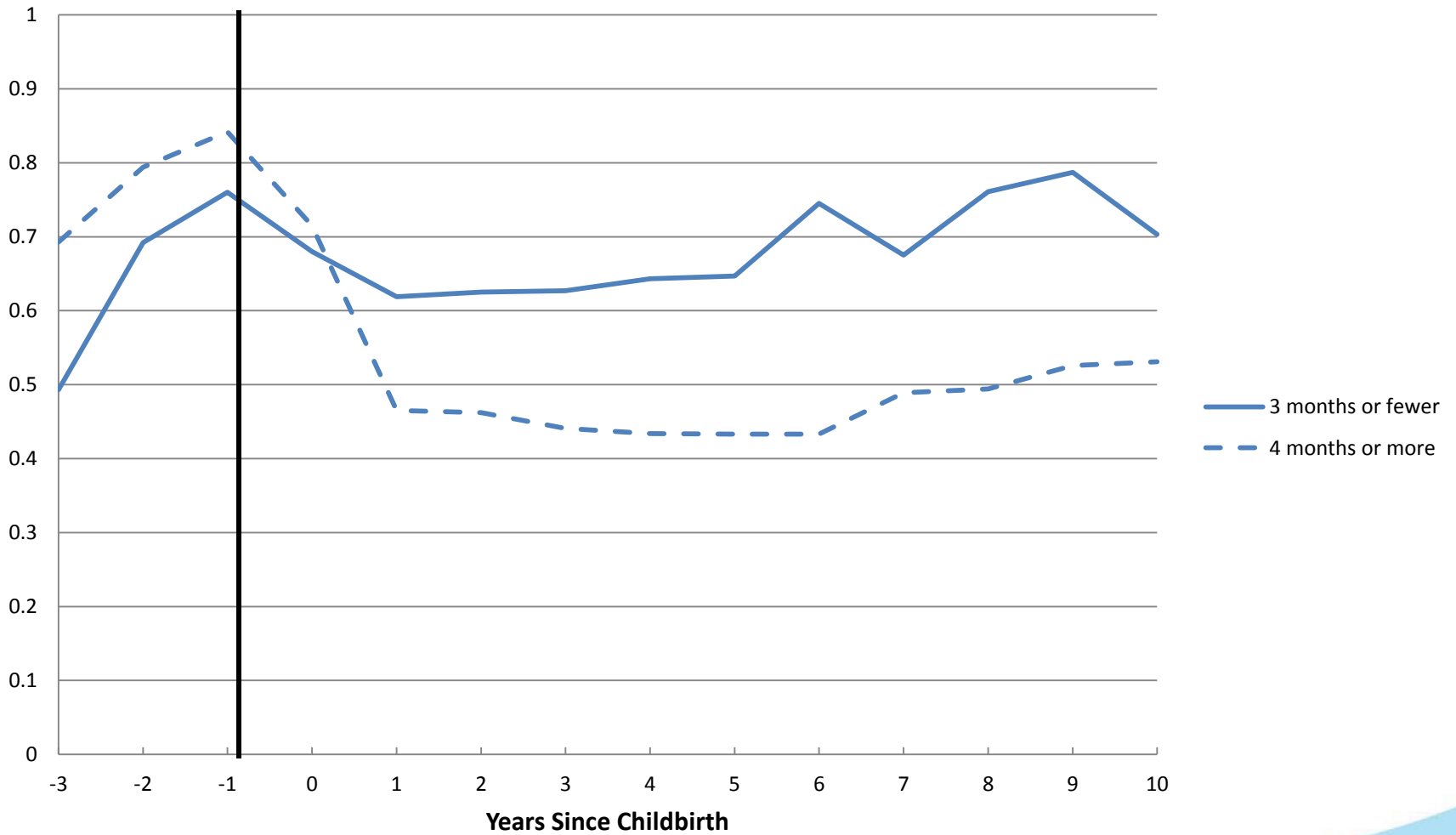
1990s Work since Year First Child Born by SIPP Leave Status



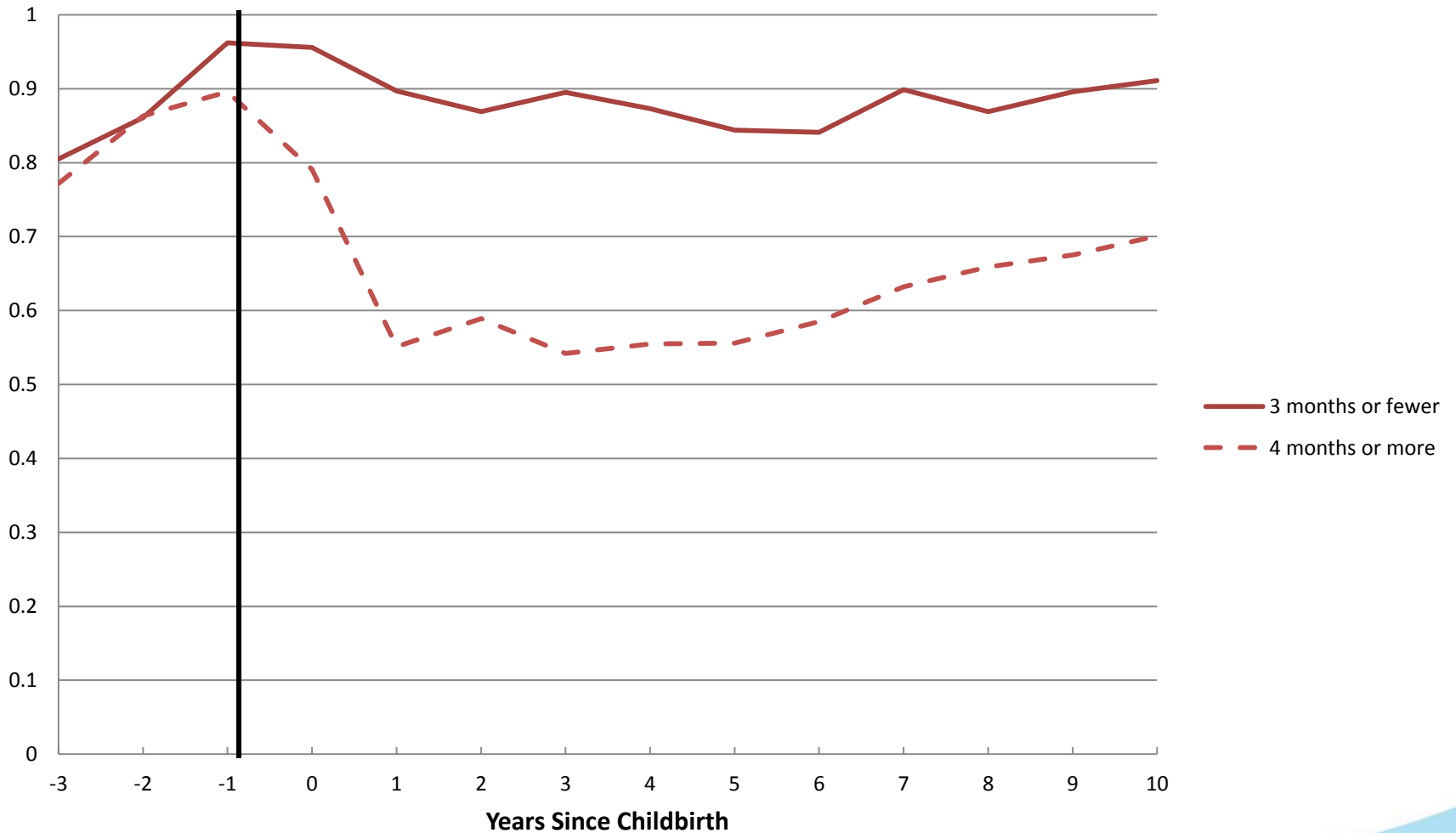
2000s Work since Year First Child Born by SIPP Leave Status



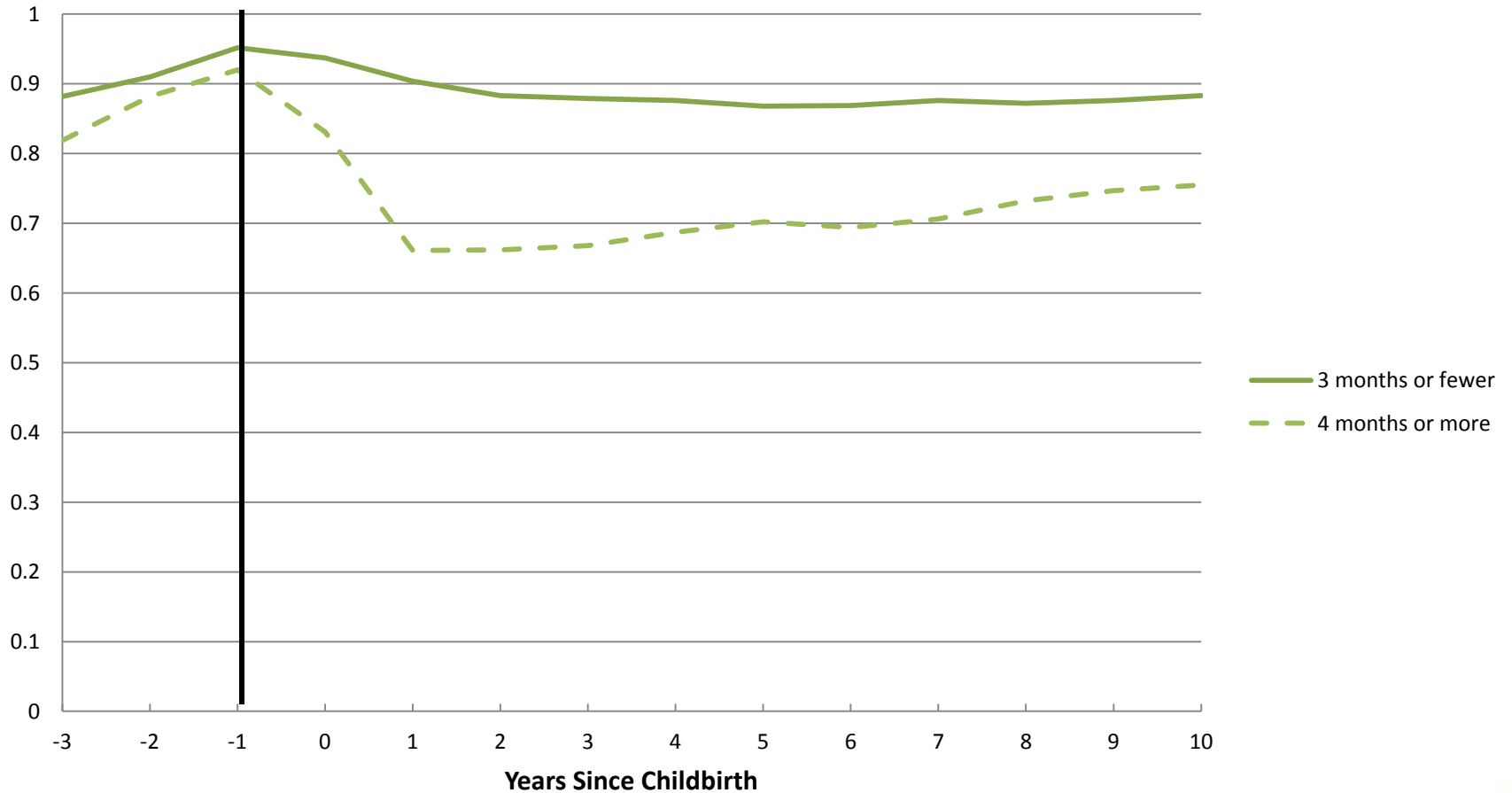
1960s Work since Year First Child Born by SIPP Total Months Off



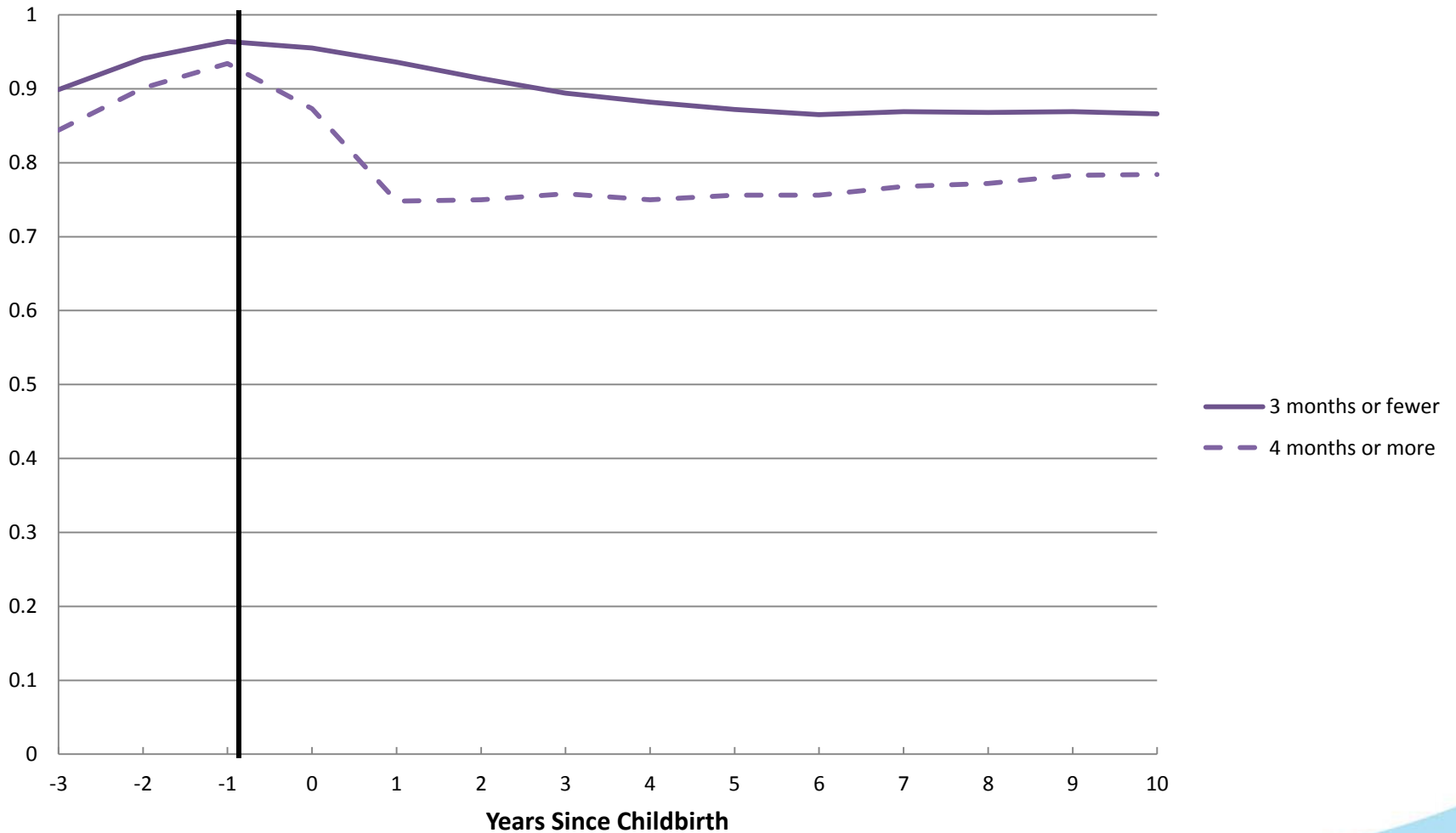
1970s Work since Year First Child Born by SIPP Total Months Off



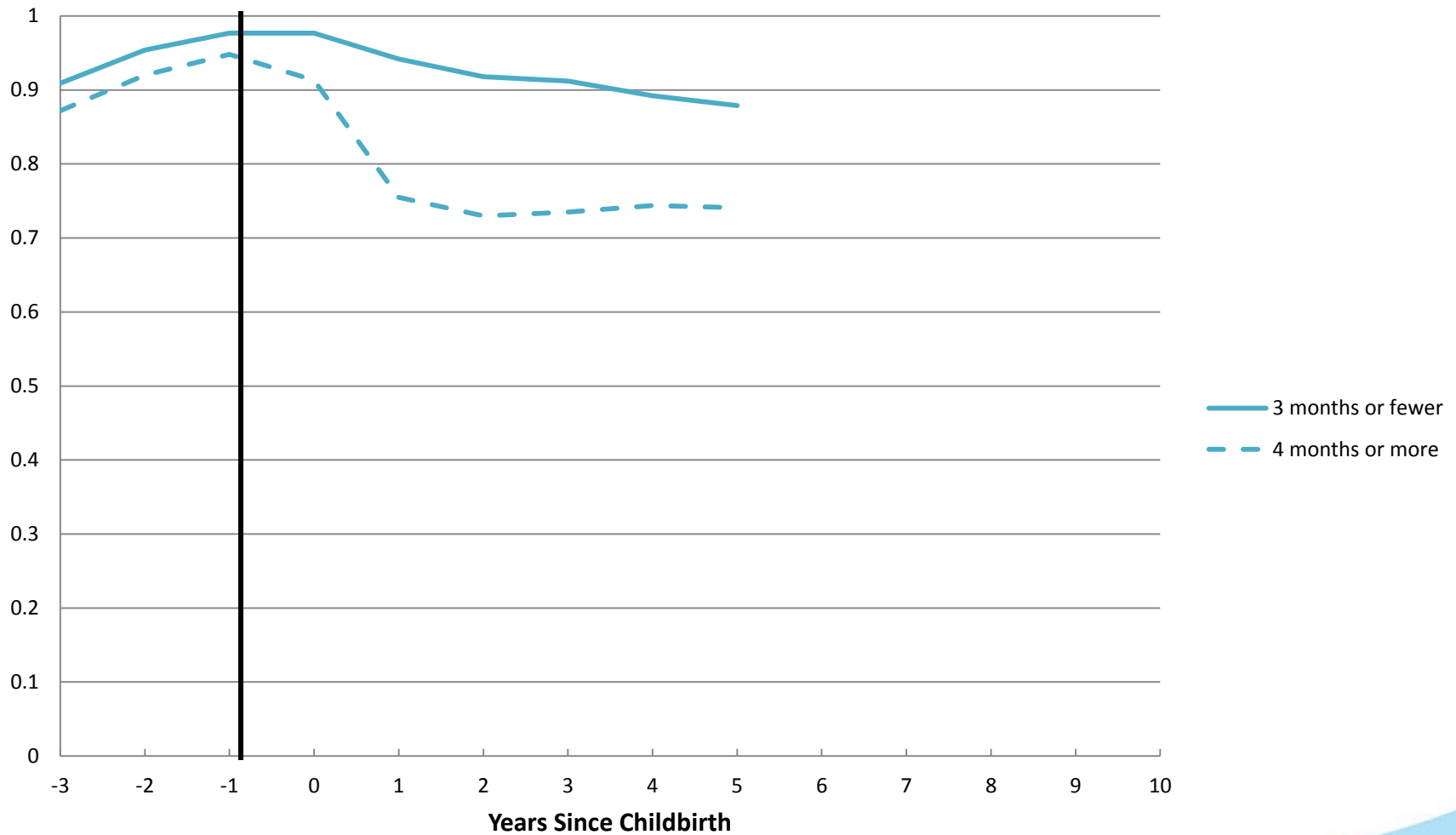
1980s Work since Year First Child Born by SIPP Total Months Off



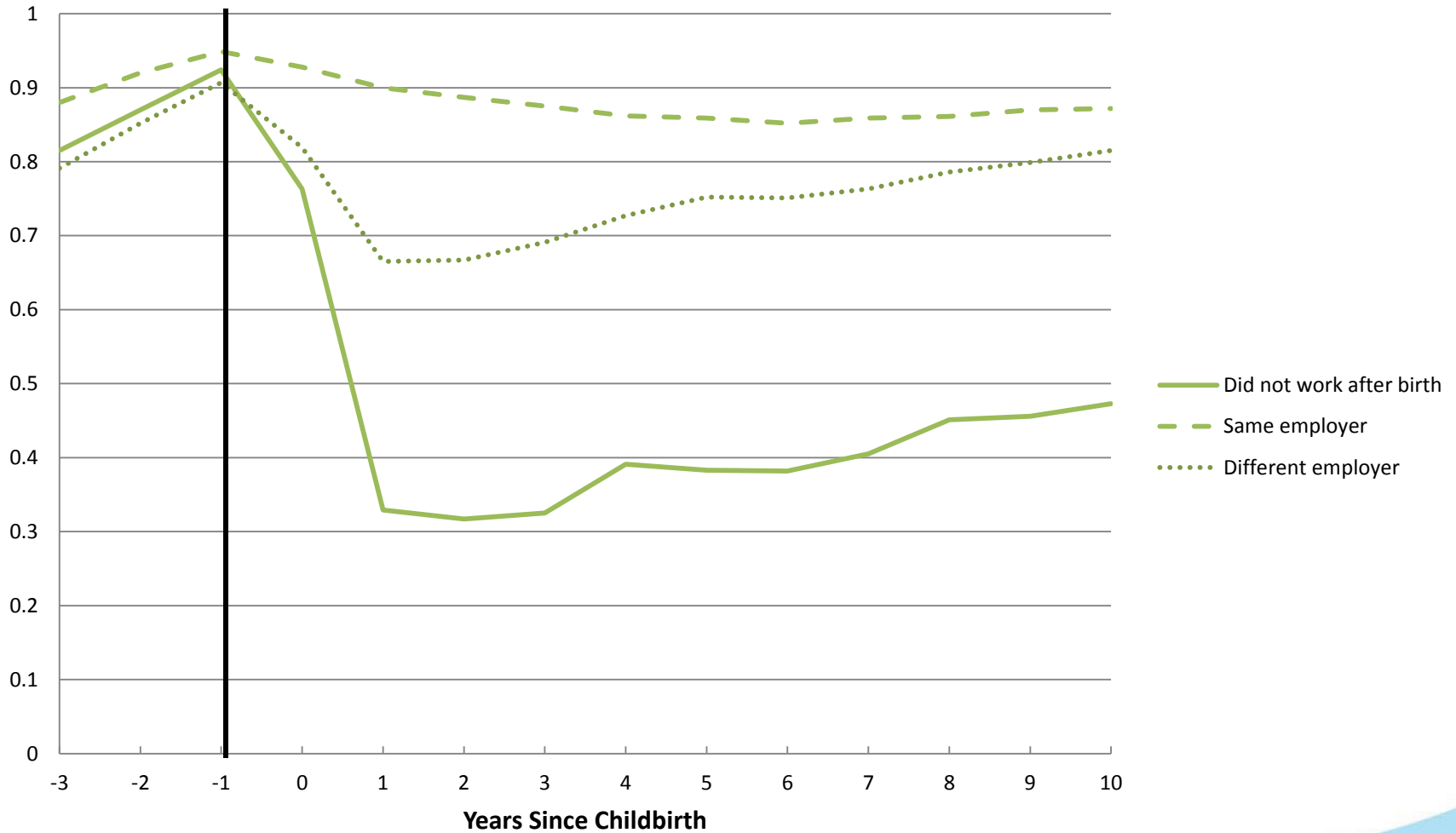
1990s Work since Year First Child Born by SIPP Total Months Off



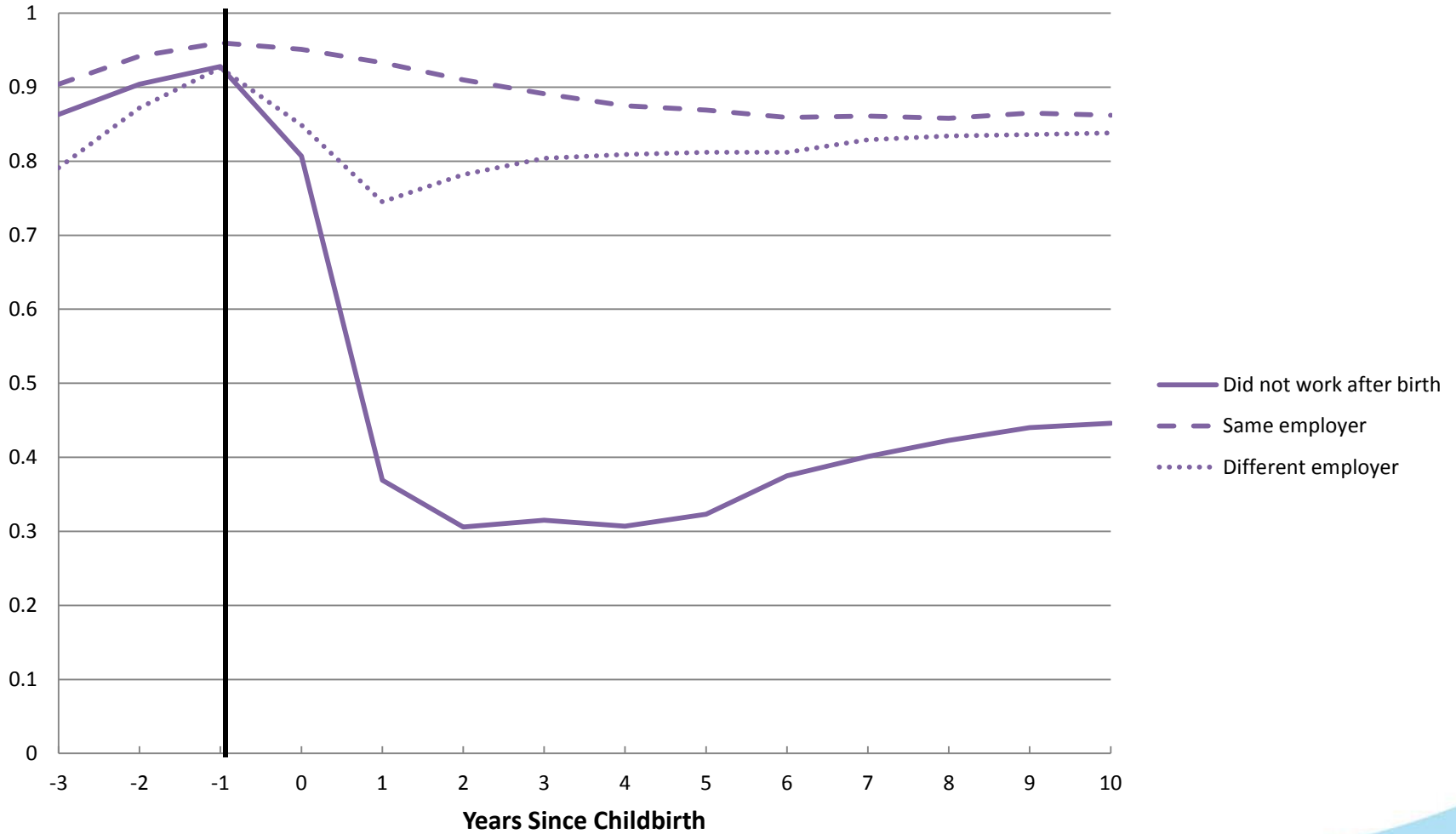
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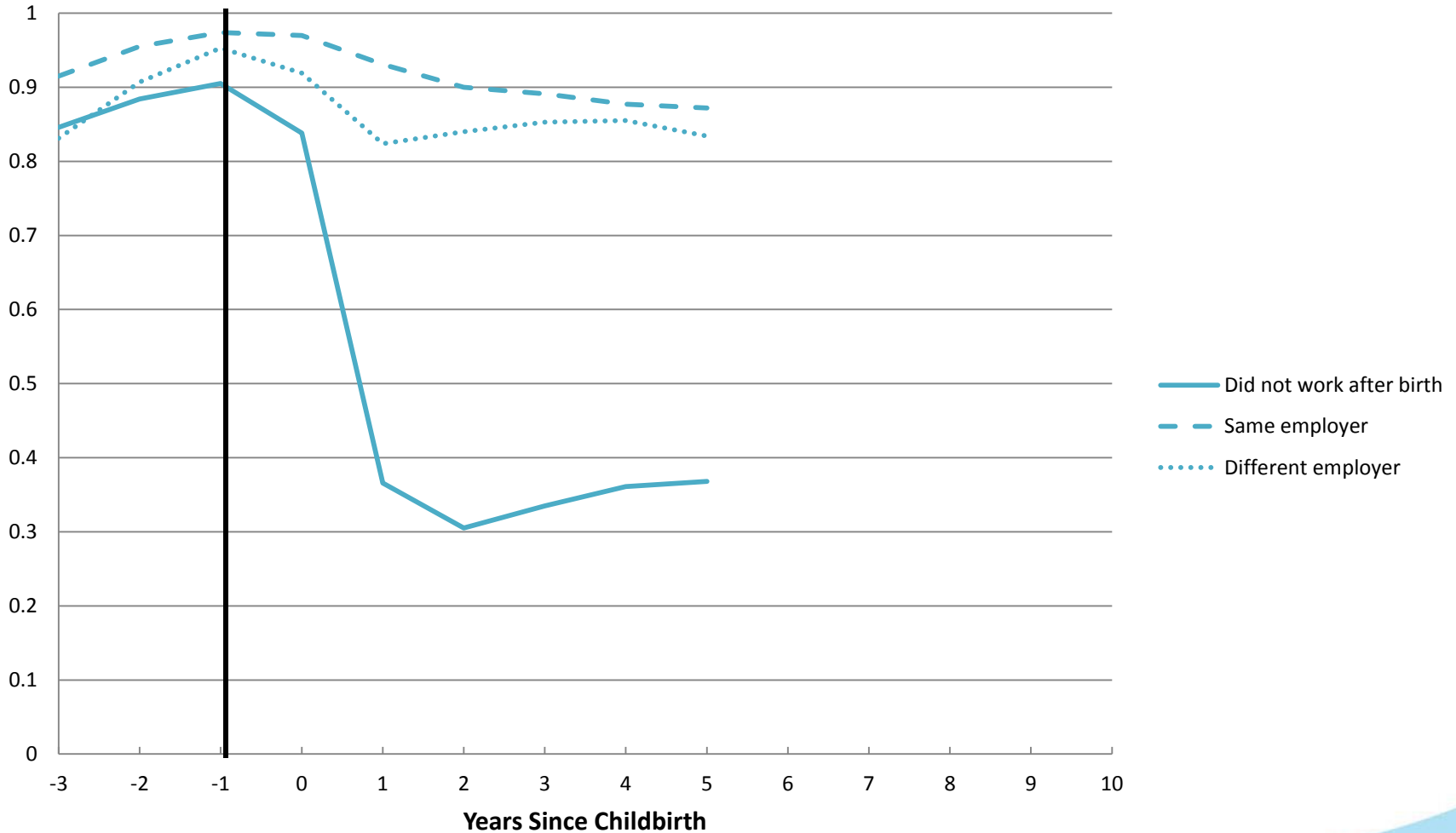
1980s Work since Year First Child Born by SIPP Stayed with Same Employer



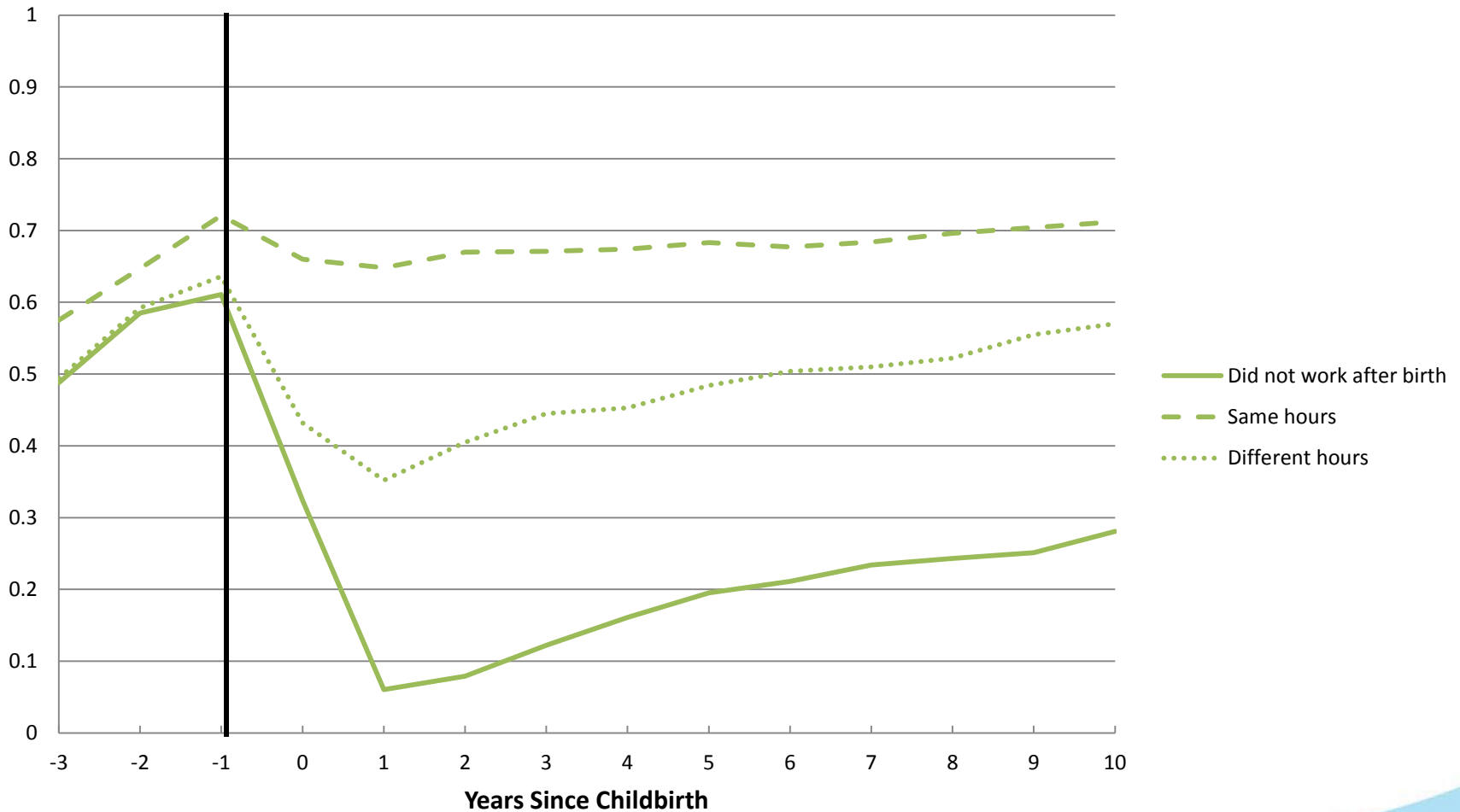
1990s Work since Year First Child Born by SIPP Stayed with Same Employer



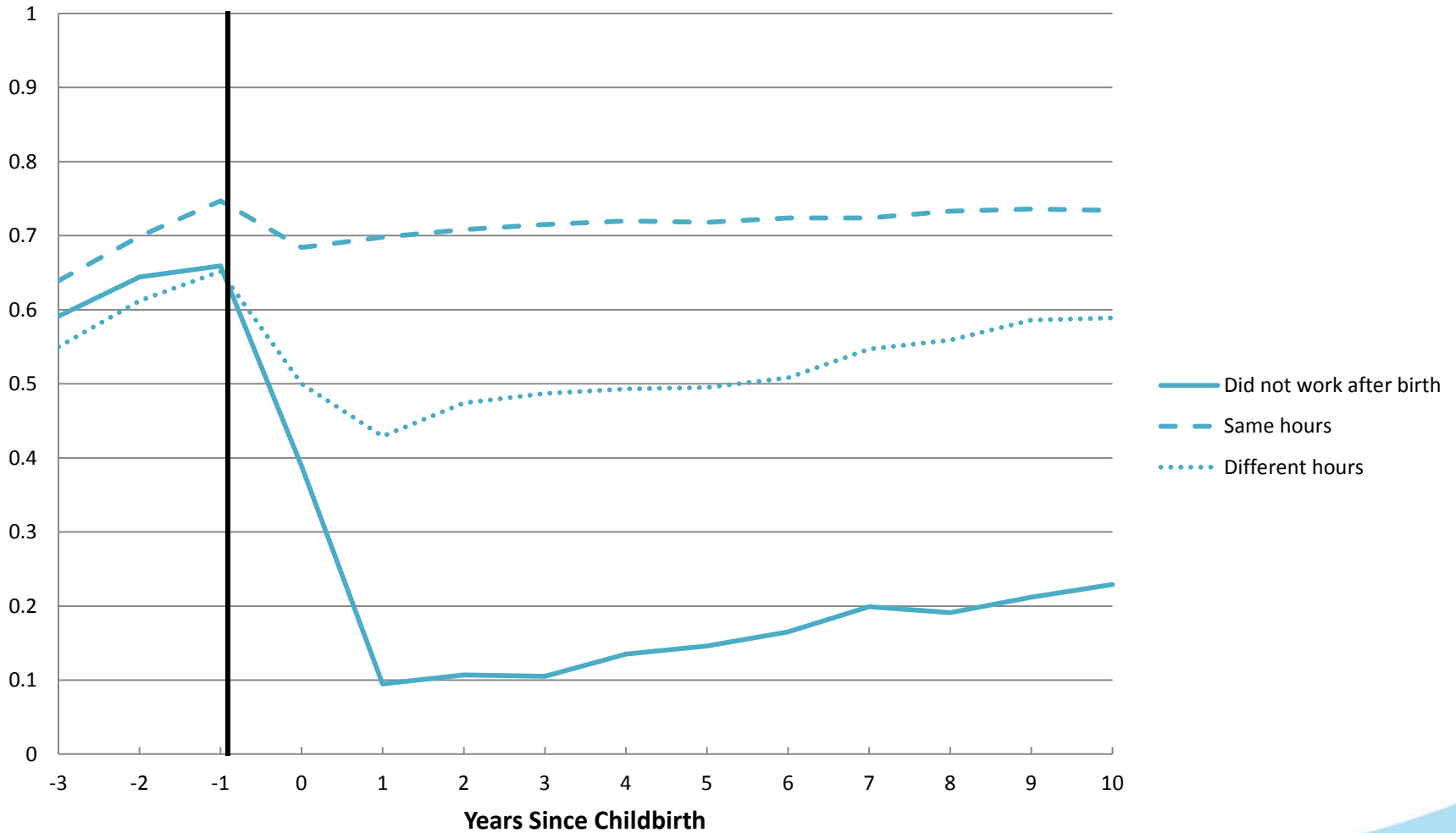
2000s Work since Year First Child Born by SIPP Stayed with Same Employer



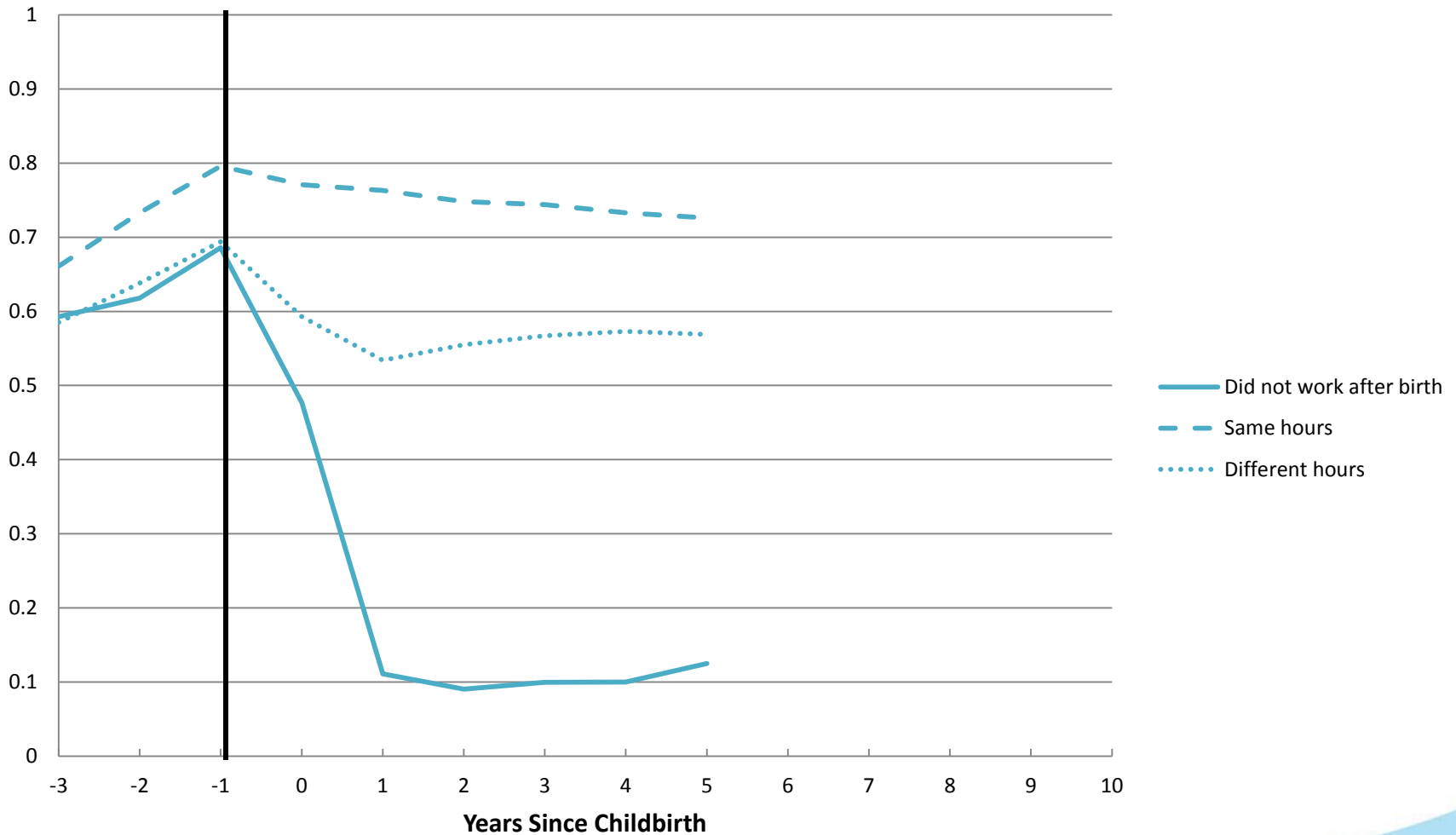
1980s FTFY Work since Year First Child Born by SIPP Kept Same Hours



1990s FTFY Work since Year First Child Born by SIPP Kept Same Hours



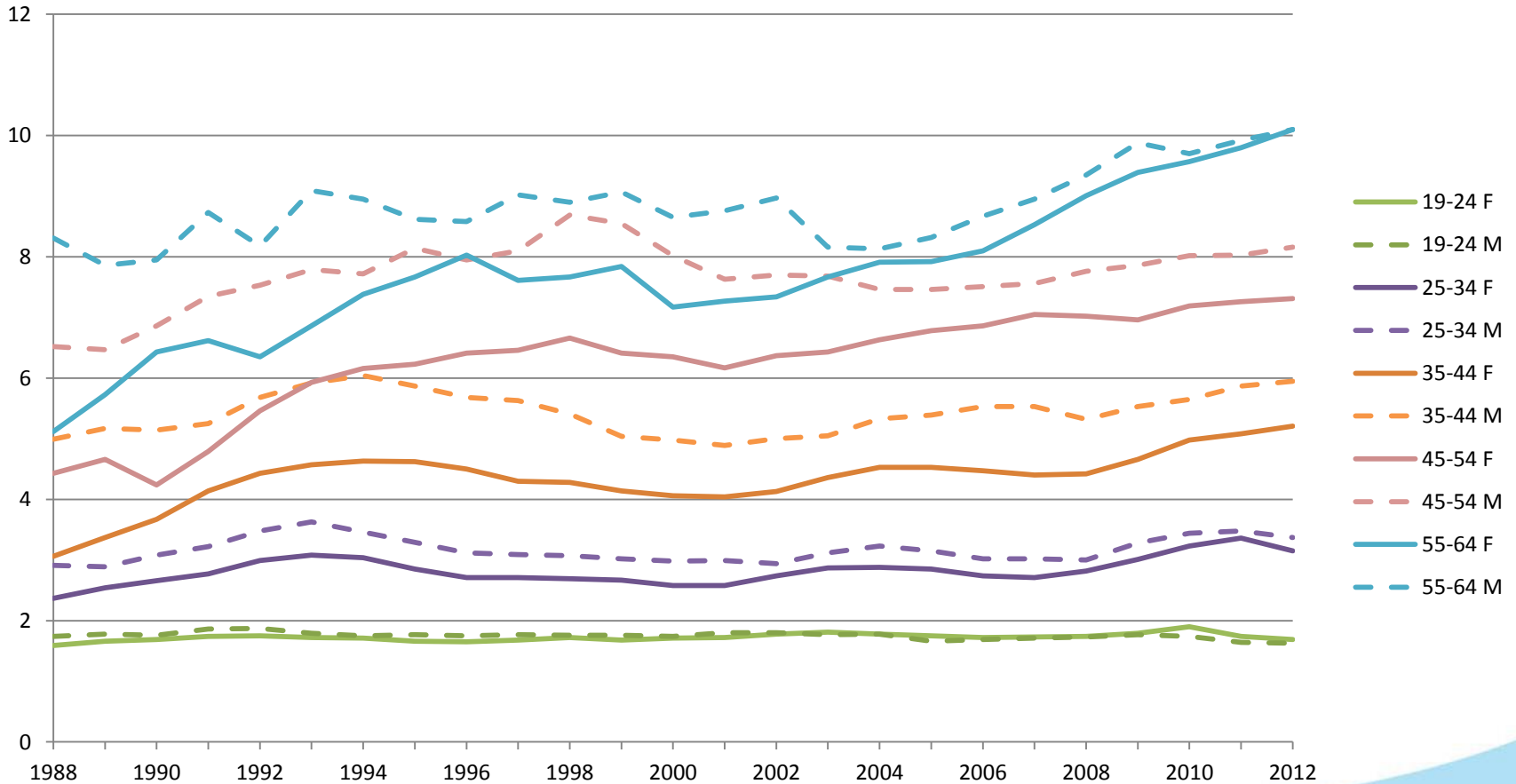
2000s FTFY Work since Year First Child Born by SIPP Kept Same Hours



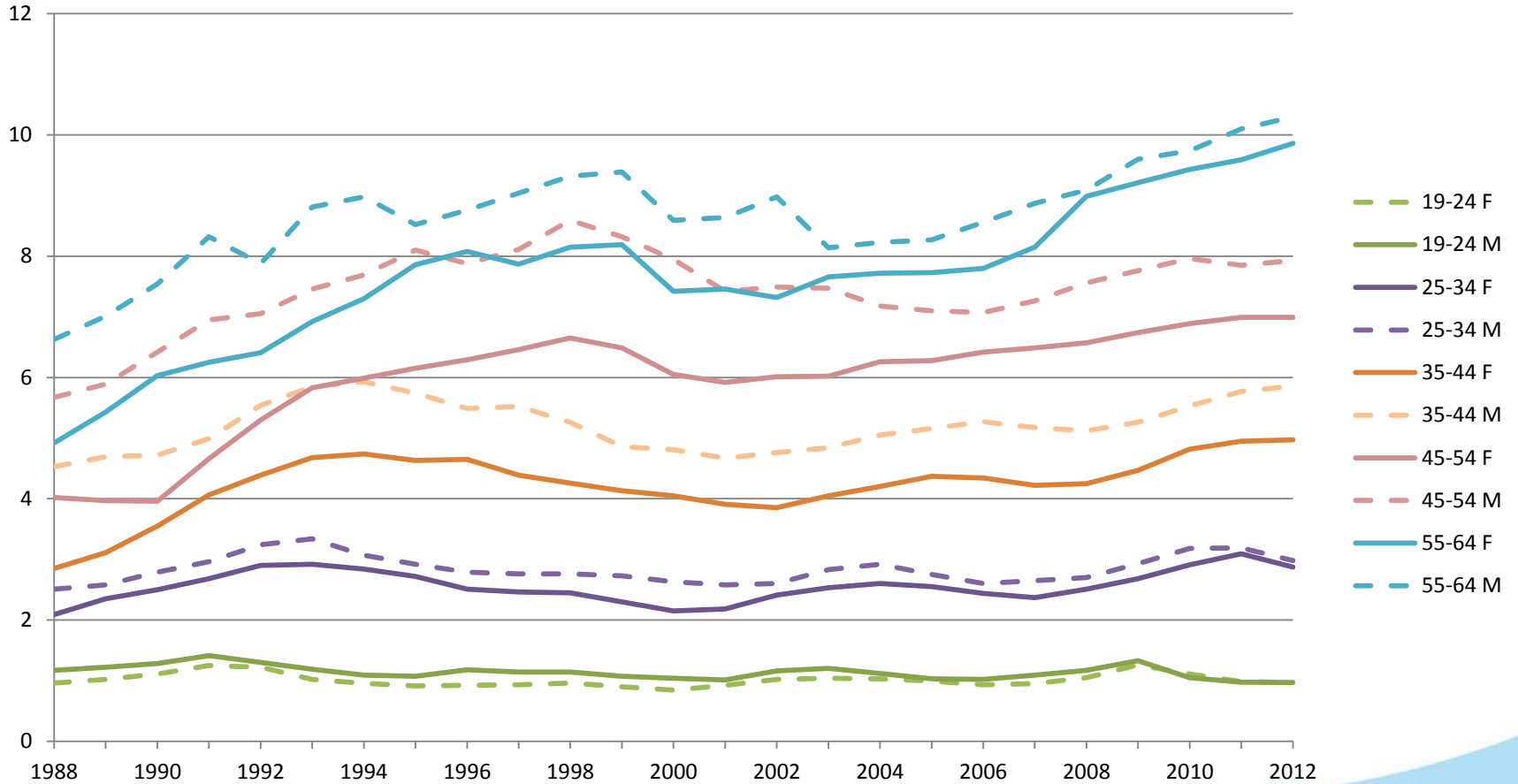
New measures of Job Tenure

- Years of tenure another dimension of human capital accumulation
- Use DER job ids to construct (interpolated) median years of job tenure for wage and salary workers 1988-2012
- Repair job ids in DER by using Census BR and LBD
 - Preliminary analysis suggests small impact on median
- Women/men working longer...and at same jobs?

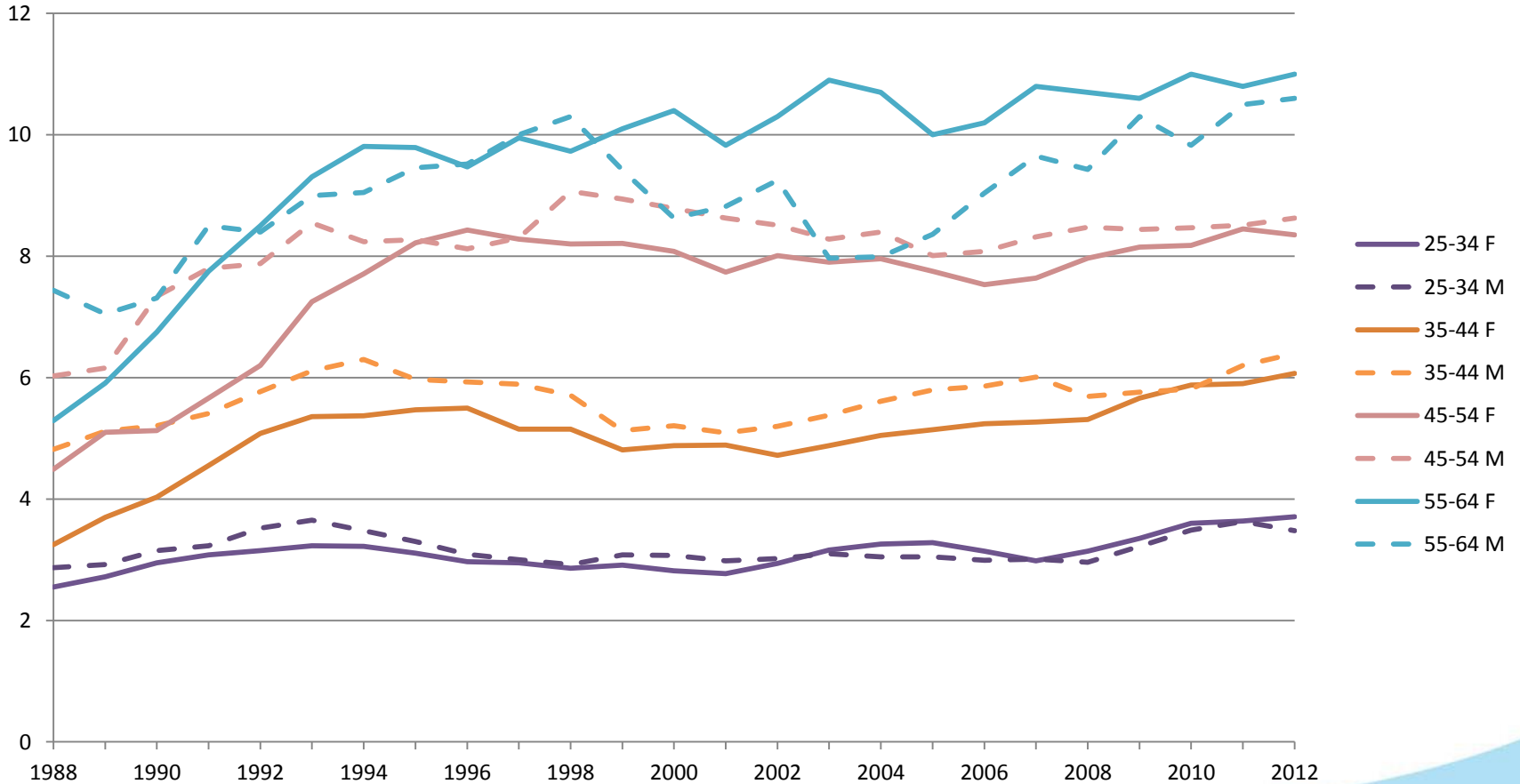
Median Years of Job Tenure by Age and Gender



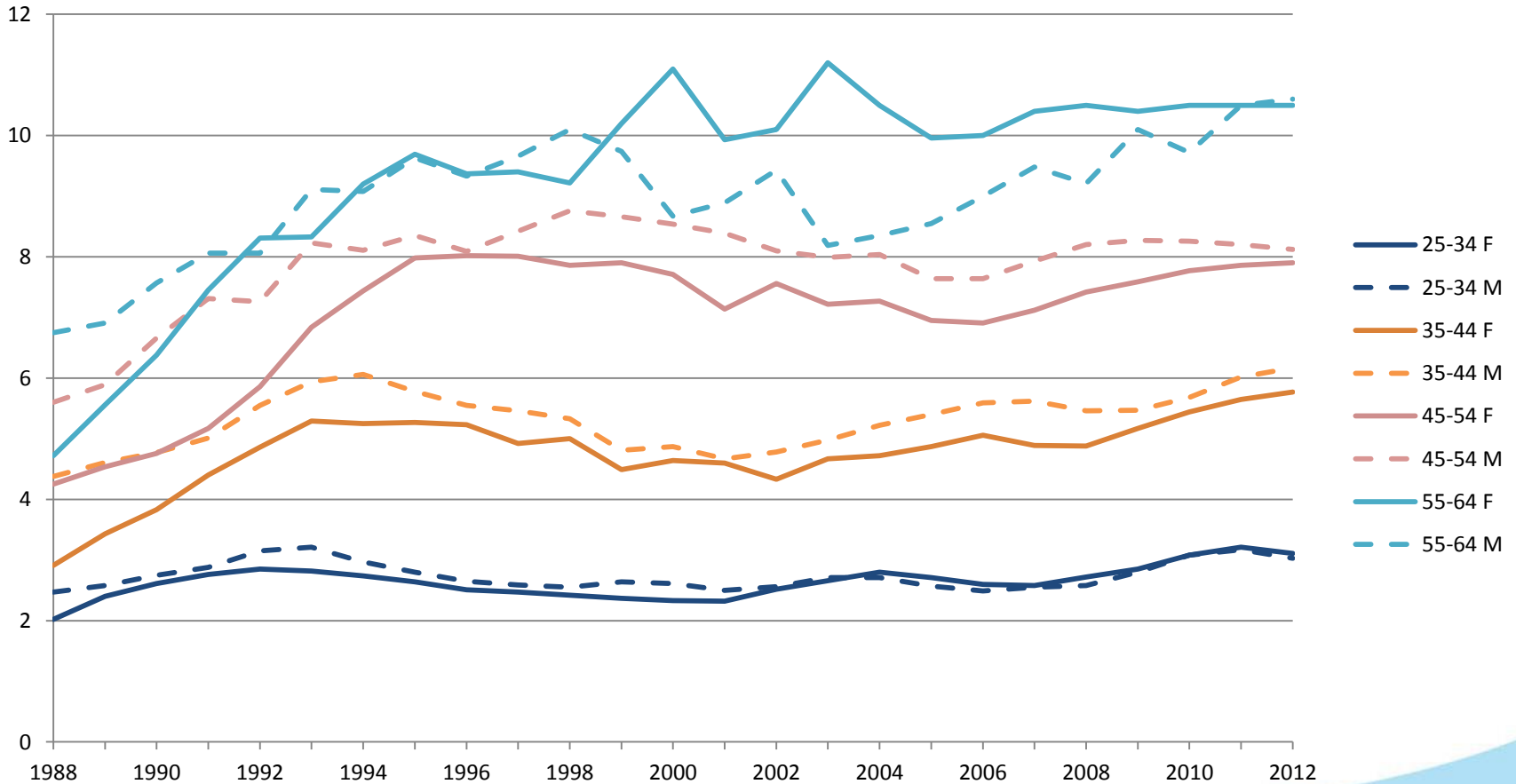
Median Years of FTFY Job Tenure by Age and Gender



Median Years of Job Tenure by Age and Gender, College Plus



Median Years of FTFY Job Tenure by Age and Gender, College Plus



Next Steps-Many Possible Directions

- Address coverage issues 1957-1977, and mortality issues
- Expand labor force outcomes to include social security claiming responses with MBR (own record/spousal/survivor benefit/disability)
- Examine employer characteristics of women who take leave
- Exploit quasi-experimental variation in access to leave?
- Connect tenure, experience, leave analyses more explicitly