

**Gender Differences in Self-employment Duration: the Case of Opportunity and Necessity
Entrepreneurs**

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Abstract

A strand of the self-employment literature suggests that those “pushed” into self-employment out of necessity may perform differently from those “pulled” into self-employment to pursue a business opportunity. While findings on self-employment outcomes by self-employed type are not unanimous, there is mounting evidence that performance outcomes differ between these two self-employed types. Another strand of the literature has found important gender differences in self-employment entry rates, motivations for entry, and outcomes. Using a unique set of data that links the American Community Survey to administrative data from Form 1040 and W-2 records, we bring together these two strands of the literature. We explore whether there are gender differences in self-employment duration of self-employed types. In particular, we examine the likelihood of self-employment exit towards unemployment versus the wage sector for five consecutive entry cohorts, including two cohorts who entered self-employment during the Great Recession. Severely limited labor-market opportunities may have driven many in the recession cohorts to enter self-employment, while those entering self-employment during the boom may have been pursuing opportunities under favorable market conditions. To more explicitly test the concept of “necessity” versus “opportunity” self-employment, we also examine the wage labor attachment (or weeks worked in the wage sector) in the year prior to becoming self-employed. We find that, within the cohorts we examine, there are gender differences in the rate at which men and women depart self-employment for either wage work or non-participation, but that the patterns are dependent on pre self-employment wage-sector attachment and cohort effects.

Keyword: Self-employment, gender differences, gender, entrepreneurship, necessity entrepreneur, opportunity entrepreneur, self-employment duration, Great Recession.

JEL Classification: J15, J20, J24, L26, M13

I. Introduction

A strand of the self-employment literature suggests that those “pushed” into self-employment out of necessity (“necessity” self-employed) may perform differently from those “pulled” into self-employment to pursue a business opportunity (“opportunity” self-employed). While findings on this issue are not unanimous, there is mounting evidence that performance outcomes, such as the duration of self-employment or self-employment earnings, differ between these two types of entrants (e.g., Luque & Jones, 2016; Block & Wagner, 2010; Carrasco, 1999). Another strand of the literature has examined and found important gender differences in self-employment entry rates, motivations for self-employment entry, and performance outcomes (e.g., Jarmin et al., 2016; Fairlie & Robb, 2008).

Using a dataset that links the American Community Survey (ACS)¹ to tax Form 1040 and W-2 records, in this paper we bring together these two strands of the literature and explore whether there are gender differences in the performance of opportunity and necessity self-employed individuals. Specifically, we examine whether the self-employment duration of female opportunity and necessity entrepreneurs differs from that of their male counterparts for five consecutive entry cohorts, including two cohorts who entered self-employment during the Great Recession. Understanding these differences is important for economic growth and policy-making. Self-employment that leads to the establishment of a successful employer and/or innovative firm can be a conduit for job creation and an engine of economic growth. Self-employment may also serve as a tool to cushion economic downturns for those who would otherwise be unemployed. Understanding if and how self-employed types differ in their

¹ For more information on the ACS, visit <https://www.census.gov/programs-surveys/acs/>.

performance outcomes and whether these vary by gender is important to inform and tailor policies. For example, necessity types may be on average more likely to exit self-employment, but men may be more likely than women to leave self-employment for the wage sector.

We identify individuals with a strong wage labor attachment the year prior to self-employment entry as “opportunity” self-employed and those with a more tenuous prior wage labor attachment to be the “necessity” type. As discussed further below in the Data and Methodology sections, by “wage labor” we mean that individuals received a W-2 form and thus earned either a wage or a salary. We focus on the destination of exits from self-employment, using multinomial logit models to predict the probability of departure to either the wage sector or non-participation/unemployment.

Our findings indicate that there are gender differences in the rate at which men and women depart self-employment for either wage work or non-participation, but that the patterns are dependent on pre-self-employment wage-sector attachment and cohort effects. In our analysis, women with a more tenuous connection to wage labor prior to becoming self-employed left self-employment for non-participation/unemployment more quickly than comparable men; however, this finding holds true only for pre-recession cohorts. For those entering self-employment during recessionary years (2008 or 2009), men with a stronger pre-entry wage sector attachment were more likely than comparable women to exit self-employment for wage employment.

The next sections of this paper provide some background literature on the question of necessity and opportunity self-employed, as well as what we currently know about gender differences in self-employment entry and duration. Section III introduces the data. In Section IV, we cover the methods used for analyzing differences in self-employment duration by exit type,

gender, cohort, and wage-labor attachment group. Section V goes over the results and implications of the analysis, and Section VI concludes.

II. Background and Research Questions

There is a self-employment participation gap between men and women in the U.S.. American women are half as likely as men to become entrepreneurs, and female-owned firms are less profitable, small and more likely to fail than male-owned firms. Women are more likely to become self-employed in home-based industries, such as childcare and retail.² Female business owners are consistently less able to secure funding at the same rates as men,³ and self-employed women tend to start off a self-employment spell with less in resources (Rybczynski, 2015). Thus, the gender gap in participation may be due both to lower rates of selection into self-employment by women as well as higher barriers to success—and thus faster exit—after becoming self-employed. There is also a persistent wage gap between self-employed men and women, with women who work full-time earning about 60 percent of what full-time men earn (Lawter et al., 2016). While some studies (e.g., Fairlie and Robb, 2008) suggest that this gap may be due to the types of industries women turn to for self-employment (retail trade as opposed to construction, for example), others find that this gap persists even when controlling for industry, education, hours worked, or choice of occupation (Lawter et al., 2016).

Another strand of the literature explores motivations for becoming self-employed and the potential for outcome differences that those may bring about. When considering the decision to become self-employed, researchers have identified two main paths—those that enter self-

² For instance, see Jarmin et al. (2016) and <http://www.kauffman.org/what-we-do/resources/kauffman-compilation-research-on-gender-and-entrepreneurship>.

³ For instance, see <http://www.kauffman.org/blogs/growthology/2016/03/an-uphill-climb-state-of-the-field-examines-women-in-entrepreneurship>.

employment due to necessity and those who do so to pursue an opportunity (Bosma, 2013; Fairlie, 2013). These are also referred to as push and pull factors, and generally reflect the different individual and market forces that encourage self-employment while also potentially reflecting factors that contribute to labor market participation in general (Patrick et al., 2016). An individual may be pushed into self-employment when opportunities in the wage labor market are scarce (Fairlie, 2013) or when his or her individual human capital attributes are a disadvantage on the labor market (Acs, 2006). An individual may be pulled into self-employment to pursue an attractive business opportunity or because of the non-pecuniary benefits self-employment offers relative to the wage sector. In particular, Hurst & Pugsley (2015) emphasize the role of non-pecuniary benefits and entrepreneurs' tastes for entering self-employment, and how these factors may affect performance outcomes.

Research into necessity and opportunity entrepreneurs provide some evidence of a difference in outcomes by entrepreneurial type. Using household data from Spain, Carrasco (1999) found that those self-employed with previous unemployment episodes (necessity type) are more likely to exit self-employment even after controlling for demographic and local economic conditions. Using data from a household survey in Germany, Block and Wagner (2010) found that necessity entrepreneurs had lower earnings than opportunity entrepreneurs. Luque & Jones (2016) found a higher likelihood of self-employment exit towards unemployment/non-participation for those self-employed who were less attached to the wage sector prior to entry into self-employment. This result held for five different self-employment entry cohorts, where the entry years were 2005-2009. These findings highlight the need to distinguish between these two types in self-employment research, since understanding if and how self-employed types differ in their performance outcomes is important to inform and tailor

policies. Those becoming self-employed out of necessity might be better served by training or education programs instead of policies that stimulate self-employment indiscriminately.

Meanwhile, the opportunity types may find greater benefit from policies aimed to facilitate self-employment and bring down barriers to entry, such as access to capital.

Some studies suggest that different push and pull factors may affect women differentially from men. For instance, there is evidence indicating that desire for work-life balance, flexible time, and scarcer opportunities in the wage labor market may all influence women's self-employment entry (and in turn performance outcomes) compared with men. Fairlie and Robb (2009) find that twice as many self-employed women as men report that having children is a determining factor in becoming self-employed. Moreover, the desire for better work-life balance has been cited as a motivating factor for women's self-employment in a variety of studies (Boden, 1999; Hundley, 2000; Lombard, 2001; Budig, 2006). Meanwhile, although the presence of young children may constrain women to become self-employed in order to better balance work and family, a higher number of children is associated with earlier self-employment exit for women, but not for men (Rybczynski, 2015). Women tend to be more risk averse than men, which Fossen (2012), found to hasten women's exit from self-employment. Marital status also impacts risk aversion, with unmarried men the most risk tolerant and married women the least (Yao & Hanna, 2005). Professional women may be pushed into non-incorporated self-employment due to family responsibilities or due to lack of advancement potential in their career of choice—this distinguishes the push factors for high-skilled women from those of high-skilled men (McKie et al., 2013). Meanwhile, for lower-skilled women, self-employment may be the preferred option when their mix of job skills cannot be matched with jobs of high enough quality

offering flexible schedules (Budig, 2006). Non-professional self-employment in these cases may be jobs such as babysitting, dog walking, and home-based selling (Lawter et al., 2016).

Similarly, or perhaps precisely because women may be pushed or pulled into self-employment in ways that differ from men, performance outcomes, including exit rates, may be conditional on both self-employment type and gender. Our research builds on the findings reported in the previous literature—most notably, Luque and Jones (2016), which found outcome differences between “necessity” vs. “opportunity” self-employment types. Here, we examine whether those outcome differences vary by gender. That is, how does the self-employment duration difference observed in low versus high wage-attachment women compare to that observed in men? How do low wage-attachment self-employed women fair relative to low wage-attachment self-employed men? And, how do high wage-attachment self-employed women fair relative to high wage-attachment self-employed men?

III. Data

As in Luque and Jones (2016), our data come primarily from two sources: the 2005 through 2009 ACS, and administrative records from the Internal Revenue Service (IRS). IRS data comprise individual tax returns (Form 1040) from 2003 to 2013, and W-2 data from 2005 to 2014. In addition, to control for ongoing local economic conditions, we link Bureau of Labor Statistics data on county and state annual unemployment rates.

The ACS is an ongoing representative survey of the U.S. population, collecting and providing socioeconomic, demographic, and housing data for both large and small geographic areas in the U.S. The ACS provides the demographic and socio-economic characteristics as well as some geographic identifiers (such as state or county) of the self-employed individuals in our

analytical dataset. We also use the ACS in combination with our tax data to identify entry into self-employment, as described further below.⁴

Records are linked at the U.S. Census Bureau using a process whereby individuals in each data set are given a unique, protected identifier. When a Social Security Number (SSN) is available in administrative data, the identifier is placed based on SSN. For records in a dataset without an SSN, personally identifiable information such as name, address, and date of birth are used in probabilistic matching to assign persons to their identifier. The fields used for matching are compared against the same fields in a master reference file that contains the unique identifier. Personal information is then removed from each data set before a researcher may link the data sets together and use them for research purposes. For more information on the linking process, see Wagner and Layne (2014).

To capture all tax filers who appear in the successive years of the ACS, we first link all primary Form 1040 filers and then all secondary filers. In this way, we capture self-employed persons in cases when the spouse was the primary filer. We retain only the matching persons between the ages of 25 to 60 in our final analytical dataset. Information on the quality of the match appears in Panel A of Table 1. For each year of data, between approximately 91 and 92 percent of persons who reported being self-employed as their main work activity in the ACS received the unique identifier. Of those who reported being self-employed, between 87 and 91 percent receive an identifier and are matched to a record in the Form 1040 data. We also link

⁴ The ACS is a survey and is subject to sampling error. For more information about confidentiality protection, sampling and non-sampling error and definitions, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.”

information on W-2 earnings to the spouses of identified self-employed persons, using the spouse information on the Form 1040 to account for divorces and marriage over time.

Our unique data allow us to determine entry into self-employment for each cohort (2005-2009) and follow cohort members' self-employment trajectories through time up to 2013. Furthermore, the W-2 data allow us to determine whether the individual exits self-employment toward the wage sector or non-participation (including unemployment) in any given year. We can follow our first entry cohort (the 2005 cohort) for up to nine years (2006–2013), and our last one (the 2009 cohort) for up to five years (2009–2013). The early cohorts—2005 and 2006⁵—entered self-employment during an economic expansion; thus, their members may be more representative of the self-employed “by opportunity” path. Meanwhile, those entering in 2008 through 2009 did so during the worst downturn since the Great Depression, and thus may be more representative of the self-employed “by necessity” path. That being said, the last two cohorts of our data (2008 and 2009) are likely to have experienced self-employment under different circumstances: while the 2009 cohort entered just before the (official) start of the recovery, the unemployment rate reached its peak in October 2009.⁶ The two cohorts likely face different outside opportunities at similar points in their self-employment trajectories.

As mentioned earlier, to further identify potential differences between “necessity” and “opportunity” self-employment, we include information on entrants' pre-entry wage labor attachment. To do this, we use information from the ACS on the number of weeks worked in the previous 12 months. Starting in 2008, the ACS included only a categorical variable, with weeks

⁵ The official start of the Great Recession was December of 2007. We consider 2007 to be a “transition” year between the expansionary and recessionary periods.

⁶ See http://www.nber.org/cycles/US_Business_Cycle_Expansions_and_Contractions_20120423.pdf and https://www.bls.gov/spotlight/2012/recession/pdf/recession_bls_spotlight.pdf.

worked taking the following values: “13 weeks or less,” “14 to 26 weeks,” “27 to 39 weeks,” “40 to 47 weeks,” “48 to 49 weeks” and “50 to 52 weeks.” Our categories are based on the choices ACS provides, ensuring there are enough observations in each category to run our analysis, and grouping categories that are likely to “behave” similarly. The resulting categories are “26 weeks or less”, “27-49 weeks”, and “50 or more weeks”. We then include the same wage labor attachment categories for years of data prior to 2008.

To identify our self-employed cohorts using a precise definition, we make use of ACS data in conjunction with the tax data. We first identify persons in the ACS who indicated (in the ACS) that self-employment was their main current or most recent job activity as of the survey year. We then subset on those individuals who filed a self-employment tax form for the same tax year as the survey year (e.g., for the 2005 cohort, filed as self-employed in 2005), but did not file a self-employment tax form in the prior two years. Self-employment tax forms include Schedule C and Schedule self-employed (SE); if either of these is first filed in the survey year, we consider that filer to have entered self-employment based on joint survey response and tax data. This definition allows us to isolate ACS respondents who entered self-employment in the year in question, both in terms of their response at the time of the survey and in subsequent claiming of self-employment earnings.⁷

We then impose some restrictions to our data to obtain our analytic dataset. In this paper, we focus on self-employed individuals with a stronger, more continuous attachment to self-employment (once they become self-employed). For this reason, if a cohort member does not file any taxes or a Schedule C or SE for two or more consecutive years and then goes back to filing

⁷ As mentioned earlier, please note that our self-employed analytical dataset does not include incorporated businesses since our tax data provides information only on whether individuals filed Schedules C and SE. The exploration of incorporated as well as unincorporated self-employed individuals is left to future work as additional data becomes available.

taxes or a Schedule C or SE, we exclude that person from our analysis. At the same time, we include individuals with one-year gaps in self-employment and do not treat these gaps as departures from self-employment. That is, if an individual files a Schedule C or SE in a given year, then he/she does not in the following year, but files either Schedule again in the subsequent year, we consider that individual to have remained self-employed during those three years. We leave for future work the exploration of self-employment trajectories that are more volatile and with a more tenuous attachment to self-employment.

We then use W-2 records covering 2005 to 2014 to identify what happens to self-employment leavers. The records are linked using the same linking process described earlier. We examine whether those who exit self-employment appear to become unemployed (or drop from the labor force), or instead are found in the W-2 data—indicating entry into wage labor. Panel B of Table 1 shows how many people fit into this definition. Between approximately 66 and 69 percent of ACS self-employed who were matched to a Form 1040 record filed a Schedule C or SE. The drop in percent matched may arise from a variety of measurement issues. The first is that individuals that report being self-employed on the ACS may be incorporated businesses and the tax data available to us only allow us to identify sole-proprietors or partners (in a partnership), but not corporations.⁸ Also someone may report being self-employed on the ACS, but they do not claim their self-employment earnings (erroneously or fraudulently). In addition, individuals may confuse the definition of self-employment and may, in reality, receive a W-2. Finally, a person may report being self-employed erroneously to the ACS.

⁸ A sole proprietorship is an unincorporated business owned and run by one individual. A partnership is an unincorporated business owned and run by more than one person.

The next row of Panel B in Table 1 reflects the next step of our definition, which requires that individuals be entrants into self-employment. We retain only current self-employed who did not file a Schedule C or SE in the preceding two tax years. The final step applies our age restriction. We show the number of self-employment entrants per year and the percentage of the jointly defined self-employed that this represents. The newly self-employed account for about 3.5 percent of all self-employed in each cohort, and about 3 percent meet all the previous restrictions and the age restrictions.

Tables 2 and 3 report on the demographic characteristics of the analytical dataset. As in Luque and Jones (2016), characteristics are relatively stable across cohorts, although the recession cohorts were more likely to have a BA/BS or MA/PhD and to have \$75,000 or more in family income. Recession cohorts also had higher labor wage market attachment, with lower percentages in the intermediate category of pre-entry wage attachment and higher percentages in the highest wage attachment category. Table 3 shows that demographic characteristics vary by wage labor market attachment. For every characteristic except Hispanic origin and citizenship status, distributions by sex in each of the three wage labor market attachment categories are statistically different from the overall distribution by sex of the dataset. Of particular note for the current study is the finding that, compared with the overall distribution of gender in the analytic data, women are overrepresented compared with men in the 26 weeks or less wage labor attachment group and underrepresented in the 50 or more weeks group. We should mention that we use unweighted data in our estimation. Therefore, figures in Tables 2 and 3 may not be representative of the underlying self-employment population.

Finally, we use gender from the ACS and filing status from the Form 1040 data to look separately at male and female self-employment and to include spouse information and marital

status as covariates. Our main interest is the intersection between gender and pre-self-employment wage labor market attachment; thus we define groups based on gender and the wage labor market attachment variables described previously.

IV. Methodology

To examine potential gender differences in self-employment duration within wage-labor attachment groups for each entry cohort, we use multinomial logistic regression analysis. The dependent variable reflects three outcome states: no exit from self-employment (the reference category), exit to wage labor, or exit to non-participation.

We model the likelihood of self-employment exit as a function of pre-entry wage-labor attachment categories, gender, and other individual and household characteristics that have been found relevant in the gender self-employment literature. We also control for local economic conditions and industry, occupation, state, and year fixed effects as they are confounding factors. Because our primary interest is to examine whether we observe gender differences in self-employment exit rates within self-employment type, we interact gender with our pre-entry wage-labor attachment categories. Specifically, we estimate model (1) below. We do not run logits for women and men separately because some of our cell sizes are too small to support reliable estimation. In addition, since we want to examine how results may vary across recession and non-recession cohorts, we estimate model (1) for each entry cohort independently. Standard errors are clustered at the county level to account for the inclusion of county-level unemployment rate. Also, because we use unweighted data, we need to exercise caution when interpreting our results since they may not be representative of the full self-employed population.

$$\ln \frac{P(y_i=m)}{P(y_i=1)} = \alpha_m + \beta_{m1}WW_i + \beta_{m2}Gender_i + \beta_{m3}WW_i * Gender_i + \beta_{m4}Child_{it} + \beta_{m5}SWage_{it} + \beta_{m6}Hispi + \beta_{m7}Race_i + \beta_{m8}Cit_i + \beta_{m9}Age_i + \beta_{m10}Edu_i + \beta_{m11}Htenure_i + \beta_{m12}FamInc_i + \beta_{m13}Ind_i + \beta_{m14}Occ_i + \beta_{m15}Unemp_{ct} + \beta_{m16}\sigma_s + \beta_{m17}\varphi_t + \varepsilon_{it} \quad (1)$$

As mentioned earlier, in any given year during the period of analysis, our annual tax and W-2 data provide us with longitudinal information on whether the individual remains self-employed or exits self-employment towards either the wage sector or non-participation in the labor market (this includes either unemployment, retirement, or any other withdrawal from the labor force). We define an exit from self-employment as the failure to file either a Schedule C or a Schedule SE for two (or more) consecutive tax years. This is because, as explained in the Data Section, we allow individuals in our analytic dataset to have one-year gaps in self-employment. That is, if an individual is self-employed in year $t-1$, is not self-employed in year t , but re-appears as self-employed in $t+1$, we consider that individual to have remained self-employed throughout that period, from $t-1$ to $t+1$.⁹ The dependent variable reflects three outcome states (indexed by m): no exit from self-employment (the base category), exit to wage labor, or exit to non-participation. We define the latter two categories as follows: If t is the last year of self-employment for individual i and then we observe the individual in W-2 data in $t+1$, then we identify that individual as having become employed in the wage sector in year $t+1$. If we do not see him/her in the W-2 data in year $t+1$, then we consider that individual to have become unemployed or to have exited the labor market.

As already stated, one of our primary goals is to examine whether female “opportunity/necessity” self-employed types exhibit different self-employment exit rates from

⁹ Individuals that remain self-employed up to our last time period are treated as right-censored observations.

male “opportunity/necessity” self-employed types. We thus include a categorical variable (*WW* in model (1), above) based on the number of weeks the self-employed individual worked in the wage sector the year prior to entering self-employment. We view individuals who worked less weeks (or with a lower “attachment” to wage labor) as having limited possibilities in the wage sector, thus aligning with the “necessity” view. Specifically, as described in Section III, we create three different wage-labor attachment categories: 26 weeks or less, 27-49 weeks, and 50 or more weeks (from here on, referred to as “labor-attachment” groups). We then interact this categorical variable with gender (*Gender_i*) to examine gender patterns within each labor-attachment group.

Other covariates include categorical variables representing individual or household-level characteristics that have been shown to potentially have a role in self-employment outcomes.¹⁰ Of particular interest in our context is the number of children living at home (*Child_{it}*) and spouse’s W-2 wages (*SWage_{it}*). *Child_{it}* is a time-varying binary variable equaling one if the self-employed person has any children living at home at time *t* and equals zero otherwise. *SWage_{it}* is also a time-varying categorical variable with seven different categories. Five of the seven categories correspond to the five quantiles of spouse’s wages of those self-employed who are married, the sixth category represents those who are married but with zero spouse’s wages, and the seventh category are those who are not married. These two variables—gender and spouse wages—are important for identifying how push and pull factors may vary by gender and marital status, as discussed in Section II. For example, married women may make different self-employment choices from unmarried women due to the support of spouse income.

¹⁰ See, for example, Fairlie and Robb (2009), among many others reported in Section II.

Further individual characteristics are the race, Hispanic origin, gender, citizenship status, age, educational attainment, family income, and housing tenure of the self-employed individual. The variable $Race_i$ contains four different race groups: White alone, Black alone, Asian alone, and Other – which includes American Indian/Alaska Native (AIAN) alone, Native Hawaiian/Pacific Islander (NHPI) alone, and Other race (which includes persons of two or more races).¹¹ $Hispi$ includes those of any race who identify as Hispanic. $Citi$ is a dummy variable identifying those who are U.S. citizens. Edu_i comprises five educational attainment categories: less than high school (HS), HS degree, some college, bachelor's degree (BS/BA), and Master's degree or beyond. $Htenure_i$ reflects whether the self-employed individual rents or owns a home. $Unemp_{ct}$ is the time-varying annual change in the county-level unemployment rate where the self-employed individual resides, and is included to control for ongoing local economic/labor market conditions affecting the individual's decision to exit self-employment. Ind_i , Occ_i , σ_i , and φ_t are dummy variables controlling for industry, occupation, state, and year fixed effects respectively.

Because our analytical dataset includes self-employed individuals with self-employment gaps of one year, we could potentially overestimate exit rates if our last year of analysis was 2013. That is, individuals who do not file either a Schedule C or a Schedule SE in 2013 but reappear as self-employed in 2014 would be counted as departing self-employment in 2013. For this reason, we treat 2012 as the last year of our analysis period. In other words, self-employed individuals who did not file a Schedule C or SE in 2012, but do so in 2013 are still considered self-employed in 2012.

¹¹ These race groups are combined because of small cell sizes, which would lead to unreliable estimates.

V. Results

As already mentioned, previous work on entrepreneurial types has found outcome differences between necessity and opportunity self-employed. For instance, Luque & Jones (2016) found that self-employment entrants with a more tenuous connection to the wage labor market prior to entry (i.e., necessity types) are more likely to exit self-employment towards non-participation/unemployment relative to their higher wage-labor-attachment counterparts.¹² Based on our multinomial logit estimation results from equation (1), Panels A-E in Figure 1 show that this outcome holds for self-employed women as well as men in our cohorts.¹³ These figures show, for self-employed men and women separately, predicted probabilities of self-employment exit towards wage employment and unemployment/non-participation by wage attachment group.¹⁴ Each of the panels corresponds to an entry cohort. We see that self-employed women with the lowest attachment to wage labor prior to entry are more likely to exit self-employment towards unemployment/non-participation than self-employed women in the intermediate and highest attachment groups (“27-49 weeks” and “50 or more weeks” respectively). For some of the cohorts (and years),¹⁵ self-employed women in the intermediate attachment group were also more likely to leave self-employment for non-participation than women in the highest attachment

¹² These results may not be representative of the self-employed population because this work used unweighted data.

¹³ Accompanying Table A1 in the Appendix shows the corresponding predicted probabilities of exit from self-employment towards non-participation (Panel A) and towards wage employment (Panel B) by wage attachment group for each gender.

¹⁴ By ‘predicted probabilities’, we mean average predicted probabilities (or Average Partial Effects, APEs) calculated by gender at each year while maintaining the rest of the covariates at their observed values. We use this approach in the paper because the goal is to obtain an estimate of the average effect in the female relative to the male self-employed population - rather than aiming to understand the effect for the average female/male case. See Hanmer & Kalkan (2013) for a discussion of the subject. Please note that the estimates we obtain apply only to the cohorts in our analytical datasets, and thus, may not apply to the entire self-employed population.

¹⁵ See Table 4, Panels A and B.

group. Likewise, we find similar result for self-employed men.¹⁶ The statistical significance of these differences across wage-attachment groups can be seen in Table 4.¹⁷

The research question posited in this paper goes one step beyond and explores whether the exit differences observed in low- versus high-attachment women are significantly different from those observed in men. That is, how do low wage-attachment self-employed women fare relative to low wage-attachment men? And, how do high wage-attachment self-employed women compare to high wage-attachment self-employed men?

Before discussing our main results, we should mention that we primarily focus on showing (average) predicted probabilities of exit for female and male self-employed by wage attachment categories in our period of analysis. We do this for each cohort independently. While we also calculate the marginal “effect” of being female within wage attachment group, the reason for focusing on predicted probabilities is that the core of our paper hinges upon the interaction of gender and labor-attachment groups, and interacted variables are difficult to interpret and visualize in nonlinear models, especially multinomial logits. Displaying our results this way will give us more insight onto potential differences in self-employment exit patterns for female and male opportunity/necessity entrepreneurs.¹⁸ These predicted self-employment exit probabilities are the result of the multinomial logit estimation of equation (1) and thus are estimated after controlling for individual characteristics, local economic conditions, and industry

¹⁶ As indicated above, in this paper we restrict our analytical dataset to prime age working adults, and find that self-employment exit towards the wage sector is also more likely for self-employed people with a higher attachment to the wage sector prior to self-employment entry. This is true for women as well as men.

¹⁷ We show statistical significance at the 10, 5 and 1 percent level. A result is viewed as statistically significant if its level of significance is 10 percent.

¹⁸ For the interpretation of interaction terms in nonlinear models, see Karaca et al. (2012), Greene (2010), and Ai & Norton (2003).

and state fixed effects. We then test the statistical significance of the female-male differences in exit probabilities within each labor-attachment group for each entry cohort.

Panels A through E in Figure 2 report the predicted self-employment exit probabilities by gender and pre-entry wage-attachment groups, calculated for each year of exit and for the two different exit trajectories.¹⁹ Each Panel in Figure 2 corresponds to an entry cohort. As mentioned, our interest is in how these predicted probabilities differ between men and women of comparable wage-attachment types; accordingly, Table 5 shows the statistical significance of the gender difference within each wage-attachment group. These results should be taken together to assess the self-employment experience by gender, wage attachment group, and time-varying labor-market conditions.

We find different patterns of exit by gender-attachment group depending on when entry into self-employment occurs. That is, the answer to the question of how do low/high wage-attachment self-employed women fare relative to their male counterparts seems to depend on whether they entered self-employment before or during the recession. Specifically, our results suggest that within the cohorts we examined, self-employed women in the lowest-wage-attachment group entering self-employment during an economic boom (2005 and 2006 cohorts) are more likely than their male counterparts to leave self-employment through non-participation/unemployment (Panels A and B in Figure 2).²⁰ This was also the case for 2005 cohort women in the intermediate attachment group. In addition, self-employed women in the lowest attachment group in the 2006 cohort had a lower likelihood than their male counterparts

¹⁹ Table A1 in the Appendix shows the predicted exit probabilities displayed in Figure 2.

²⁰ See Panel A of Table 5 for the statistical significance of the difference.

to leave self-employment to become employed in the wage sector. These results may indicate both less self-employment success and fewer opportunities on the wage market.

Meanwhile, self-employed women in the intermediate-attachment group entering self-employment during the recession (2008 and 2009) and those in the high-attachment group entering self-employment in 2009 are as likely as their male counterparts to leave self-employment towards non-participation/unemployment, but are less likely than men to exit self-employment to become employed in the wage sector (see Panels D and E in Figure 2, and Table 5 Panels A and B for the statistical significance of the differences). In the 2009 cohort, self-employed women in the highest wage attachment group were also more likely to remain self-employed than their male counterparts (see Table 5, Panel C). These results suggest that intermediate and high wage-attachment women who entered self-employment during a recession may not return to wage work (whether voluntarily or involuntarily) as quickly as their male counterparts. If this outcome is voluntary, it may be indicative of higher self-employment survival rates for this group of women (relative to comparable men). If involuntary, it may simply indicate fewer opportunities for this group of women in the wage sector.²¹

These gender differences in self-employment exit can also be seen in Table 6, which shows the marginal “effect” of being female within wage attachment group.²² Women in the lowest wage attachment group who entered self-employment in either 2005 or 2006 as well as women in the intermediate attachment group entering in 2005 (i.e., economic boom years) seem more likely than their male peers to leave self-employment for unemployment or inactivity in the labor market. Meanwhile, women in the intermediate wage attachment group entering self-

²¹ Note that for the 2007 cohort, all results in Table 5 are statistically insignificant.

²² Marginal effects are estimated using our multinomial logit in equation (1).

employment in either 2008 or 2009 as well as women in the high-attachment group entering in 2009 (i.e., recession years) are less likely than their male counterparts to exit self-employment for employment in the wage sector.

Having the necessary data to be able to further identify the motivations for becoming self-employed and thus, those being pushed into self-employment versus those being pulled into it, would go a long way to help us better understand the observed results and the underlying contributing factors - such as the role of household labor supply decisions. Taken as a whole, our results are consistent with findings in the literature indicating that self-employed women tend to perform differently from their male peers. We find that gender outcome differences persist even within self-employment types, and that the nature of these differences seem to vary depending on the general economic conditions at the time of self-employment entry (economic boom vs. recession). We need to exercise caution when interpreting these results though since, as discussed earlier, our analytical dataset may not be representative of the full self-employed population.

VI. Conclusion

In this paper, we bring together two strands of the literature on self-employment: Features of self-employment that distinguish those who are pushed into self-employment versus those who are pulled; and features of self-employment, and especially self-employment duration, that are dependent on gender. Separating out groups of self-employment entrants distinguished by exit destination and cohort of entry, we examine the “effect” of gender on self-employment duration by self-employment type.

Our results are consistent with the literature in that we find outcome differences between self-employed men and women. Further, our findings indicate that these gender differences persist within self-employment types: the likelihood of self-employment exit for low wage-attachment women differs from that of low wage-attachment men—and likewise for the higher wage-attachment group. We also found that the nature of these differences seem to vary depending on the general economic conditions at the time of self-employment entry (economic boom or recession).

Our findings suggest that, for the cohorts we examined, women who enter self-employment before the recession (in 2005 and 2006) with a weak pre-entry wage-market attachment were more likely than their male peers to exit self-employment for non-participation. Meanwhile, intermediate-attachment men in both recession cohorts (2008 and 2009) and high-attachment men in the 2009 recession cohort were more likely to exit to the wage sector than their female counterparts. Also, for the 2009 recession cohort, high-attachment women were more likely to remain self-employed than comparable men. These results may indicate that women entering self-employment through an opportunity (high wage-attachment women) may have more success than men under the “right” economic conditions, or they may indicate that jobs returned more quickly during the recovery for self-employed men. We caution though that these results are based on unweighted data and self-employed who are not incorporated, thus they may not be representative of the underlying full self-employment population.

What factors may contribute to these differences may range from differences in financial constraints to household labor supply decisions including the role of secondary earners. At the same time, it is not clear if higher wage-attachment groups entering self-employment during harsh economic times can be classified as opportunity entrepreneurs, since many may have

become self-employed due to the loss of a job during the recession. Unfortunately, our data do not allow us to fully identify the timing and motivations underlying self-employment entry. More research needs to be conducted with additional cohorts and a finer identification of motivations and self-employment types to explore these issues. For these reasons, we need to exercise caution when interpreting these results. As new data become available, we plan to expand our analytical dataset to include incorporated businesses as well as drill-down on self-employment motivations in future work.

References

- Acs, Z. (2006). How is entrepreneurship good for economic growth? *Innovations*, 1(1), 97-107.
- Ai, C., & Norton, E. C. (2003). Interaction terms in logit and probit models. *Economics letters*, 80(1), 123-129.
- Block, J. H., & Wagner, M. (2010). Necessity and opportunity entrepreneurs in Germany: Characteristics and earnings differentials. Working paper.
- Bosma, N. (2013). The Global Entrepreneurship Monitor (GEM) and its impact on entrepreneurship research. *Foundations and Trends® in Entrepreneurship*, 9(2), 143-248.
- Budig, M. J. (2006). Intersections on the road to self-employment: Gender, family and occupational class. *Social Forces*, 84(4), 2223-2239.
- Carrasco, R. (1999). Transitions to and from self-employment in Spain: an empirical analysis. *Oxford Bulletin of Economics and Statistics*, 61(3), 315-341.
- Fairlie, Robert W. and Robb, Alicia, Gender Differences in Business Performance: Evidence from the Characteristics of Business Owners Survey (August 29, 2008). US Census Bureau Center for Economic Studies Paper No. CES-WP- 08-39. Available at SSRN: <https://ssrn.com/abstract=1260987> or <http://dx.doi.org/10.2139/ssrn.1260987>
- Fairlie, R. W., & Robb, A. (2009). Entrepreneurship, self-employment and business data: an introduction to several large, nationally-representative datasets.
- Fairlie, R. W. (2013). Entrepreneurship, economic conditions, and the great recession. *Journal of Economics & Management Strategy*, 22(2), 207-231.
- Greene, W. (2010). Testing hypotheses about interaction terms in nonlinear models. *Economics Letters*, 107(2), 291-296.
- Hanmer, M. J. and Ozan Kalkan, K. (2013), Behind the Curve: Clarifying the Best Approach to Calculating Predicted Probabilities and Marginal Effects from Limited Dependent Variable Models. *American Journal of Political Science*, 57: 263–277.
- Jarmin, Ron S., C.J. Krizan, and Adela Luque (2016). "Small Business Growth and Failure During the Great Recession: the Role of House Prices, Race and Gender." CARRA Working Paper 2016-08. Washington, D.C.: Center for Administrative Records Research & Applications, U.S. Census Bureau.
- Karaca-Mandic, P., Norton, E. C., & Dowd, B. (2012). Interaction terms in nonlinear models. *Health Services Research*, 47(1pt1), 255-274.
- Kauffman Compilatons: Research on Gender & Entrepreneurship, August 2016.
- Lawter, L., Rua, T., & Andreassi, J. (2016). The Glass Cage: The Gender Pay Gap and Self-Employment in the United States. *New England Journal of Entrepreneurship*, 19(1), 23.

Luque, A, & Jones, M.R. (2016). Differences in Self-employment Duration by Year of Entry & Pre-entry Wage-sector Attachment Working Paper Number: Center for Administrative Records Research and Applications Working Paper 2016-09.

McKie, L., Biese, I., & Jyrkinen, M. (2013). 'The Best Time is Now!': The Temporal and Spatial Dynamics of Women Opting in to Self-Employment. *Gender, Work & Organization*, 20(2), 184-196.

Patrick, C., Stephens, H., & Weinstein, A. (2016). Where are all the self-employed women? Push and pull factors influencing female labor market decisions. *Small Business Economics*, 46(3), 365-390.

Rybczynski, K. (2015). What drives self-employment survival for women and men? Evidence from Canada. *Journal of Labor Research*, 36(1), 27-43.

Wagner, D. and Layne, M. (2014). The Person Identification Validation System (PVS): Applying the Center for Administrative Records Research and Applications' (CARRA) Record Linkage Software. Center for Administrative Records Research and Applications Working Paper 2014-01.

Yao, R., & Hanna, S. D. (2005). The effect of gender and marital status on financial risk tolerance. *Journal of Personal Finance*, 4(1), 66.

Tables

Table 1. Identifier application and match rates for reported self-employed in American Community Survey (ACS) by data year

| | 2005 | 2006 | 2007 | 2008 | 2009 |
|------------------------------------|---------|---------|---------|---------|---------|
| Panel A | | | | | |
| Number reporting SE in ACS | 312,622 | 312,622 | 305,972 | 290,309 | 284,888 |
| Number of ACS SE with identifier | 287,739 | 287,739 | 280,797 | 265,235 | 259,849 |
| Percent of total | 92.0% | 92.0% | 91.8% | 91.4% | 91.2% |
| Number matched to same-year 1040 | 274,569 | 273,792 | 277,393 | 256,577 | 251,035 |
| Percent of total | 87.8% | 87.6% | 90.7% | 88.4% | 88.1% |
| Panel B | | | | | |
| Defined as SE in both ACS and 1040 | 182,359 | 188,271 | 187,466 | 172,612 | 170,173 |
| Percent of matched records | 66.4% | 68.8% | 67.6% | 67.3% | 67.8% |
| Number defined as new SE | 6,462 | 6,661 | 6,784 | 6,085 | 6,019 |
| Percent of matched SE | 3.5% | 3.5% | 3.6% | 3.5% | 3.5% |
| Number meeting age restrictions | 5,374 | 5,351 | 4,804 | 5,374 | 5,351 |
| Percent of matched SE | 2.9% | 2.9% | 2.9% | 2.8% | 2.7% |

Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014.

Note: For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Table 2: Selected demographic characteristics of entry cohorts

| | 2005 cohort | 2006 cohort | 2007 cohort | 2008 cohort | 2009 cohort |
|--------------------|-------------|-------------|-------------|-------------|-------------|
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Gender | | | | | |
| Female | 40.7% | 40.0% | 39.8% | 39.4% | 39.0% |
| Male | 59.3% | 60.0% | 60.2% | 60.6% | 61.0% |
| Children at home | | | | | |
| 0 | 41.6% | 42.2% | 42.3% | 40.9% | 41.8% |
| 1 | 19.3% | 20.2% | 21.0% | 21.2% | 20.3% |
| 2+ | 39.1% | 37.5% | 36.6% | 37.9% | 37.9% |
| Marital status | | | | | |
| Married | 78.4% | 76.4% | 76.1% | 77.5% | 76.4% |
| Not married | 21.6% | 23.6% | 23.9% | 22.5% | 23.6% |
| Race | | | | | |
| White alone | 88.6% | 86.9% | 87.8% | 87.4% | 87.3% |
| Black alone | 2.9% | 3.8% | 3.4% | 4.1% | 3.4% |
| Asian alone | 4.5% | 4.3% | 4.3% | 4.9% | 4.9% |
| Other | 4.1% | 5.0% | 4.5% | 3.6% | 4.5% |
| Hispanic origin | | | | | |
| Non-Hispanic | 93.7% | 92.2% | 91.8% | 91.7% | 91.0% |
| Hispanic | 6.3% | 7.8% | 8.2% | 8.3% | 9.0% |
| Citizenship status | | | | | |
| Citizen | 94.8% | 94.7% | 94.6% | 93.9% | 94.3% |
| Non-citizen | 5.2% | 5.3% | 5.4% | 6.1% | 5.7% |
| Education | | | | | |
| Less than HS | 6.6% | 7.3% | 6.6% | 6.5% | 6.8% |
| HS | 23.8% | 25.7% | 25.1% | 23.5% | 22.1% |
| Some college | 32.2% | 31.7% | 30.2% | 30.5% | 31.8% |
| BS/BA | 23.2% | 22.1% | 23.5% | 24.5% | 24.2% |
| Master/PhD | 14.2% | 13.3% | 14.6% | 15.0% | 15.1% |
| Age | | | | | |
| 25-34 | 22.0% | 20.8% | 21.1% | 21.2% | 20.4% |
| 35-44 | 32.5% | 31.2% | 30.8% | 30.0% | 29.0% |
| 45-54 | 31.2% | 32.5% | 32.0% | 32.0% | 33.5% |
| 55-60 | 14.3% | 15.5% | 16.1% | 16.8% | 17.1% |

Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014.

Note: For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Table 2 (cont'd): Selected demographic characteristics of entry cohorts

| | 2005 cohort | 2006 cohort | 2007 cohort | 2008 cohort | 2009 cohort |
|---------------------------|-------------|-------------|-------------|-------------|-------------|
| Family income | | | | | |
| <\$25K | 47.1% | 48.0% | 45.9% | 45.1% | 46.6% |
| \$25-50K | 22.4% | 22.8% | 22.4% | 21.4% | 21.4% |
| \$50-75K | 13.7% | 13.0% | 13.8% | 14.6% | 13.9% |
| \$75+ | 16.7% | 16.2% | 17.9% | 18.7% | 17.9% |
| Pre-entry wage attachment | | | | | |
| <=26 weeks | 21.4% | 21.2% | 19.8% | 18.0% | 19.0% |
| 27-49 weeks | 20.0% | 19.2% | 21.5% | 16.8% | 18.6% |
| >=50 weeks | 58.6% | 59.6% | 58.7% | 65.2% | 62.4% |
| N | 5,208 | 5,374 | 5,351 | 4,804 | 4,633 |

Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014.

Note: For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Table 3. Selected demographic characteristics by labor market attachment, pooled cohorts

| | <=26 weeks | 27-49 weeks | >=50 weeks | Total | <=26 weeks | 27-49 weeks | >=50 weeks | Total |
|--------------------|--------------------------|------------------------|--------------------------|--------------|--------------------------|------------------------|--------------------------|--------------|
| Total | 5,054 | 4,900 | 15,416 | 25,370 | 100.0% | 100.0% | 100.0% | 100.0% |
| Gender | | | | | | | | |
| Female | 3,054 | 2,127 | 4,913 | 10,094 | 60.4% | 43.4% | 31.9% | 39.8% |
| Male | 2,000 | 2,773 | 10,503 | 15,276 | 39.6% | 56.6% | 68.1% | 60.2% |
| Children at home | | | | | | | | |
| 0 | 2,090 | 2,143 | 6,371 | 10,604 | 41.4% | 43.7% | 41.3% | 41.8% |
| 1 | 968 | 1,031 | 3,178 | 5,177 | 19.2% | 21.0% | 20.6% | 20.4% |
| 2+ | 1,996 | 1,726 | 5,867 | 9,589 | 39.5% | 35.2% | 38.1% | 37.8% |
| Marital status | | | | | | | | |
| Married | 3,989 | 3,558 | 11,976 | 19,523 | 78.9% | 72.6% | 77.7% | 77.0% |
| Not married | 1,065 | 1,342 | 3,440 | 5,847 | 21.1% | 27.4% | 22.3% | 23.0% |
| Race | | | | | | | | |
| White alone | 4,353 | 4,206 | 13,664 | 22,223 | 86.1% | 85.8% | 88.6% | 87.6% |
| Black alone | 219 | 186 | 487 | 892 | 4.3% | 3.8% | 3.2% | 3.5% |
| Asian alone | 237 | 251 | 669 | 1,157 | 4.7% | 5.1% | 4.3% | 4.6% |
| Other | 245 | 257 | 596 | 1,098 | 4.8% | 5.2% | 3.9% | 4.3% |
| Hispanic origin | | | | | | | | |
| Non-Hispanic | 4,650 | 4,471 | 14,250 | 23,371 | 92.0% | 91.2% | 92.4% | 92.1% |
| Hispanic | 404 | 429 | 1,166 | 1,999 | 8.0% | 8.8% | 7.6% | 7.9% |
| Citizenship status | | | | | | | | |
| Citizen | 4,772 | 4,585 | 14,608 | 23,965 | 94.4% | 93.6% | 94.8% | 94.5% |
| Non-citizen | 282 | 315 | 808 | 1,405 | 5.6% | 6.4% | 5.2% | 5.5% |

Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014.

Note: For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit

<https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Table 3 (cont'd). Selected demographic characteristics by labor market attachment, pooled cohorts

| | <=26 weeks | 27-49 weeks | >=50 weeks | Total | <=26 weeks | 27-49 weeks | >=50 weeks | Total |
|----------------------|--------------------------|------------------------|--------------------------|--------------|--------------------------|------------------------|--------------------------|--------------|
| Education | | | | | | | | |
| Less than HS | 389 | 368 | 962 | 1,719 | 7.7% | 7.5% | 6.2% | 6.8% |
| HS | 1,206 | 1,052 | 3,854 | 6,112 | 23.9% | 21.5% | 25.0% | 24.1% |
| Some college | 1,629 | 1,520 | 4,782 | 7,931 | 32.2% | 31.0% | 31.0% | 31.3% |
| BS/BA | 1,202 | 1,168 | 3,587 | 5,957 | 23.8% | 23.8% | 23.3% | 23.5% |
| Master/PhD | 628 | 792 | 2,231 | 3,651 | 12.4% | 16.2% | 14.5% | 14.4% |
| Age | | | | | | | | |
| 25-34 | 1,094 | 1,287 | 2,977 | 5,358 | 21.6% | 26.3% | 19.3% | 21.1% |
| 35-44 | 1,472 | 1,511 | 4,819 | 7,802 | 29.1% | 30.8% | 31.3% | 30.8% |
| 45-54 | 1,550 | 1,410 | 5,212 | 8,172 | 30.7% | 28.8% | 33.8% | 32.2% |
| 55-60 | 938 | 692 | 2,408 | 4,038 | 18.6% | 14.1% | 15.6% | 15.9% |
| Family income | | | | | | | | |
| <\$25K | 1,826 | 2,380 | 7,611 | 11,817 | 36.1% | 48.6% | 49.4% | 46.6% |
| \$25-50K | 1,055 | 1,031 | 3,528 | 5,614 | 20.9% | 21.0% | 22.9% | 22.1% |
| \$50-75K | 808 | 623 | 2,051 | 3,482 | 16.0% | 12.7% | 13.3% | 13.7% |
| \$75+ | 1,347 | 856 | 2,220 | 4,423 | 26.7% | 17.5% | 14.4% | 17.4% |

Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014.

Note: For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit

<https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Table 4: Multinomial logit results – Statistical significance of differences in predicted probabilities of wage attachment groups by exit type & cohort for women and men

Panel A: SE to unemp/non-participation - Women

| Year | Weeks worked | 2005 cohort | | 2006 cohort | | 2007 cohort | | 2008 cohort | | 2009 cohort | |
|------|----------------|-------------------|-----------|-------------------|-----------|-------------------|-----------|-------------------|-----------|-------------------|-------|
| | | Diff in Pred Prob | z | Diff in Pred Prob | z |
| 2006 | 27-49 vs. <=26 | -0.052*** | -5.29 | | | | | | | | |
| 2007 | | -0.037*** | -5.41 | -0.051*** | -5.88 | | | | | | |
| 2008 | | -0.036*** | -5.19 | -0.048*** | -5.62 | -0.056*** | -5.15 | | | | |
| 2009 | | -0.032*** | -4.29 | -0.046*** | -4.79 | -0.042*** | -4.47 | -0.037*** | -2.92 | | |
| 2010 | | -0.034*** | -4.90 | -0.035*** | -5.24 | -0.034*** | -4.68 | -0.030*** | -2.96 | -0.062*** | -4.56 |
| 2011 | | -0.040*** | -5.00 | -0.032*** | -5.06 | -0.033*** | -4.38 | -0.025*** | -2.95 | -0.046*** | -4.33 |
| 2012 | -0.039*** | -4.65 | -0.043*** | -5.08 | -0.040*** | -4.43 | -0.031*** | -2.83 | -0.044*** | -4.21 | |
| 2006 | >=50 vs. <=26 | -0.067*** | -7.94 | | | | | | | | |
| 2007 | | -0.047*** | -7.50 | -0.061*** | -7.96 | | | | | | |
| 2008 | | -0.046*** | -7.44 | -0.057*** | -7.65 | -0.066*** | -6.87 | | | | |
| 2009 | | -0.041*** | -5.07 | -0.054*** | -5.79 | -0.049*** | -5.42 | -0.061*** | -5.33 | | |
| 2010 | | -0.043*** | -6.69 | -0.042*** | -6.64 | -0.040*** | -5.93 | -0.050*** | -5.87 | -0.084*** | -6.46 |
| 2011 | | -0.051*** | -6.88 | -0.037*** | -6.09 | -0.038*** | -5.45 | -0.042*** | -5.56 | -0.062*** | -5.94 |
| 2012 | -0.050*** | -6.40 | -0.050*** | -6.53 | -0.046*** | -5.51 | -0.051*** | -5.26 | -0.059*** | -5.78 | |
| 2006 | >=50 vs. 27-49 | -0.014** | -2.18 | | | | | | | | |
| 2007 | | -0.010** | -2.11 | -0.010 | -1.50 | | | | | | |
| 2008 | | -0.010** | -2.16 | -0.009 | -1.46 | -0.010 | -1.21 | | | | |
| 2009 | | -0.009** | -2.00 | -0.008 | -1.41 | -0.007 | -1.18 | -0.025*** | -2.67 | | |
| 2010 | | -0.009** | -2.14 | -0.006 | -1.40 | -0.006 | -1.19 | -0.020*** | -2.69 | -0.021** | -2.06 |
| 2011 | | -0.011** | -2.14 | -0.006 | -1.39 | -0.005 | -1.19 | -0.017*** | -2.64 | -0.016** | -2.02 |
| 2012 | -0.011** | -2.18 | -0.008 | -1.43 | -0.007 | -1.19 | -0.021*** | -2.67 | -0.015** | -2.04 | |

Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014.

Notes: ***, **, * represent statistical significance at the 1%, 5% and 10% level respectively. For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Table 4 (cont'd): Multinomial logit results – Statistical significance of differences in predicted probabilities of wage attachment groups by exit type & cohort for women and men

Panel B: SE to unemp/non-participation - Men

| Year | Weeks worked | 2005 cohort | | 2006 cohort | | 2007 cohort | | 2008 cohort | | 2009 cohort | |
|------|----------------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|
| | | Diff in Pred Prob | z |
| 2006 | 27-49 vs. <=26 | -0.049*** | -5.47 | | | | | | | | |
| 2007 | | -0.034*** | -5.18 | -0.037*** | -4.44 | | | | | | |
| 2008 | | -0.033*** | -5.32 | -0.035*** | -4.33 | -0.047*** | -4.08 | | | | |
| 2009 | | -0.029*** | -4.17 | -0.033*** | -3.82 | -0.035*** | -3.69 | -0.074*** | -4.71 | | |
| 2010 | | -0.031*** | -5.10 | -0.026*** | -4.00 | -0.029*** | -3.78 | -0.060*** | -4.78 | -0.067*** | -5.20 |
| 2011 | | -0.037*** | -5.03 | -0.023*** | -4.01 | -0.027*** | -3.76 | -0.052*** | -4.33 | -0.050*** | -4.83 |
| 2012 | | -0.036*** | -4.78 | -0.031*** | -4.19 | -0.033*** | -3.70 | -0.062*** | -4.62 | -0.048*** | -4.74 |
| 2006 | >=50 vs. <=26 | -0.049*** | -6.24 | | | | | | | | |
| 2007 | | -0.034*** | -5.66 | -0.046*** | -6.01 | | | | | | |
| 2008 | | -0.033*** | -5.73 | -0.043*** | -5.80 | -0.061*** | -5.77 | | | | |
| 2009 | | -0.030*** | -4.29 | -0.042*** | -4.77 | -0.045*** | -4.85 | -0.086*** | -5.50 | | |
| 2010 | | -0.031*** | -5.57 | -0.032*** | -5.20 | -0.037*** | -5.21 | -0.070*** | -5.70 | -0.069*** | -5.97 |
| 2011 | | -0.037*** | -5.53 | -0.029*** | -5.15 | -0.035*** | -4.98 | -0.060*** | -4.96 | -0.051*** | -5.42 |
| 2012 | | -0.036*** | -5.23 | -0.039*** | -5.35 | -0.043*** | -4.93 | -0.072*** | -5.40 | -0.049*** | -5.29 |
| 2006 | >=50 vs. 27-49 | -0.0004 | -0.09 | | | | | | | | |
| 2007 | | -0.0003 | -0.09 | -0.009* | -1.81 | | | | | | |
| 2008 | | -0.0003 | -0.08 | -0.009* | -1.82 | -0.013** | -2.03 | | | | |
| 2009 | | -0.0002 | -0.08 | -0.008* | -1.79 | -0.010** | -2.00 | -0.012 | -1.62 | | |
| 2010 | | -0.0002 | -0.08 | -0.006* | -1.82 | -0.008** | -2.06 | -0.010 | -1.64 | -0.001 | -0.20 |
| 2011 | | -0.0003 | -0.08 | -0.006* | -1.81 | -0.008** | -2.00 | -0.008 | -1.61 | -0.001 | -0.17 |
| 2012 | | -0.0003 | -0.08 | -0.008* | -1.78 | -0.009** | -2.02 | -0.010 | -1.63 | -0.001 | -0.17 |

Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014.

Notes: ***, **, * represent statistical significance at the 1%, 5% and 10% level respectively. For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Table 4 (cont'd): Multinomial logit results – Statistical significance of differences in predicted probabilities of wage attachment groups by exit type & cohort for women and men

Panel C: SE to wage sector – Women

| Year | Weeks worked | 2005 cohort | | 2006 cohort | | 2007 cohort | | 2008 cohort | | 2009 cohort | |
|-------|----------------|-------------------|-------|-------------------|------|-------------------|------|-------------------|------|-------------------|------|
| | | Diff in Pred Prob | z | Diff in Pred Prob | z | Diff in Pred Prob | z | Diff in Pred Prob | z | Diff in Pred Prob | z |
| 2006 | 27-49 vs. <=26 | 0.019* | 1.82 | | | | | | | | |
| 2007 | | 0.012 | 1.62 | 0.014 | 1.29 | | | | | | |
| 2008 | | 0.010 | 1.59 | 0.010 | 1.23 | 0.019 | 1.53 | | | | |
| 2009 | | 0.010 | 1.51 | 0.008 | 1.19 | 0.011 | 1.33 | 0.028** | 2.16 | | |
| 2010 | | 0.008 | 1.55 | 0.006 | 1.08 | 0.010 | 1.24 | 0.020** | 2.09 | 0.019 | 1.21 |
| 2011 | | 0.009 | 1.62 | 0.006 | 1.04 | 0.008 | 1.23 | 0.021** | 2.06 | 0.011 | 1.05 |
| 2012 | | 0.008 | 1.61 | 0.008 | 1.17 | 0.009 | 1.29 | 0.019** | 2.06 | 0.011 | 1.04 |
| 2006 | >=50 vs. <=26 | 0.018** | 2.01 | | | | | | | | |
| 2007 | | 0.010* | 1.68 | 0.040*** | 3.92 | | | | | | |
| 2008 | | 0.009* | 1.66 | 0.028*** | 3.83 | 0.025** | 2.29 | | | | |
| 2009 | | 0.008 | 1.55 | 0.024*** | 3.69 | 0.016** | 2.01 | 0.043*** | 3.82 | | |
| 2010 | | 0.007 | 1.58 | 0.018*** | 3.54 | 0.014** | 1.96 | 0.030*** | 3.90 | 0.032*** | 2.58 |
| 2011 | | 0.008* | 1.74 | 0.019*** | 3.41 | 0.011* | 1.91 | 0.032*** | 3.83 | 0.020** | 2.34 |
| 2012 | | 0.007* | 1.70 | 0.023*** | 3.57 | 0.012** | 2.01 | 0.029*** | 3.87 | 0.019** | 2.28 |
| 2006 | >=50 vs. 27-49 | -0.002 | -0.16 | | | | | | | | |
| 2007 | | -0.002 | -0.22 | 0.025** | 2.36 | | | | | | |
| 2008 | | -0.001 | -0.22 | 0.018** | 2.36 | 0.007 | 0.58 | | | | |
| 2009 | | -0.001 | -0.24 | 0.015** | 2.36 | 0.004 | 0.55 | 0.015 | 1.18 | | |
| e2010 | | -0.001 | -0.23 | 0.012** | 2.31 | 0.004 | 0.54 | 0.010 | 1.15 | 0.013 | 0.92 |
| 2011 | | -0.001 | -0.21 | 0.013** | 2.29 | 0.003 | 0.54 | 0.011 | 1.11 | 0.009 | 0.86 |
| 2012 | | -0.001 | -0.21 | 0.015** | 2.29 | 0.004 | 0.56 | 0.010 | 1.17 | 0.008 | 0.85 |

Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014.

Notes: ***, **, * represent statistical significance at the 1%, 5% and 10% level respectively. For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Table 4 (cont'd): Multinomial logit results – Statistical significance of differences in predicted probabilities of wage attachment groups by exit type & cohort for women and men

Panel D: SE to wage sector - Men

| Year | Weeks worked | 2005 cohort | | 2006 cohort | | 2007 cohort | | 2008 cohort | | 2009 cohort | |
|------|----------------|-------------------|------|-------------------|------|-------------------|-------|-------------------|-------|-------------------|------|
| | | Diff in Pred Prob | z | Diff in Pred Prob | z | Diff in Pred Prob | z | Diff in Pred Prob | z | Diff in Pred Prob | z |
| 2006 | 27-49 vs. <=26 | 0.030** | 2.52 | | | | | | | | |
| 2007 | | 0.019** | 2.35 | 0.004 | 0.29 | | | | | | |
| 2008 | | 0.017** | 2.33 | 0.003 | 0.26 | 0.026* | 1.80 | | | | |
| 2009 | | 0.016** | 2.26 | 0.002 | 0.24 | 0.017 | 1.63 | 0.064*** | 4.00 | | |
| 2010 | | 0.013** | 2.29 | 0.001 | 0.16 | 0.015 | 1.59 | 0.045*** | 4.09 | 0.035** | 2.04 |
| 2011 | | 0.014** | 2.35 | 0.001 | 0.13 | 0.012 | 1.56 | 0.049*** | 3.99 | 0.022* | 1.85 |
| 2012 | | 0.013** | 2.34 | 0.002 | 0.21 | 0.013 | 1.62 | 0.044*** | 3.92 | 0.022* | 1.85 |
| 2006 | >=50 vs. <=26 | 0.033*** | 3.51 | | | | | | | | |
| 2007 | | 0.022*** | 3.32 | 0.007 | 0.56 | | | | | | |
| 2008 | | 0.019*** | 3.28 | 0.004 | 0.51 | 0.024* | 1.93 | | | | |
| 2009 | | 0.019*** | 3.12 | 0.004 | 0.48 | 0.015* | 1.70 | 0.058*** | 4.42 | | |
| 2010 | | 0.015*** | 3.23 | 0.002 | 0.36 | 0.013 | 1.63 | 0.041*** | 4.46 | 0.046*** | 3.24 |
| 2011 | | 0.016*** | 3.31 | 0.002 | 0.33 | 0.011 | 1.58 | 0.044*** | 4.33 | 0.030*** | 2.99 |
| 2012 | | 0.015*** | 3.31 | 0.003 | 0.45 | 0.012* | 1.70 | 0.039*** | 4.29 | 0.030*** | 3.04 |
| 2006 | >=50 vs. 27-49 | 0.004 | 0.43 | | | | | | | | |
| 2007 | | 0.003 | 0.44 | 0.003 | 0.28 | | | | | | |
| 2008 | | 0.002 | 0.44 | 0.002 | 0.27 | -0.002 | -0.17 | | | | |
| 2009 | | 0.002 | 0.44 | 0.002 | 0.26 | -0.002 | -0.21 | -0.006 | -0.51 | | |
| 2010 | | 0.002 | 0.44 | 0.001 | 0.23 | -0.002 | -0.24 | -0.005 | -0.52 | 0.011 | 0.81 |
| 2011 | | 0.002 | 0.44 | 0.001 | 0.22 | -0.001 | -0.24 | -0.005 | -0.55 | 0.008 | 0.81 |
| 2012 | | 0.002 | 0.44 | 0.001 | 0.25 | -0.001 | -0.22 | -0.004 | -0.52 | 0.008 | 0.81 |

Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014.

Notes: ***, **, * represent statistical significance at the 1%, 5% and 10% level respectively. For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Table 4 (cont'd): Multinomial logit results – Statistical significance of differences in predicted probabilities of wage attachment groups by exit type & cohort for women and men

Panel E: Remains SE - Women

| Year | Weeks worked | 2005 cohort | | 2006 cohort | | 2007 cohort | | 2008 cohort | | 2009 cohort | |
|------|----------------|-------------------|------|-------------------|-------|-------------------|------|-------------------|------|-------------------|------|
| | | Diff in Pred Prob | z | Diff in Pred Prob | z | Diff in Pred Prob | z | Diff in Pred Prob | z | Diff in Pred Prob | z |
| 2006 | 27-49 vs. <=26 | 0.033** | 2.40 | | | | | | | | |
| 2007 | | 0.025** | 2.48 | 0.037*** | 2.67 | | | | | | |
| 2008 | | 0.026*** | 2.69 | 0.038*** | 3.36 | 0.037** | 2.42 | | | | |
| 2009 | | 0.022** | 2.27 | 0.038*** | 3.30 | 0.030** | 2.44 | 0.009 | 0.52 | | |
| 2010 | | 0.026*** | 3.03 | 0.030*** | 3.43 | 0.024** | 2.32 | 0.010 | 0.77 | 0.043** | 2.28 |
| 2011 | | 0.031*** | 3.32 | 0.026*** | 2.97 | 0.024** | 2.54 | 0.004 | 0.33 | 0.035** | 2.43 |
| 2012 | | 0.031*** | 3.15 | 0.035*** | 3.27 | 0.030*** | 2.78 | 0.012 | 0.86 | 0.033** | 2.25 |
| 2006 | >=50 vs. <=26 | 0.049*** | 4.28 | | | | | | | | |
| 2007 | | 0.036*** | 4.35 | 0.021* | 1.72 | | | | | | |
| 2008 | | 0.037*** | 4.66 | 0.029*** | 2.85 | 0.040*** | 3.05 | | | | |
| 2009 | | 0.032*** | 3.53 | 0.030*** | 2.84 | 0.033*** | 2.90 | 0.019 | 1.34 | | |
| 2010 | | 0.037*** | 4.86 | 0.024*** | 3.00 | 0.026*** | 2.81 | 0.020* | 1.92 | 0.051*** | 3.10 |
| 2011 | | 0.043*** | 5.14 | 0.018** | 2.25 | 0.026*** | 3.08 | 0.011 | 1.00 | 0.041*** | 3.22 |
| 2012 | | 0.043*** | 4.83 | 0.027*** | 2.69 | 0.033*** | 3.40 | 0.023** | 1.97 | 0.039*** | 3.00 |
| 2006 | >=50 vs. 27-49 | 0.016 | 1.40 | | | | | | | | |
| 2007 | | 0.012 | 1.41 | -0.016 | -1.33 | | | | | | |
| 2008 | | 0.011 | 1.51 | -0.009 | -1.00 | 0.003 | 0.22 | | | | |
| 2009 | | 0.010 | 1.38 | -0.007 | -0.86 | 0.003 | 0.25 | 0.010 | 0.69 | | |
| 2010 | | 0.010 | 1.62 | -0.006 | -0.89 | 0.002 | 0.18 | 0.010 | 0.86 | 0.008 | 0.46 |
| 2011 | | 0.012* | 1.68 | -0.008 | -1.12 | 0.002 | 0.25 | 0.006 | 0.53 | 0.007 | 0.54 |
| 2012 | | 0.012* | 1.72 | -0.008 | -0.93 | 0.003 | 0.34 | 0.011 | 0.94 | 0.006 | 0.51 |

Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014.

Notes: ***, **, * represent statistical significance at the 1%, 5% and 10% level respectively. For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Table 4 (cont'd): Multinomial logit results – Statistical significance of differences in predicted probabilities of wage attachment groups by exit type & cohort for women and men

Panel F: Remains SE - Men

| Year | Weeks worked | 2005 cohort | | 2006 cohort | | 2007 cohort | | 2008 cohort | | 2009 cohort | |
|------|----------------|-------------------|-------|-------------------|------|-------------------|------|-------------------|------|-------------------|-------|
| | | Diff in Pred Prob | z | Diff in Pred Prob | z | Diff in Pred Prob | z | Diff in Pred Prob | z | Diff in Pred Prob | z |
| 2006 | 27-49 vs. <=26 | 0.019 | 1.41 | | | | | | | | |
| 2007 | | 0.015 | 1.45 | 0.033** | 2.10 | | | | | | |
| 2008 | | 0.017* | 1.81 | 0.032*** | 2.59 | 0.022 | 1.32 | | | | |
| 2009 | | 0.013 | 1.33 | 0.031*** | 2.67 | 0.019 | 1.47 | 0.010 | 0.46 | | |
| 2010 | | 0.018** | 2.26 | 0.025*** | 2.63 | 0.014 | 1.24 | 0.015 | 0.89 | 0.033* | 1.73 |
| 2011 | | 0.023** | 2.46 | 0.022** | 2.36 | 0.015 | 1.47 | 0.003 | 0.15 | 0.028* | 1.89 |
| 2012 | | 0.023** | 2.48 | 0.029*** | 2.62 | 0.021* | 1.74 | 0.018 | 1.03 | 0.026* | 1.77 |
| 2006 | >=50 vs. <=26 | 0.016 | 1.36 | | | | | | | | |
| 2007 | | 0.012 | 1.40 | 0.040*** | 2.82 | | | | | | |
| 2008 | | 0.014* | 1.80 | 0.039*** | 3.45 | 0.037** | 2.49 | | | | |
| 2009 | | 0.011 | 1.21 | 0.038*** | 3.40 | 0.031** | 2.53 | 0.028 | 1.41 | | |
| 2010 | | 0.016** | 2.31 | 0.030*** | 3.40 | 0.024** | 2.31 | 0.029* | 1.87 | 0.024 | 1.42 |
| 2011 | | 0.021** | 2.53 | 0.027*** | 3.09 | 0.024** | 2.52 | 0.016 | 1.00 | 0.021* | 1.65 |
| 2012 | | 0.021*** | 2.58 | 0.036*** | 3.46 | 0.031*** | 2.86 | 0.032** | 1.97 | 0.019 | 1.51 |
| 2006 | >=50 vs. 27-49 | -0.003 | -0.35 | | | | | | | | |
| 2007 | | -0.002 | -0.35 | 0.007 | 0.64 | | | | | | |
| 2008 | | -0.002 | -0.34 | 0.007 | 0.86 | 0.015 | 1.31 | | | | |
| 2009 | | -0.002 | -0.35 | 0.007 | 0.93 | 0.011 | 1.33 | 0.018 | 1.32 | | |
| 2010 | | -0.002 | -0.32 | 0.005 | 0.92 | 0.010 | 1.26 | 0.014 | 1.36 | -0.010 | -0.65 |
| 2011 | | -0.002 | -0.30 | 0.005 | 0.78 | 0.009 | 1.34 | 0.013 | 1.24 | -0.007 | -0.64 |
| 2012 | | -0.002 | -0.30 | 0.006 | 0.90 | 0.011 | 1.46 | 0.014 | 1.38 | -0.007 | -0.65 |

Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014.

Notes: ***, **, * represent statistical significance at the 1%, 5% and 10% level respectively. For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Table 5: Multinomial logit results - Statistical significance of gender differences in predicted probabilities by exit type, labor attachment group and cohort

Panel A: SE to unemp/non-participation

| Year | Weeks worked | 2005 cohort | | 2006 cohort | | 2007 cohort | | 2008 cohort | | 2009 cohort | |
|------|--------------|--------------------------|-------|--------------------------|-------|--------------------------|-------|--------------------------|-------|--------------------------|-------|
| | | Male-Female Diff in Pred | | Male-Female Diff in Pred | | Male-Female Diff in Pred | | Male-Female Diff in Pred | | Male-Female Diff in Pred | |
| | | Prob | z |
| 2006 | <=26 | -0.020* | -1.90 | | | | | | | | |
| 2007 | | -0.015* | -1.95 | -0.018* | -1.82 | | | | | | |
| 2008 | | -0.015* | -1.92 | -0.016* | -1.74 | -0.006 | -0.43 | | | | |
| 2009 | | -0.013* | -1.90 | -0.015* | -1.70 | -0.004 | -0.41 | 0.027 | 1.62 | | |
| 2010 | | -0.014* | -1.91 | -0.012* | -1.67 | -0.003 | -0.41 | 0.022 | 1.60 | -0.011 | -0.70 |
| 2011 | | -0.016* | -1.91 | -0.010* | -1.65 | -0.003 | -0.40 | 0.019 | 1.56 | -0.008 | -0.65 |
| 2012 | | -0.016* | -1.90 | -0.014* | -1.69 | -0.004 | -0.40 | 0.023 | 1.60 | -0.008 | -0.64 |
| 2006 | 27-49 | -0.017** | -2.32 | | | | | | | | |
| 2007 | | -0.012** | -2.27 | -0.003 | -0.40 | | | | | | |
| 2008 | | -0.012** | -2.29 | -0.003 | -0.36 | 0.003 | 0.35 | | | | |
| 2009 | | -0.010** | -2.20 | -0.002 | -0.35 | 0.003 | 0.39 | -0.010 | -0.91 | | |
| 2010 | | -0.011** | -2.28 | -0.002 | -0.34 | 0.002 | 0.40 | -0.008 | -0.87 | -0.017 | -1.37 |
| 2011 | | -0.013** | -2.24 | -0.002 | -0.34 | 0.002 | 0.41 | -0.007 | -0.88 | -0.012 | -1.30 |
| 2012 | | -0.013** | -2.27 | -0.002 | -0.35 | 0.003 | 0.41 | -0.008 | -0.86 | -0.011 | -1.30 |
| 2006 | >=50 | -0.003 | -0.74 | | | | | | | | |
| 2007 | | -0.002 | -0.70 | -0.003 | -0.62 | | | | | | |
| 2008 | | -0.002 | -0.68 | -0.003 | -0.65 | -0.001 | -0.10 | | | | |
| 2009 | | -0.002 | -0.69 | -0.002 | -0.66 | 0.000 | -0.08 | 0.002 | 0.51 | | |
| 2010 | | -0.002 | -0.67 | -0.002 | -0.66 | 0.000 | -0.07 | 0.002 | 0.53 | 0.003 | 0.47 |
| 2011 | | -0.002 | -0.67 | -0.002 | -0.66 | 0.000 | -0.07 | 0.002 | 0.53 | 0.003 | 0.59 |
| 2012 | | -0.002 | -0.67 | -0.002 | -0.66 | 0.000 | -0.07 | 0.002 | 0.54 | 0.003 | 0.59 |

Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014.

Notes: ***, **, * represent statistical significance at the 1%, 5% and 10% level respectively. For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Table 5 (cont'd): Multinomial logit results - Statistical significance of gender differences in predicted probabilities by exit type, wage attachment group and cohort

Panel B: SE to wage sector

| Year | Weeks worked | 2005 cohort | | 2006 cohort | | 2007 cohort | | 2008 cohort | | 2009 cohort | |
|------|--------------|--------------------------|-------|--------------------------|-------|--------------------------|------|--------------------------|-------|--------------------------|------|
| | | Male-Female Diff in Pred | | Male-Female Diff in Pred | | Male-Female Diff in Pred | | Male-Female Diff in Pred | | Male-Female Diff in Pred | |
| | | Prob | z | Prob | z | Prob | z | Prob | z | Prob | z |
| 2006 | <=26 | -0.004 | -0.34 | | | | | | | | |
| 2007 | | -0.003 | -0.42 | 0.027* | 1.84 | | | | | | |
| 2008 | | -0.003 | -0.42 | 0.019* | 1.81 | 0.008 | 0.55 | | | | |
| 2009 | | -0.003 | -0.44 | 0.016* | 1.81 | 0.006 | 0.53 | -0.006 | -0.44 | | |
| 2010 | | -0.002 | -0.43 | 0.012* | 1.78 | 0.005 | 0.53 | -0.004 | -0.40 | 0.018 | 1.13 |
| 2011 | | -0.002 | -0.40 | 0.014* | 1.72 | 0.004 | 0.53 | -0.004 | -0.38 | 0.012 | 1.11 |
| 2012 | | -0.002 | -0.41 | 0.016* | 1.78 | 0.005 | 0.53 | -0.004 | -0.41 | 0.012 | 1.10 |
| 2006 | 27-49 | 0.007 | 0.56 | | | | | | | | |
| 2007 | | 0.004 | 0.49 | 0.016 | 1.25 | | | | | | |
| 2008 | | 0.004 | 0.49 | 0.011 | 1.26 | 0.016 | 1.20 | | | | |
| 2009 | | 0.004 | 0.48 | 0.010 | 1.25 | 0.011 | 1.21 | 0.029* | 1.84 | | |
| 2010 | | 0.003 | 0.48 | 0.008 | 1.24 | 0.010 | 1.23 | 0.022* | 1.88 | 0.035** | 1.96 |
| 2011 | | 0.003 | 0.50 | 0.008 | 1.24 | 0.009 | 1.22 | 0.023* | 1.85 | 0.024* | 1.92 |
| 2012 | | 0.003 | 0.50 | 0.010 | 1.25 | 0.009 | 1.22 | 0.021* | 1.88 | 0.023* | 1.91 |
| 2006 | >=50 | 0.012 | 1.62 | | | | | | | | |
| 2007 | | 0.008 | 1.63 | -0.006 | -0.76 | | | | | | |
| 2008 | | 0.007 | 1.61 | -0.005 | -0.77 | 0.007 | 0.84 | | | | |
| 2009 | | 0.007 | 1.62 | -0.004 | -0.78 | 0.005 | 0.84 | 0.009 | 1.01 | | |
| 2010 | | 0.006 | 1.64 | -0.003 | -0.78 | 0.005 | 0.84 | 0.007 | 1.03 | 0.032*** | 3.03 |
| 2011 | | 0.006 | 1.59 | -0.004 | -0.78 | 0.004 | 0.84 | 0.007 | 1.03 | 0.023*** | 3.07 |
| 2012 | | 0.006 | 1.61 | -0.004 | -0.77 | 0.004 | 0.84 | 0.006 | 1.02 | 0.023*** | 3.10 |

Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014.

Notes: ***, **, * represent statistical significance at the 1%, 5% and 10% level respectively. For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Table 5 (cont'd): Multinomial logit results - Statistical significance of gender differences in predicted probabilities by exit type, labor attachment group and cohort

Panel C: Remains SE

| Year | Weeks worked | 2005 cohort | | 2006 cohort | | 2007 cohort | | 2008 cohort | | 2009 cohort | |
|------|--------------|-------------------------------|-------|-------------------------------|-------|-------------------------------|-------|-------------------------------|-------|-------------------------------|-------|
| | | Male-Female Diff in Pred Prob | | Male-Female Diff in Pred Prob | | Male-Female Diff in Pred Prob | | Male-Female Diff in Pred Prob | | Male-Female Diff in Pred Prob | |
| | | z | Prob |
| 2006 | <=26 | 0.024* | 1.66 | | | | | | | | |
| 2007 | | 0.018* | 1.68 | -0.009 | -0.58 | | | | | | |
| 2008 | | 0.017* | 1.73 | -0.003 | -0.24 | -0.003 | -0.18 | | | | |
| 2009 | | 0.016* | 1.68 | -0.001 | -0.11 | -0.002 | -0.16 | -0.020 | -0.94 | | |
| 2010 | | 0.016* | 1.80 | -0.001 | -0.14 | -0.002 | -0.19 | -0.018 | -1.01 | -0.008 | -0.41 |
| 2011 | | 0.018* | 1.83 | -0.003 | -0.35 | -0.002 | -0.15 | -0.014 | -0.85 | -0.006 | -0.36 |
| 2012 | | 0.018* | 1.83 | -0.002 | -0.18 | -0.001 | -0.11 | -0.018 | -1.05 | -0.006 | -0.38 |
| 2006 | 27-49 | 0.010 | 0.78 | | | | | | | | |
| 2007 | | 0.008 | 0.80 | -0.013 | -0.97 | | | | | | |
| 2008 | | 0.008 | 0.93 | -0.009 | -0.84 | -0.018 | -1.25 | | | | |
| 2009 | | 0.007 | 0.80 | -0.007 | -0.78 | -0.013 | -1.22 | -0.019 | -1.01 | | |
| 2010 | | 0.008 | 1.11 | -0.006 | -0.79 | -0.012 | -1.26 | -0.013 | -0.92 | -0.018 | -0.89 |
| 2011 | | 0.010 | 1.20 | -0.007 | -0.89 | -0.011 | -1.23 | -0.016 | -1.11 | -0.012 | -0.81 |
| 2012 | | 0.010 | 1.24 | -0.008 | -0.81 | -0.011 | -1.19 | -0.012 | -0.86 | -0.012 | -0.85 |
| 2006 | >=50 | -0.009 | -1.17 | | | | | | | | |
| 2007 | | -0.006 | -1.17 | 0.009 | 1.04 | | | | | | |
| 2008 | | -0.005 | -1.09 | 0.007 | 1.07 | -0.006 | -0.65 | | | | |
| 2009 | | -0.006 | -1.16 | 0.007 | 1.08 | -0.005 | -0.63 | -0.012 | -1.26 | | |
| 2010 | | -0.004 | -0.98 | 0.005 | 1.08 | -0.004 | -0.66 | -0.009 | -1.26 | -0.035*** | -3.17 |
| 2011 | | -0.004 | -0.88 | 0.005 | 1.06 | -0.004 | -0.63 | -0.009 | -1.25 | -0.026*** | -3.12 |
| 2012 | | -0.004 | -0.86 | 0.006 | 1.07 | -0.004 | -0.59 | -0.009 | -1.25 | -0.025*** | -3.17 |

Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014.

Notes: ***, **, * represent statistical significance at the 1%, 5% and 10% level respectively. For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Table 6. Marginal effect of "female" for each attachment group on the probability of exit

| | 2005 cohort | | | 2006 cohort | | | 2007 cohort | | | 2008 cohort | | | 2009 cohort | | |
|----------------|--------------|-------|------|--------------|-------|------|--------------|-------|------|--------------|-------|------|--------------|-------|------|
| | Marg. effect | z | P> z |
| <=26 | | | | | | | | | | | | | | | |
| SE to Unemp | 0.016* | 1.94 | 0.05 | 0.015* | 1.76 | 0.08 | 0.004 | 0.42 | 0.68 | -0.023 | -1.62 | 0.11 | 0.009 | 0.67 | 0.50 |
| SE to Wage | 0.003 | 0.39 | 0.69 | -0.018* | -1.82 | 0.07 | -0.006 | -0.54 | 0.59 | 0.005 | 0.42 | 0.68 | -0.015 | -1.12 | 0.26 |
| Remains SE | -0.019* | -1.73 | 0.08 | 0.004 | 0.33 | 0.74 | 0.002 | 0.17 | 0.87 | 0.018 | 0.97 | 0.33 | 0.007 | 0.39 | 0.70 |
| 27-49 | | | | | | | | | | | | | | | |
| SE to Unemp | 0.013** | 2.34 | 0.02 | 0.002 | 0.37 | 0.71 | -0.003 | -0.38 | 0.70 | 0.009 | 0.89 | 0.37 | 0.014 | 1.34 | 0.18 |
| SE to Wage | -0.004 | -0.51 | 0.61 | -0.011 | -1.26 | 0.21 | -0.011 | -1.21 | 0.22 | -0.024* | -1.88 | 0.06 | -0.028* | -1.95 | 0.05 |
| Remains SE | -0.008 | -0.92 | 0.36 | 0.009 | 0.87 | 0.38 | 0.014 | 1.24 | 0.22 | 0.015 | 0.99 | 0.32 | 0.014 | 0.85 | 0.39 |
| >=50 | | | | | | | | | | | | | | | |
| SE to Unemp | 0.002 | 0.70 | 0.48 | 0.002 | 0.65 | 0.52 | 0.000 | 0.08 | 0.93 | -0.002 | -0.52 | 0.60 | -0.003 | -0.53 | 0.60 |
| SE to Wage | -0.008 | -1.63 | 0.11 | 0.005 | 0.77 | 0.44 | -0.005 | -0.84 | 0.40 | -0.007 | -1.02 | 0.31 | -0.027*** | -3.08 | 0.00 |
| Remains SE | 0.006 | 1.10 | 0.27 | -0.007 | -1.07 | 0.29 | 0.005 | 0.64 | 0.52 | 0.010 | 1.26 | 0.21 | 0.030*** | 3.17 | 0.00 |

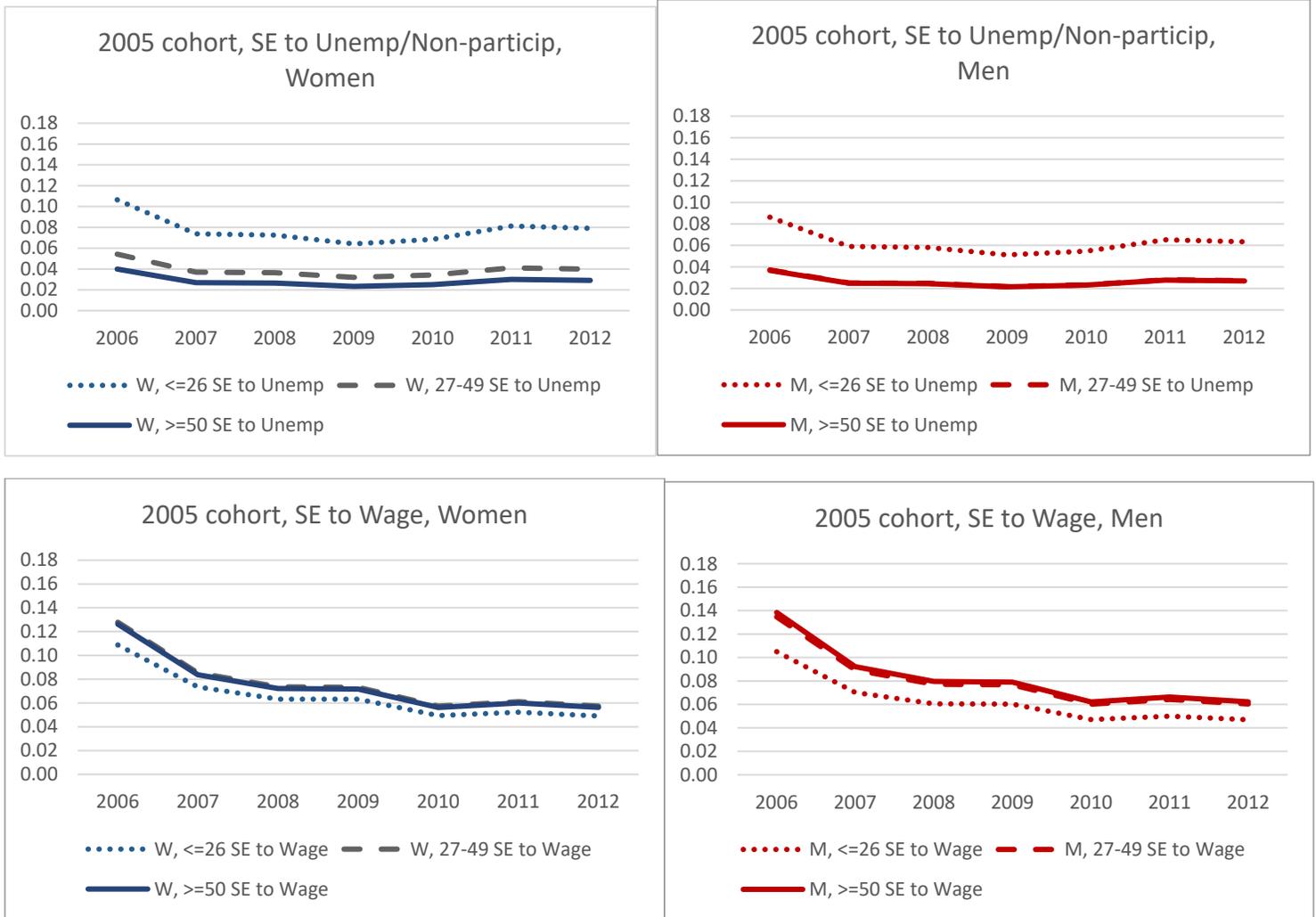
Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014.

Notes: ***, **, * represent statistical significance at the 1%, 5% and 10% level respectively. For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Figures

Figure 1: Predicted probabilities of exit for women and men by wage-attachment group and year

Panel A: 2005 cohort

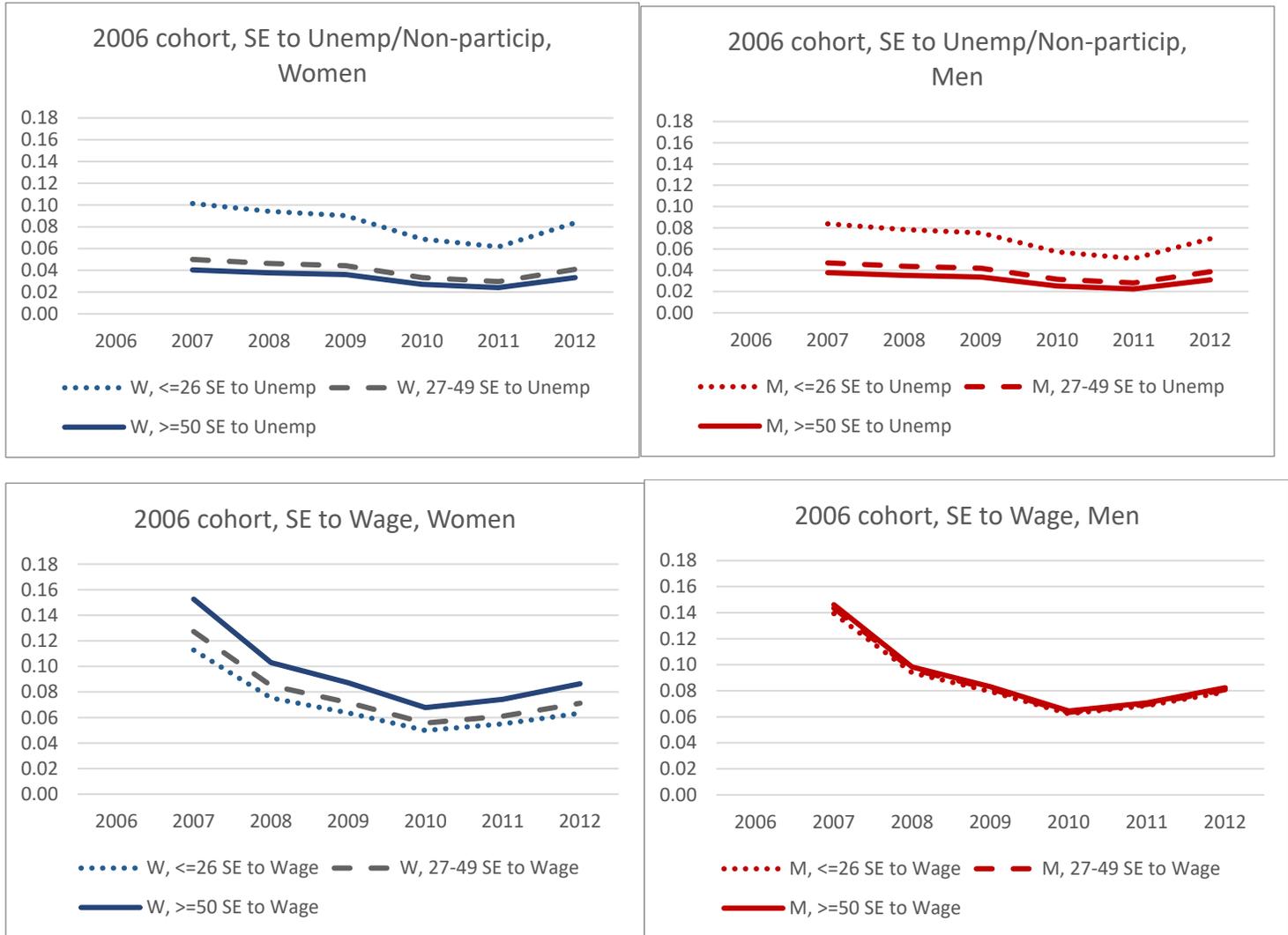


Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014.

Note: For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Figure 1 (cont'd): Predicted probabilities of exit for women and men by wage-attachment group and year

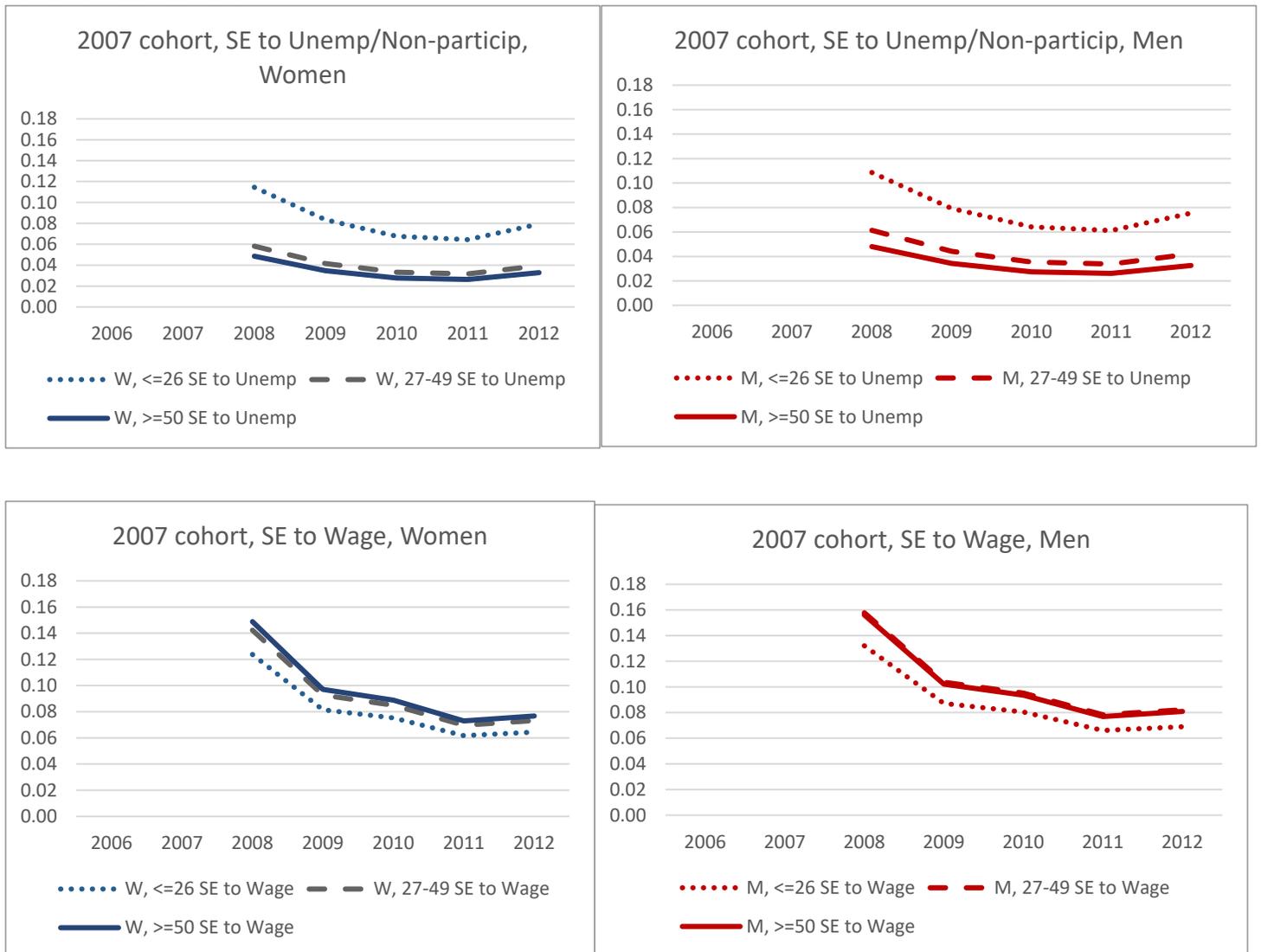
Panel B: 2006 cohort



Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014. For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Figure 1 (cont'd): Predicted probabilities of exit for women and men by wage-attachment group and year

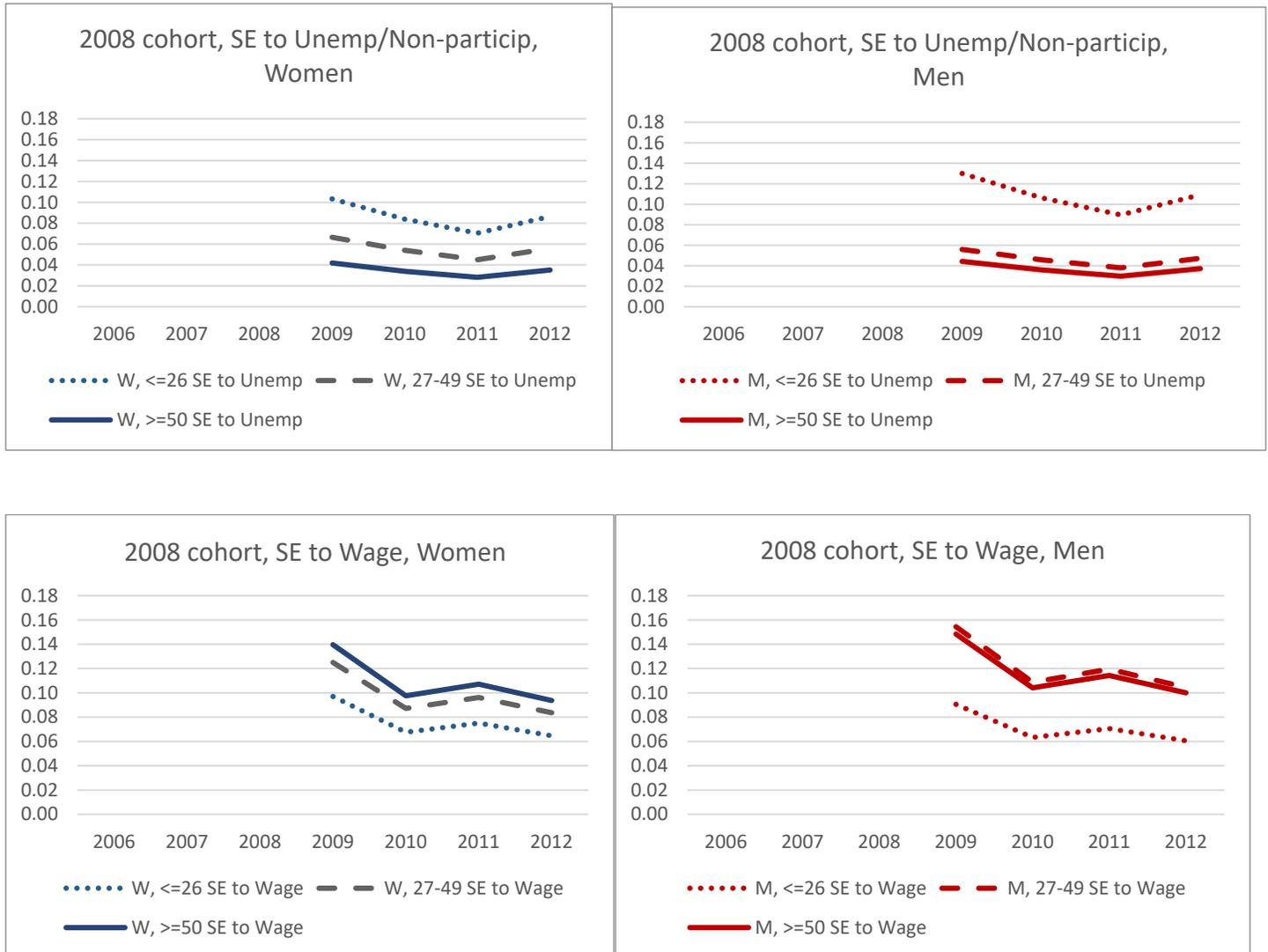
Panel C: 2007 cohort



Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014. For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Figure 1 (cont'd): Predicted probabilities of exit for women and men by wage-attachment group and year

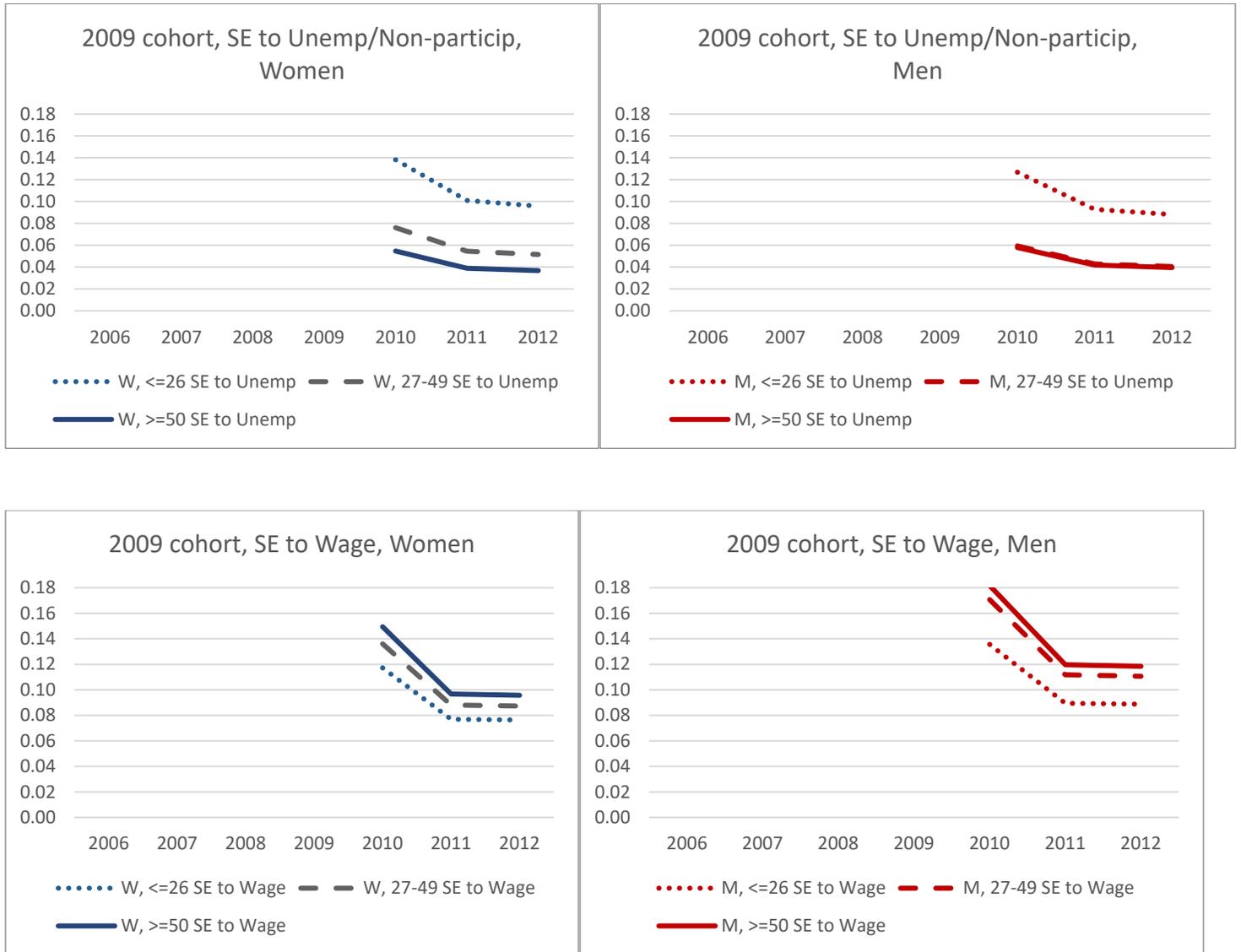
Panel D: 2008 cohort



Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014. For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Figure 1 (cont'd): Predicted probabilities of exit for women and men by wage-attachment group and year

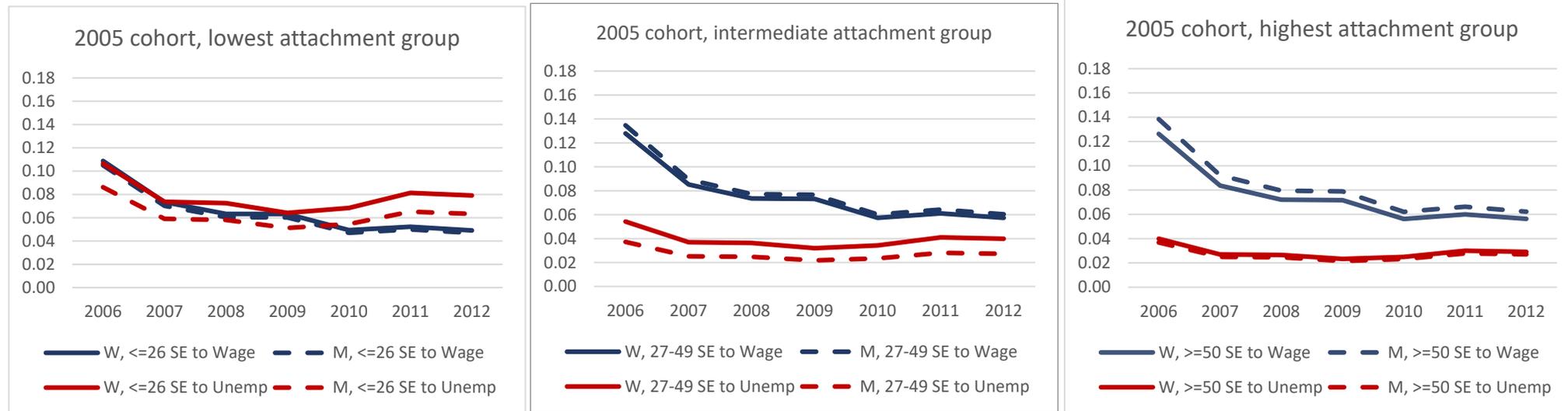
Panel E: 2009 cohort



Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014. For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Figure 2, Panels A-E. Graphs of predicted probabilities for gender-wage attachment group by cohort and year

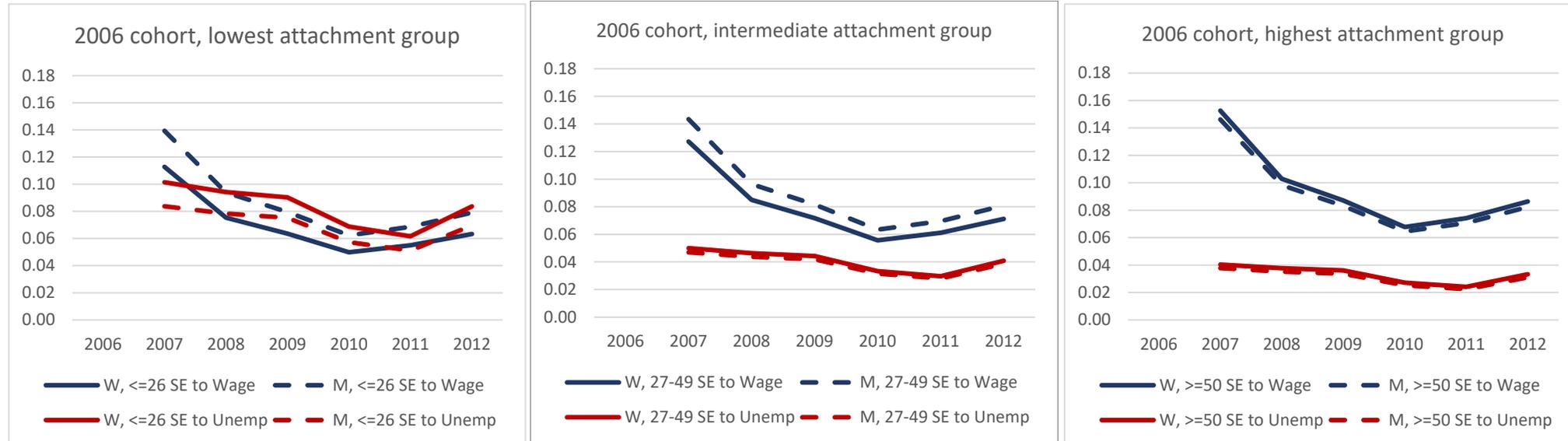
Panel A: 2005 cohort



Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014

Note: For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

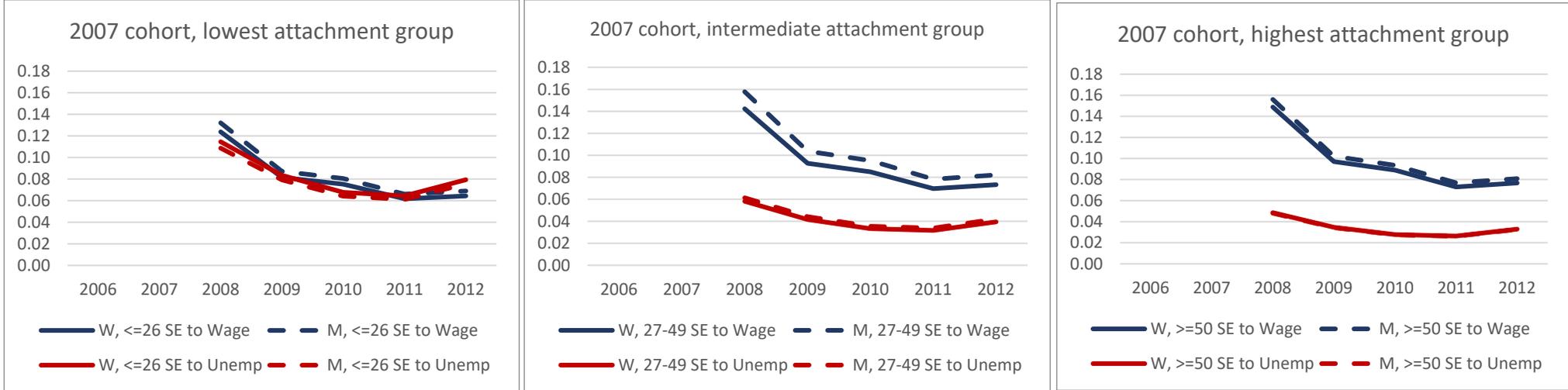
Panel B: 2006 cohort



Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014.

Note: For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

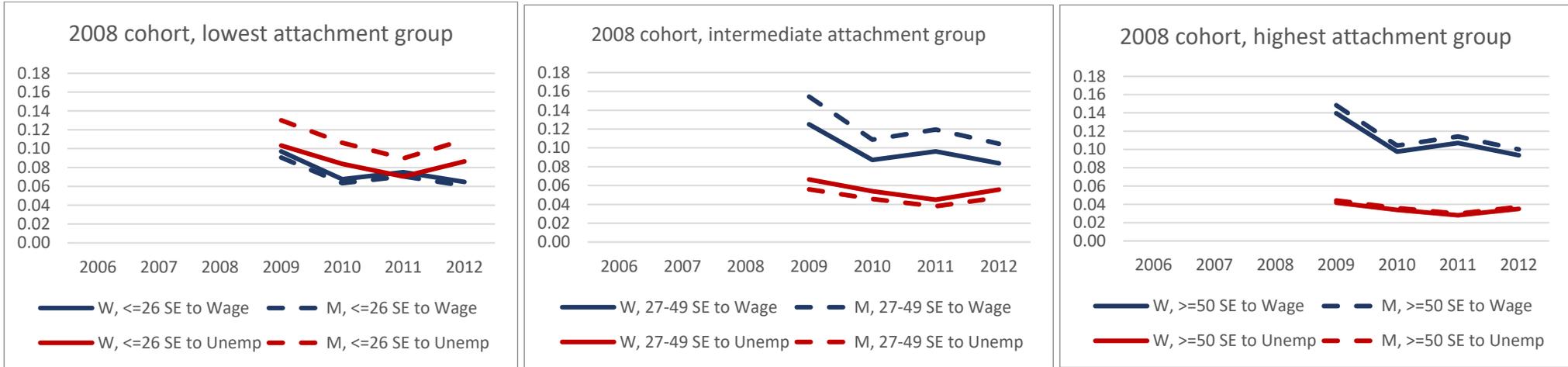
Panel C: 2007 cohort



Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014

Note: For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

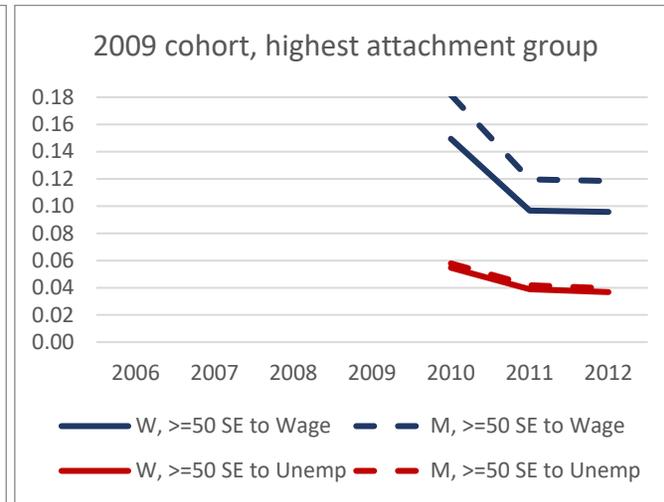
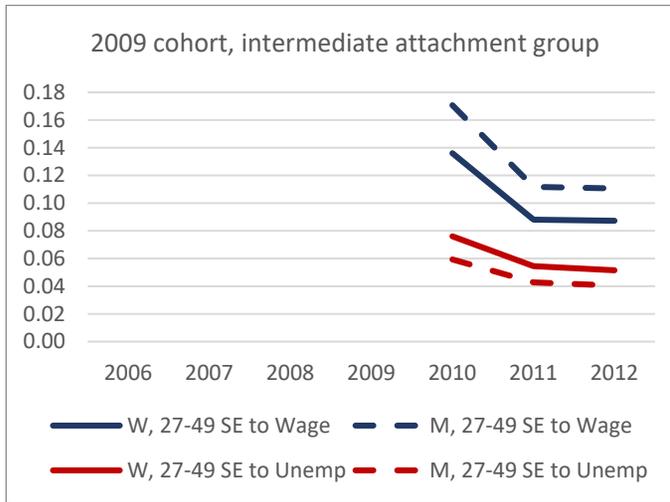
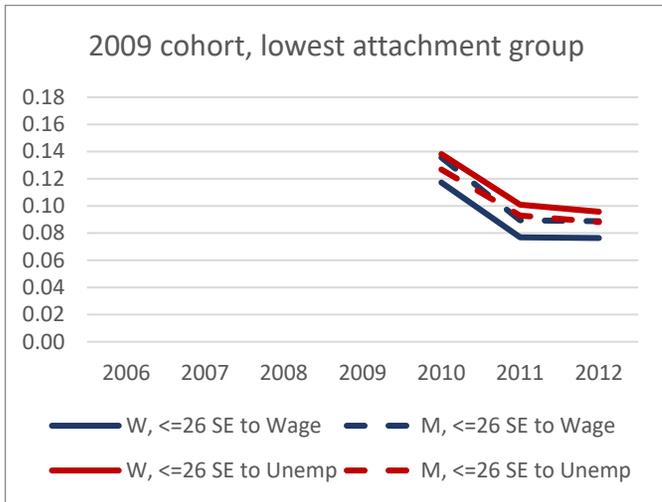
Panel D: 2008 cohort



Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014

Note: For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Panel E: 2009 cohort



Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014

Note: For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Appendix

Table A1: Multinomial logit results – Predicted probabilities of SE exit for women and men by cohort and wage attachment group

| | | 2005 cohort | | | 2006 cohort | | | 2007 cohort | | | 2008 cohort | | | 2009 cohort | | | | |
|---|--------------|-------------|-----------|--------------|-------------|--------------|-----------|--------------|-----------|--------------|-------------|--------------|-----------|--------------|-------|-------|-------|--|
| Panel A: SE to unemp/non-participation | | | | | | | | | | | | | | | | | | |
| Weeks worked | Gender | Year | Pred prob | 95% conf int | Pred prob | 95% conf int | Pred prob | 95% conf int | Pred prob | 95% conf int | Pred prob | 95% conf int | Pred prob | 95% conf int | | | | |
| <=26 | Women | 2006 | 0.106 | 0.087 | 0.126 | | | | | | | | | | | | | |
| | | 2007 | 0.074 | 0.059 | 0.088 | 0.101 | 0.085 | 0.118 | | | | | | | | | | |
| | | 2008 | 0.073 | 0.057 | 0.088 | 0.094 | 0.077 | 0.111 | 0.115 | 0.096 | 0.133 | | | | | | | |
| | | 2009 | 0.064 | 0.042 | 0.087 | 0.090 | 0.063 | 0.117 | 0.083 | 0.060 | 0.107 | 0.103 | 0.074 | 0.132 | | | | |
| | | 2010 | 0.068 | 0.052 | 0.085 | 0.069 | 0.053 | 0.084 | 0.068 | 0.052 | 0.083 | 0.084 | 0.065 | 0.102 | 0.138 | 0.111 | 0.165 | |
| | | 2011 | 0.081 | 0.062 | 0.101 | 0.062 | 0.046 | 0.077 | 0.064 | 0.047 | 0.082 | 0.070 | 0.052 | 0.089 | 0.101 | 0.078 | 0.124 | |
| | Men | 2006 | 0.079 | 0.058 | 0.100 | 0.084 | 0.064 | 0.103 | 0.079 | 0.058 | 0.101 | 0.086 | 0.063 | 0.110 | 0.096 | 0.072 | 0.120 | |
| | | 2007 | 0.086 | 0.068 | 0.104 | | | | | | | | | | | | | |
| | | 2008 | 0.059 | 0.045 | 0.073 | 0.084 | 0.068 | 0.100 | | | | | | | | | | |
| | | 2009 | 0.058 | 0.045 | 0.072 | 0.078 | 0.062 | 0.095 | 0.109 | 0.088 | 0.130 | | | | | | | |
| | | 2010 | 0.051 | 0.032 | 0.071 | 0.075 | 0.050 | 0.100 | 0.079 | 0.056 | 0.103 | 0.130 | 0.093 | 0.167 | | | | |
| | | 2011 | 0.055 | 0.041 | 0.068 | 0.057 | 0.043 | 0.072 | 0.064 | 0.048 | 0.080 | 0.106 | 0.079 | 0.133 | 0.127 | 0.102 | 0.151 | |
| 27-49 | Women | 2012 | 0.065 | 0.048 | 0.082 | 0.051 | 0.037 | 0.065 | 0.061 | 0.044 | 0.078 | 0.090 | 0.061 | 0.118 | 0.093 | 0.072 | 0.114 | |
| | | 2006 | 0.063 | 0.045 | 0.082 | 0.070 | 0.052 | 0.087 | 0.075 | 0.054 | 0.097 | 0.109 | 0.078 | 0.141 | 0.088 | 0.066 | 0.110 | |
| | | 2007 | 0.054 | 0.041 | 0.068 | | | | | | | | | | | | | |
| | | 2008 | 0.037 | 0.027 | 0.047 | 0.050 | 0.037 | 0.063 | | | | | | | | | | |
| | | 2009 | 0.036 | 0.026 | 0.047 | 0.046 | 0.034 | 0.058 | 0.058 | 0.044 | 0.072 | | | | | | | |
| | | 2010 | 0.032 | 0.019 | 0.045 | 0.044 | 0.028 | 0.061 | 0.042 | 0.027 | 0.056 | 0.066 | 0.044 | 0.089 | | | | |
| | Men | 2011 | 0.034 | 0.024 | 0.044 | 0.033 | 0.024 | 0.043 | 0.033 | 0.024 | 0.043 | 0.054 | 0.038 | 0.070 | 0.076 | 0.056 | 0.097 | |
| | | 2012 | 0.041 | 0.028 | 0.054 | 0.030 | 0.020 | 0.039 | 0.032 | 0.022 | 0.042 | 0.045 | 0.030 | 0.060 | 0.054 | 0.039 | 0.070 | |
| | | 2006 | 0.040 | 0.027 | 0.053 | 0.041 | 0.029 | 0.053 | 0.039 | 0.027 | 0.052 | 0.056 | 0.038 | 0.074 | 0.052 | 0.036 | 0.067 | |
| | | 2007 | 0.037 | 0.028 | 0.046 | | | | | | | | | | | | | |
| | | 2008 | 0.025 | 0.018 | 0.032 | 0.047 | 0.036 | 0.058 | | | | | | | | | | |
| | | 2009 | 0.025 | 0.018 | 0.032 | 0.044 | 0.033 | 0.054 | 0.061 | 0.048 | 0.075 | | | | | | | |
| Men | 2010 | 0.022 | 0.012 | 0.031 | 0.042 | 0.027 | 0.057 | 0.044 | 0.030 | 0.058 | 0.056 | 0.037 | 0.075 | | | | | |
| | 2011 | 0.023 | 0.016 | 0.030 | 0.032 | 0.023 | 0.040 | 0.035 | 0.026 | 0.045 | 0.046 | 0.032 | 0.059 | 0.059 | 0.044 | 0.075 | | |
| | 2012 | 0.028 | 0.020 | 0.036 | 0.028 | 0.020 | 0.036 | 0.034 | 0.024 | 0.044 | 0.038 | 0.025 | 0.051 | 0.043 | 0.031 | 0.055 | | |
| | 2006 | 0.027 | 0.019 | 0.036 | 0.039 | 0.027 | 0.050 | 0.042 | 0.029 | 0.055 | 0.047 | 0.031 | 0.063 | 0.040 | 0.028 | 0.053 | | |
| | 2007 | 0.027 | 0.019 | 0.036 | 0.039 | 0.027 | 0.050 | 0.042 | 0.029 | 0.055 | 0.047 | 0.031 | 0.063 | 0.040 | 0.028 | 0.053 | | |
| | 2008 | 0.027 | 0.019 | 0.036 | 0.039 | 0.027 | 0.050 | 0.042 | 0.029 | 0.055 | 0.047 | 0.031 | 0.063 | 0.040 | 0.028 | 0.053 | | |

Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014.

Note: For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Table A1 (cont'd): Multinomial logit results– Predicted probabilities of SE exit for women and men by cohort and wage attachment group

| | | | 2005 cohort | | | 2006 cohort | | | 2007 cohort | | | 2008 cohort | | | 2009 cohort | | |
|---|--------------|------|-------------|--------------|-------|-------------|--------------|-------|-------------|--------------|-------|-------------|--------------|-------|-------------|--------------|-------|
| Panel A: SE to unemp/non-participation | | | | | | | | | | | | | | | | | |
| Weeks worked | Gender | Year | Pred prob | 95% conf int | |
| >=50 | Women | 2006 | 0.040 | 0.031 | 0.049 | | | | | | | | | | | | |
| | | 2007 | 0.027 | 0.021 | 0.033 | 0.040 | 0.032 | 0.048 | | | | | | | | | |
| | | 2008 | 0.027 | 0.020 | 0.033 | 0.038 | 0.029 | 0.046 | 0.049 | 0.039 | 0.058 | | | | | | |
| | | 2009 | 0.023 | 0.015 | 0.032 | 0.036 | 0.023 | 0.049 | 0.035 | 0.024 | 0.046 | 0.042 | 0.029 | 0.055 | | | |
| | | 2010 | 0.025 | 0.018 | 0.032 | 0.027 | 0.020 | 0.034 | 0.028 | 0.021 | 0.035 | 0.034 | 0.026 | 0.042 | 0.055 | 0.042 | 0.068 |
| | | 2011 | 0.030 | 0.021 | 0.039 | 0.024 | 0.017 | 0.031 | 0.026 | 0.019 | 0.034 | 0.028 | 0.020 | 0.036 | 0.039 | 0.029 | 0.049 |
| | | 2012 | 0.029 | 0.020 | 0.038 | 0.033 | 0.025 | 0.042 | 0.033 | 0.023 | 0.043 | 0.035 | 0.025 | 0.045 | 0.037 | 0.026 | 0.048 |
| | Men | 2006 | 0.037 | 0.030 | 0.044 | | | | | | | | | | | | |
| | | 2007 | 0.025 | 0.020 | 0.030 | 0.038 | 0.032 | 0.044 | | | | | | | | | |
| | | 2008 | 0.025 | 0.020 | 0.029 | 0.035 | 0.029 | 0.042 | 0.048 | 0.041 | 0.055 | | | | | | |
| | | 2009 | 0.022 | 0.014 | 0.030 | 0.034 | 0.022 | 0.045 | 0.034 | 0.025 | 0.044 | 0.044 | 0.032 | 0.056 | | | |
| | | 2010 | 0.023 | 0.018 | 0.029 | 0.025 | 0.020 | 0.031 | 0.027 | 0.021 | 0.033 | 0.036 | 0.028 | 0.044 | 0.058 | 0.048 | 0.068 |
| | | 2011 | 0.028 | 0.021 | 0.035 | 0.022 | 0.017 | 0.028 | 0.026 | 0.019 | 0.033 | 0.030 | 0.022 | 0.038 | 0.042 | 0.034 | 0.050 |
| | | 2012 | 0.027 | 0.019 | 0.035 | 0.031 | 0.024 | 0.038 | 0.033 | 0.024 | 0.042 | 0.037 | 0.027 | 0.047 | 0.040 | 0.030 | 0.049 |

Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014.

Note: For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Table A1 (cont'd): Multinomial logit results – Predicted probabilities of SE exit for women and men by cohort and wage attachment group

| | | | 2005 cohort | | | 2006 cohort | | | 2007 cohort | | | 2008 cohort | | | 2009 cohort | | |
|----------------------------|--------------|------|-------------|--------------|-------|-------------|--------------|-------|-------------|--------------|-------|-------------|--------------|-------|-------------|--------------|-------|
| Panel B: SE to wage | | | | | | | | | | | | | | | | | |
| Weeks worked | Gender | Year | Pred prob | 95% conf int | |
| <=26 | Women | 2006 | 0.109 | 0.093 | 0.124 | | | | | | | | | | | | |
| | | 2007 | 0.073 | 0.062 | 0.085 | 0.113 | 0.096 | 0.129 | | | | | | | | | |
| | | 2008 | 0.063 | 0.052 | 0.074 | 0.075 | 0.063 | 0.088 | 0.124 | 0.106 | 0.142 | | | | | | |
| | | 2009 | 0.063 | 0.046 | 0.081 | 0.064 | 0.048 | 0.079 | 0.081 | 0.064 | 0.099 | 0.097 | 0.074 | 0.120 | | | |
| | | 2010 | 0.049 | 0.040 | 0.059 | 0.050 | 0.040 | 0.060 | 0.075 | 0.061 | 0.090 | 0.068 | 0.053 | 0.082 | 0.117 | 0.096 | 0.139 |
| | | 2011 | 0.052 | 0.041 | 0.063 | 0.055 | 0.044 | 0.066 | 0.062 | 0.048 | 0.075 | 0.075 | 0.058 | 0.092 | 0.077 | 0.061 | 0.093 |
| | | 2012 | 0.049 | 0.039 | 0.059 | 0.063 | 0.049 | 0.077 | 0.064 | 0.050 | 0.078 | 0.065 | 0.049 | 0.081 | 0.076 | 0.060 | 0.093 |
| | Men | 2006 | 0.105 | 0.086 | 0.124 | | | | | | | | | | | | |
| | | 2007 | 0.070 | 0.057 | 0.084 | 0.139 | 0.115 | 0.164 | | | | | | | | | |
| | | 2008 | 0.060 | 0.048 | 0.073 | 0.094 | 0.076 | 0.112 | 0.132 | 0.108 | 0.156 | | | | | | |
| | | 2009 | 0.060 | 0.042 | 0.078 | 0.079 | 0.059 | 0.100 | 0.087 | 0.066 | 0.108 | 0.091 | 0.063 | 0.118 | | | |
| | | 2010 | 0.047 | 0.036 | 0.058 | 0.062 | 0.049 | 0.076 | 0.080 | 0.063 | 0.098 | 0.063 | 0.046 | 0.081 | 0.136 | 0.108 | 0.163 |
| | | 2011 | 0.050 | 0.038 | 0.062 | 0.069 | 0.051 | 0.086 | 0.066 | 0.050 | 0.082 | 0.071 | 0.050 | 0.091 | 0.089 | 0.071 | 0.108 |
| | | 2012 | 0.047 | 0.035 | 0.059 | 0.079 | 0.059 | 0.099 | 0.069 | 0.052 | 0.086 | 0.061 | 0.043 | 0.078 | 0.089 | 0.068 | 0.110 |
| 27-49 | Women | 2006 | 0.128 | 0.108 | 0.128 | | | | | | | | | | | | |
| | | 2007 | 0.085 | 0.071 | 0.085 | 0.127 | 0.108 | 0.147 | | | | | | | | | |
| | | 2008 | 0.074 | 0.059 | 0.074 | 0.085 | 0.070 | 0.100 | 0.142 | 0.123 | 0.161 | | | | | | |
| | | 2009 | 0.073 | 0.052 | 0.073 | 0.072 | 0.053 | 0.090 | 0.093 | 0.073 | 0.112 | 0.125 | 0.095 | 0.155 | | | |
| | | 2010 | 0.057 | 0.045 | 0.057 | 0.056 | 0.044 | 0.067 | 0.085 | 0.070 | 0.100 | 0.087 | 0.068 | 0.106 | 0.136 | 0.109 | 0.164 |
| | | 2011 | 0.061 | 0.048 | 0.061 | 0.061 | 0.048 | 0.075 | 0.070 | 0.056 | 0.084 | 0.096 | 0.074 | 0.118 | 0.088 | 0.069 | 0.107 |
| | | 2012 | 0.057 | 0.045 | 0.057 | 0.071 | 0.055 | 0.087 | 0.073 | 0.057 | 0.089 | 0.084 | 0.062 | 0.105 | 0.087 | 0.067 | 0.107 |
| | Men | 2006 | 0.135 | 0.115 | 0.135 | | | | | | | | | | | | |
| | | 2007 | 0.089 | 0.075 | 0.089 | 0.143 | 0.123 | 0.164 | | | | | | | | | |
| | | 2008 | 0.077 | 0.064 | 0.077 | 0.096 | 0.082 | 0.111 | 0.158 | 0.138 | 0.178 | | | | | | |
| | | 2009 | 0.077 | 0.056 | 0.077 | 0.082 | 0.062 | 0.101 | 0.104 | 0.083 | 0.125 | 0.154 | 0.119 | 0.190 | | | |
| | | 2010 | 0.060 | 0.048 | 0.060 | 0.063 | 0.051 | 0.076 | 0.095 | 0.080 | 0.111 | 0.109 | 0.089 | 0.128 | 0.171 | 0.142 | 0.199 |
| | | 2011 | 0.064 | 0.051 | 0.064 | 0.070 | 0.055 | 0.084 | 0.078 | 0.063 | 0.094 | 0.119 | 0.096 | 0.143 | 0.112 | 0.092 | 0.131 |
| | | 2012 | 0.060 | 0.047 | 0.060 | 0.081 | 0.064 | 0.098 | 0.082 | 0.065 | 0.099 | 0.104 | 0.082 | 0.127 | 0.111 | 0.089 | 0.132 |

Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-2014 & W-2 data from 2005-2014.

Note: For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Table A1 (cont'd): Multinomial logit results – Predicted probabilities of SE exit for women and men by cohort and wage attachment group

| | | 2005 cohort | | | 2006 cohort | | | 2007 cohort | | | 2008 cohort | | | 2009 cohort | | | |
|----------------------------|--------------|-------------|-----------|--------------|-------------|--------------|-----------|--------------|-----------|--------------|-------------|--------------|-----------|--------------|-------|-------|-------|
| Panel B: SE to wage | | | | | | | | | | | | | | | | | |
| Weeks worked | Gender | Year | Pred prob | 95% conf int | Pred prob | 95% conf int | Pred prob | 95% conf int | Pred prob | 95% conf int | Pred prob | 95% conf int | Pred prob | 95% conf int | | | |
| >=50 | Women | 2006 | 0.126 | 0.111 | 0.126 | | | | | | | | | | | | |
| | | 2007 | 0.084 | 0.072 | 0.084 | 0.153 | 0.135 | 0.170 | | | | | | | | | |
| | | 2008 | 0.072 | 0.061 | 0.072 | 0.103 | 0.089 | 0.117 | 0.149 | 0.132 | 0.165 | | | | | | |
| | | 2009 | 0.072 | 0.053 | 0.072 | 0.087 | 0.069 | 0.106 | 0.097 | 0.078 | 0.116 | 0.140 | 0.111 | 0.168 | | | |
| | | 2010 | 0.056 | 0.045 | 0.056 | 0.068 | 0.056 | 0.079 | 0.089 | 0.076 | 0.102 | 0.098 | 0.082 | 0.113 | 0.149 | 0.129 | 0.170 |
| | | 2011 | 0.060 | 0.049 | 0.060 | 0.074 | 0.060 | 0.088 | 0.073 | 0.059 | 0.087 | 0.107 | 0.088 | 0.126 | 0.097 | 0.083 | 0.111 |
| | | 2012 | 0.056 | 0.045 | 0.056 | 0.086 | 0.069 | 0.104 | 0.077 | 0.063 | 0.091 | 0.094 | 0.075 | 0.112 | 0.096 | 0.080 | 0.112 |
| | Men | 2006 | 0.138 | 0.123 | 0.138 | | | | | | | | | | | | |
| | | 2007 | 0.092 | 0.082 | 0.092 | 0.146 | 0.132 | 0.160 | | | | | | | | | |
| | | 2008 | 0.080 | 0.068 | 0.080 | 0.098 | 0.087 | 0.109 | 0.156 | 0.143 | 0.169 | | | | | | |
| | | 2009 | 0.079 | 0.060 | 0.079 | 0.083 | 0.065 | 0.101 | 0.102 | 0.085 | 0.120 | 0.148 | 0.120 | 0.176 | | | |
| | | 2010 | 0.062 | 0.052 | 0.062 | 0.064 | 0.055 | 0.074 | 0.094 | 0.082 | 0.105 | 0.104 | 0.090 | 0.118 | 0.182 | 0.162 | 0.202 |
| | | 2011 | 0.066 | 0.055 | 0.066 | 0.071 | 0.059 | 0.083 | 0.077 | 0.063 | 0.090 | 0.114 | 0.096 | 0.132 | 0.120 | 0.106 | 0.134 |
| | | 2012 | 0.062 | 0.051 | 0.062 | 0.082 | 0.067 | 0.097 | 0.081 | 0.067 | 0.095 | 0.100 | 0.082 | 0.118 | 0.118 | 0.102 | 0.134 |

Source: 2005 through 2009 American Community Survey (ACS) linked with Form 1040 data from 2003-20 & W-2 data from 2005-2014.

Note: For more information on sampling error, non-sampling error and confidentiality protection in the ACS, visit <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.