

5. Earnings shocks and recoveries, females





5.1

Introduction



Key findings

- The share of females entering earnings shocks is at least 2 percent higher than the percentage for males: it varies from 7 percent to 10 percent throughout the period. Similar to males, the percentage of females experiencing a drop of 100 percent of their income also declines from 1994 to 2017.
- More females than males experience at least one earnings shock: 77 percent of females between the ages of 25 and 44 will experience an earnings shock, but fewer females experience a repeated earnings shock: 17 percent.
- Recovery from earnings shocks takes longer for females than for males. The 3-year recovery rate fluctuates between 33 and 36 percent.

In Chapter 4 we demonstrated that most males experience at least one earnings shock during their working life and that recovery from these shocks is typically slow for the majority. In this chapter we explore earnings and shocks for females. We explore whether the findings for males are similar for females. Given earnings shocks may be involuntary (e.g., losing a job) or voluntary (e.g., cutting back on hours worked, switching careers), we might expect the reasons for observing an earnings shock will vary across genders. Moreover, given differences in occupational choices and/or differences in the treatment of male and female workers, shocks and recovery from shocks differ based on these reasons as well.

5.2

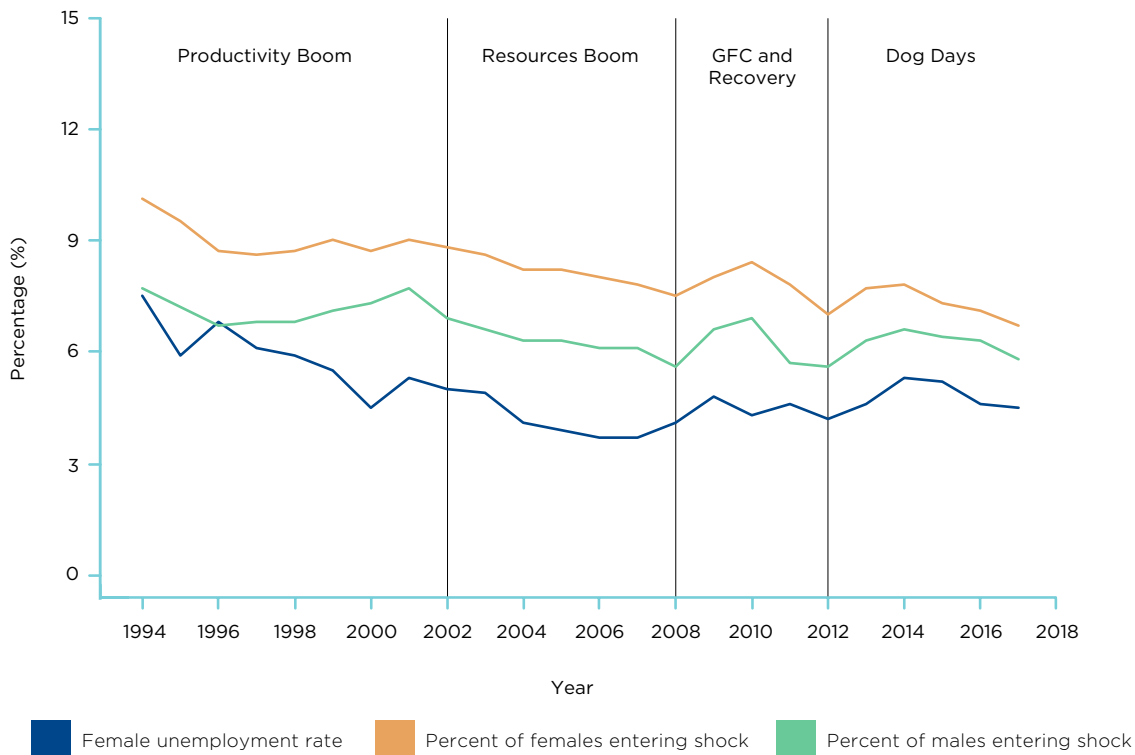
Experiencing an earnings shock



We begin by depicting the annual earnings shock rate for females in Figure 5.1. There are two striking differences between females and males. First, the earnings shock rates for females are much higher than those reported for males. To highlight the differences, we have included the male earnings shock rates in Figure 5.1. While the trend for males and females is similar, in most years, the rate for females is higher than for males by approximately 2 percentage points. Near the end of the period, however, the gap between females and males narrows to just less than 1 percentage point.

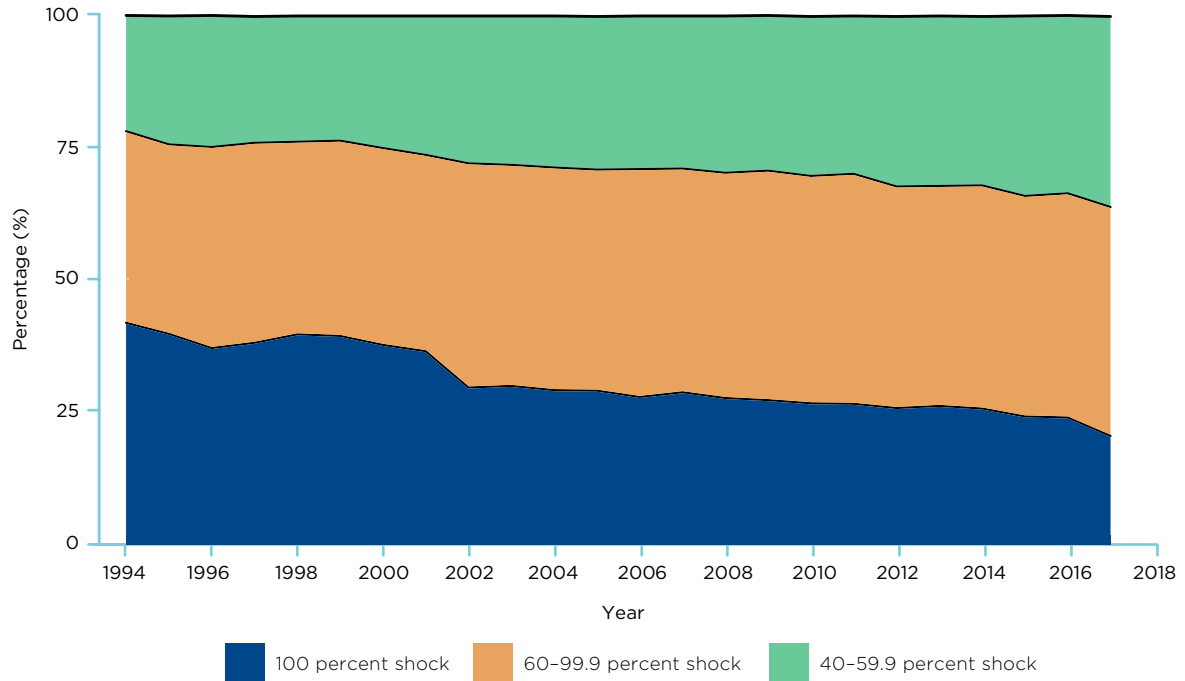
The second striking difference is the gap between the rates of female earnings shocks and the female unemployment rate. As discussed previously, there is no reason to expect these two rates to be equal or to follow similar trends. The differences as depicted in Figure 5.1, however, highlight the importance of utilising more than an unemployment rate to understand disadvantage.

Figure 5.1. Females experiencing an earnings shock



To what extent are the earnings shocks experienced by females closer to a change in earnings of 40 percent or closer to a change of 100 percent? In Figure 5.2, we depict the shocks in three groups: a complete or 100 percent shock; a shock that equals a drop of 60 to 100 percent in pre-shock earnings; and a shock that ranges from 40 to 60 percent of pre-shock earnings. Except for the first two years, the earnings shock for most females ranges between 60 and 100 percent.

In more recent years, the second largest group is represented by females with an earnings shock that ranges between 40 and 60 percent. While we might expect more females to voluntarily reduce their labour earnings by 100 percent, especially those who are in their childbearing years, this does not seem to be the case. This will be investigated further in Chapter 7.

Figure 5.2. Depth of earnings shocks—Females

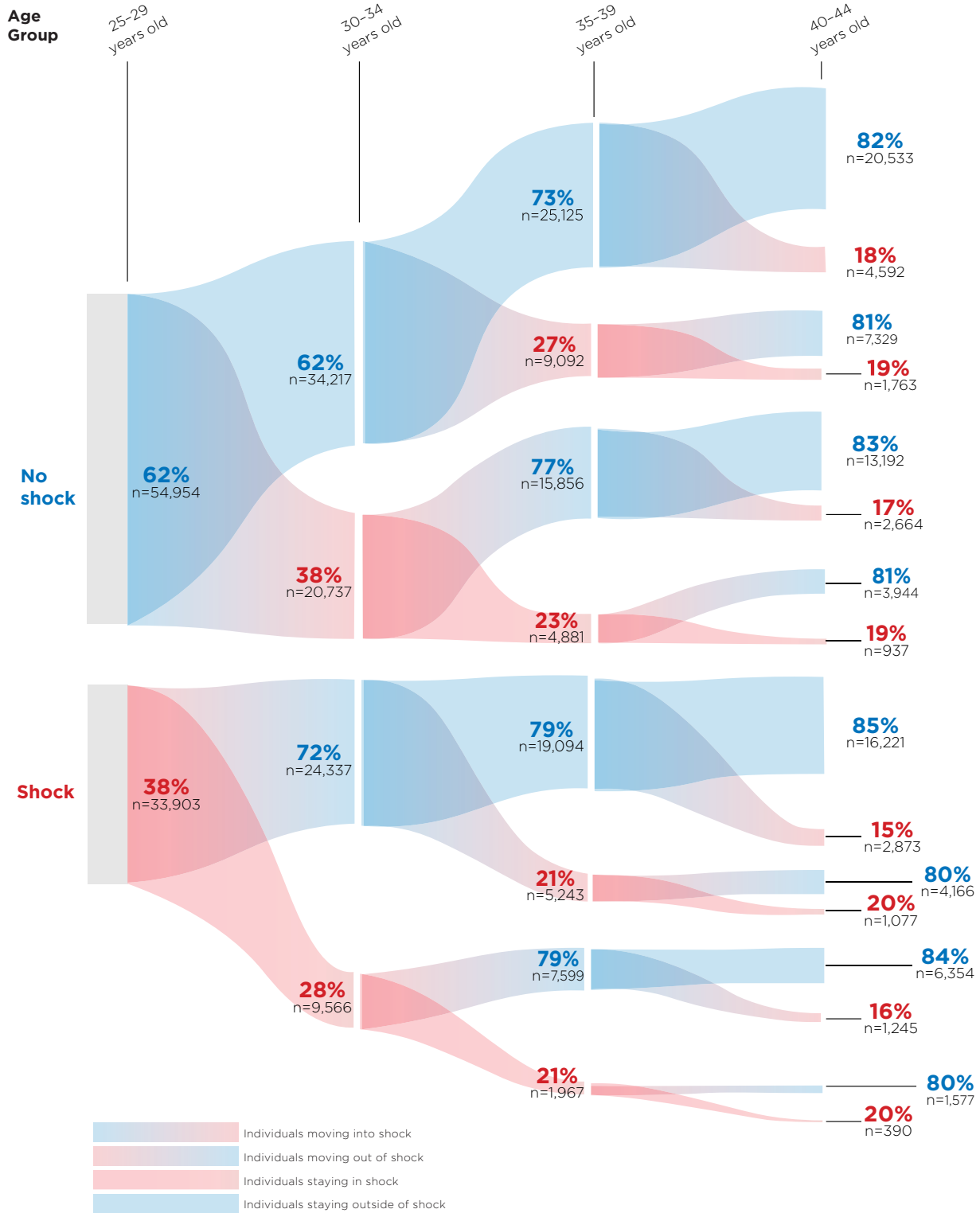
Notes: The share is based on a denominator that equals the number of females observed with an earnings shock of 40 percent or greater. The numerator is equal to the number of females in shock based on the magnitude of the shock observed.

For Figure 5.3, we depict female tax filers who we can follow from ages 25 to 44 to explore in greater depth the likelihood of experiencing one or more earnings shocks across four 5-year periods (25–29, 30–34, 35–39, 40–44). Starting first with the youngest ages (25 to 29), we observe 38 percent of the tax filers as experiencing an earnings shock. This is 11 percentage points greater than is observed for the male tax filers. Of those who experience an earnings shock between the age of 25 and 29, however, 48 percent never experience an earnings shock as they age. Moreover, only 1 percent of those with a shock in the first period are observed experiencing a shock in the remaining three periods. These rates suggest that, conditioning on a shock in the first period, females do not experience as many shocks as males.

Of the 62 percent of females who do not experience an earnings shock in the first period, 37 percent also do not experience a shock in future periods. This is a lower share than is observed for males. Across most periods, there is a higher rate of females experiencing an earnings shock than observed for males.

Across the females tracked for Figure 5.3, 23 percent never experience an earnings shock and 47 percent experience an earnings shock in only one period. Thus, most females are observed with at least one earnings shock (77 percent). But more experience only one shock versus two or more shocks.

Figure 5.3. Experiencing shocks over the life cycle—Females



Notes: The tree diagram represents the sequence of shock / non-shock events experienced by females over the life-cycle. To construct the tree diagram we take all females with reported earnings and total income in all years from age 25 to age 44. The 20 years of data are split into 4 periods of 5 years to represent different stages of life (age 25 to 29, age 30 to 34, age 35 to 39, age 40 to 44). In each stage of life the event “shock” occurs if a female experiences one or more shocks. A shock is defined as a drop of both earnings and total income of more than 40 percent based on the minimum value of the two previous years. ‘n’ denotes the number of individuals.

5.3

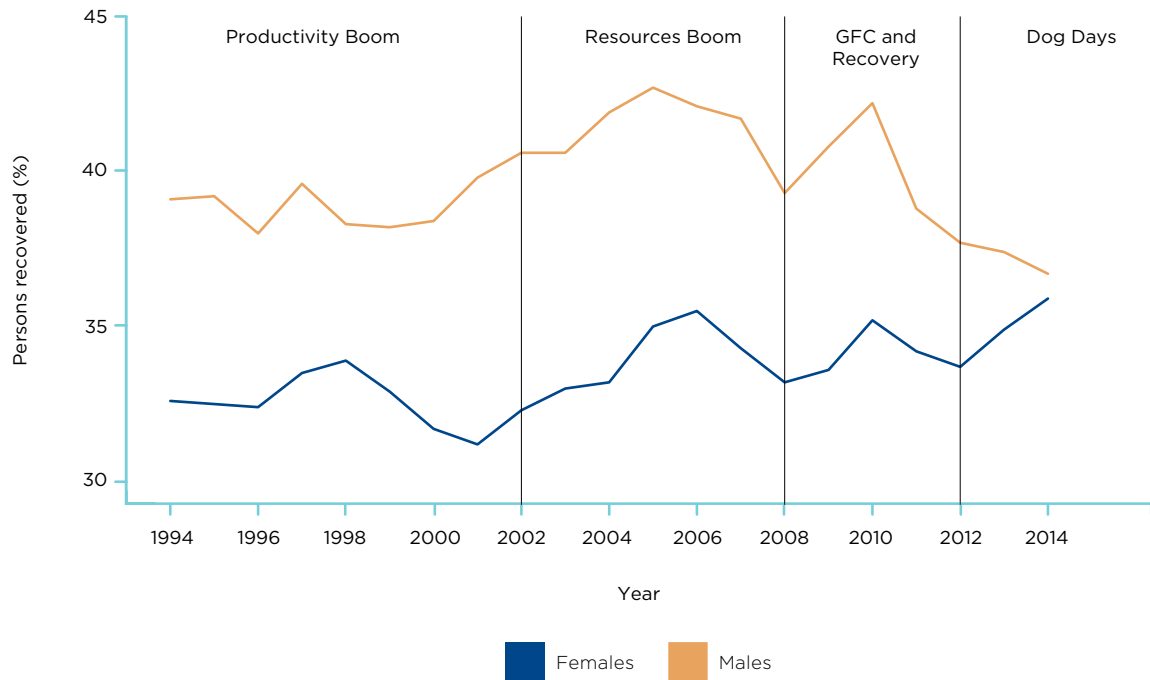
Recovery from earnings shocks



In the previous section, we illustrated that a higher rate of females than males are observed experiencing an earnings shock. Do female recovery rates also differ from male recovery rates? The simple answer is yes. In Figure 5.4 we depict the 3-year recovery rate for females. We also depict the male recovery rate to use as a comparator. In the 1990s and before the 2001 recession, the recovery rate hovered around 33 percent. For those who experienced an earnings shock in 2001, a recession year, the recovery rate dipped to 31 percent. When comparing this rate to males, females experience lower recovery rates, by more than 6 percentage points.

Throughout the 2000s there has been a relative increase in the recovery rate. There was a dip in 2008 and 2012 but by 2014, the recovery rate increased to 36 percent for females. Compared to males, however, the 5-year recovery rates are lower for the three periods.

Figure 5.4. Recoveries from an earnings shock—Females



Notes: Numerator is number of recoveries within 3 years for females who experienced an earnings shock in a given year. Denominator is number of females experiencing shock.

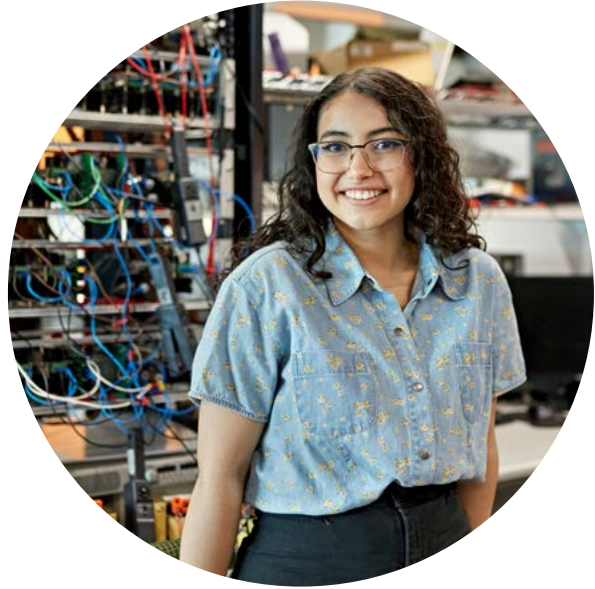
Table 5.1: Recoveries from an earnings shock—Females

	Productivity boom	Resources boom	GFC and recovery	Dog Days
Number of tax filers with an earnings shock	173,272	123,113	88,656	67,576
Average number of shocks per tax filer with at least one shock	1.14	1.10	1.03	1.03
Share recovering within 3 years	32.7%	33.8%	34.2%	34.9%
Share recovering within 5 years	42.4%	44.0%	44.1%	

Notes: This table shows the number of females experiencing earnings shocks and recoveries. 'Productivity boom' refers to years 1993–2001. 'Resources boom' refers to years 2002–2007. 'GFC and recovery' refers to years 2008–2011, and 'Dog Days' refers to years 2012–2014.

5.4

Summary



Females are more likely to experience an earnings shock and more likely to experience a longer recovery period than males. The potential silver lining is that females are less likely to experience multiple earnings shocks. Moreover, in recent years, the 3-year recovery rates have been improving.

Higher earnings shocks and lower recovery rates may be due to voluntary decisions, such as long maternity leave or attitudes tied to pursuing or acting on employment opportunities. Or it may also point to potential differences in opportunities to minimise experiencing a shock in the first place and/or support for recovery. We will explore these differences further in the upcoming chapters and will provide a more comprehensive discussion of gender differences.

