

Unemployment Insurance and the Family: Heterogeneous Effects of Benefit Generosity on Reemployment and Economic Precarity

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Abstract: We investigate how unemployment insurance generosity impacts reemployment and economic precarity by family type. With Swiss longitudinal administrative data and a regression discontinuity design using potential benefit duration, we examine differences between single households and primary and secondary or equal earners, as well as differences by gender and presence of children. Less generous unemployment insurance (shorter potential benefit duration) speeds up reemployment for all family types during the period with benefit cuts whereas longer-term effects are stronger for single households, secondary and equal earners, and those without children. Economic precarity increases for singles, single-parents, and primary earners during the period with lower benefits though there are no long-term effects. We argue that those with higher financial responsibility (i.e., primary earners or those with children) face pressure to find jobs irrespective of benefit generosity whereas those with lower financial responsibility (i.e., secondary or equal earners and those without children) have more capacity to react.

Keywords: unemployment; unemployment insurance; family; gender; welfare state; poverty

Replication Package: The code for data analysis, data description, and instructions on how data can be requested for replication is provided on SwissUbase. <https://doi.org/10.25597/tm2k-jf98>

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UNEMPLOYMENT insurance is a key component of the social safety net with the primary goal of smoothing income over time and preventing financial hardship. Unemployment insurance reduces income losses for individuals (DiPrete and McManus 2000; Hardoy and Schöne 2014), protecting all members of the household from economic precarity and its related negative consequences. More generous unemployment benefits have been shown to improve living standards and reduce the risk of poverty (Alm et al. 2020; Di Nallo and Oesch 2021).

In setting unemployment insurance generosity, policy makers face a trade-off between maintaining peoples living standard and the unintended negative effect of delaying reemployment. There is consistent evidence that there is slower reemployment with more generous unemployment insurance, such as longer benefit duration rights (see Schmieder et al. 2016: for a review) and higher income replacement rates (Carling et al. 2001; Lalive et al. 2006; Røed and Zhang 2003).¹

Although traditionally the literature on unemployment focused on the individual, the relevance of family during unemployment is increasingly recognized.

Recent research has examined how partners of the unemployed can increase their earnings as a reaction to unemployment (the added worker effect) (Cammeraat et al. 2022; Halla et al. 2020; Hevenstone et al. 2023). Furthermore, studies have found that partners co-insure each other with their existing income and wealth (Alm et al. 2020; Ehlert 2012), and that main earners have shorter unemployment spells than secondary earners (Jacob and Kleinert 2014). In short, the household has multiple pathways towards influencing the unemployment experience, with the consequence that both reemployment and the risk of poverty during unemployment depend on family context.

Although there is substantial work on family context and unemployment, there is little evidence on how welfare state generosity interacts with family context in affecting economic precarity and reemployment. The analysis of the heterogeneous effects of unemployment insurance generosity by family type has key policy relevance. Given the trend towards welfare state retrenchment, it is unclear whether the hardship imposed by welfare state reductions affects all households equally or whether it falls primarily on certain types of households while other family types can buffer the effects of cuts. Differences by family type in the effect of unemployment insurance generosity on reemployment and economic precarity would suggest that the trade-off between insuring income and encouraging reemployment depends on family context, and thus, from a policy perspective, optimal generosity levels might vary. Examining these differential effects is even more important in a context of growing diversity of family types, as social insurance systems were typically designed with a traditional male earner household model in mind. Policy makers need evidence whether the current unemployment insurance system is meeting the needs of different population groups. It could be that certain family types are more affected by poverty when the welfare state recedes, whereas others increase their reemployment more.

In this study, we test how unemployment insurance generosity impacts reemployment and economic precarity for people in different family situations using data from administrative records in Switzerland — a country with generous unemployment insurance in both level and duration (Hijzen and Salvatori 2020; OECD 2020). Our analysis taps into a discontinuity in benefit duration rights (i.e., the maximum number of days an individual is eligible for unemployment insurance during one spell often referred to as potential benefit duration [PBD]). We examine the discontinuity in PBD of 12 versus 18 months due to being employed for 18 or more months in the past two years. For those with shorter duration rights this means significantly reduced benefit income from the 13th to 18th month following the start of unemployment.

We distinguish family types by focusing on the level of financial responsibility the unemployed person has for the household based on the following factors: presence of partner, relative income contribution of the individual to household income, gender, and children. If the unemployed person has a high level of financial responsibility, then unemployment implies a more important loss of household income, which may in turn increase the pressure to find a job, especially when unemployment insurance generosity is low. Alternatively, if those with financial responsibility already give their total effort to finding a job, a reduction in unemployment

benefit duration might have little effect and rather those with less responsibility might increase their reemployment rate more. With respect to economic precarity, intuitively, one expects that less generous unemployment benefits should increase the risk of economic precarity more for those with greater financial responsibility.

Our contribution to the literature is four-fold. First, we contribute to theory on the role of the family in unemployment, by deriving hypotheses on how the unemployed persons financial responsibility for the household interacts with unemployment insurance generosity. Although previous literature looked at gender differences, having a partner, children, or partner resources as separate aspects, the concept of financial responsibility provides a common perspective for interpreting these effects.

Second, we offer a starting point for a new literature examining how welfare state generosity, in particular unemployment insurance, differentially impacts reemployment depending on family context. The economic literature shows consistently that less generous unemployment insurance shortens unemployment spells, but so far has neglected elements of the household context, such as the presence of a partner, the partners resources, or children.

Third, we expand on a small but important literature looking at how welfare states differentially affect the level of precarity of different family types. Some studies have found that a receding or less generous welfare state exposes single unemployed people more to poverty than other family types (Alm et al. 2020; Ehlert 2012). This evidence on heterogeneous effects of welfare generosity on different family types relies on differences between countries or on changes over time. We expand this work using a design exploiting discontinuities in unemployment insurance generosity that allows for more reliable conclusions on causal effects.

Fourth, using administrative rather than survey data, results are not biased by nonresponse, and we can examine small groups such as female main earners and male secondary earners. These groups are of particular interest because they help to disentangle effects related to economic responsibility from other gender effects due to, for example, norms and social expectations. Previous studies have often analyzed mens and womens reemployment chances without addressing gender differences explicitly. We thus provide first evidence on how unemployment policy affects reemployment chances of male and female unemployment accounting for family type and financial responsibility.

Background and Theory

We first briefly describe the research on how unemployment insurance generosity impacts reemployment and economic precarity before moving into more in-depth reviews on the role of family for reemployment and economic precarity during unemployment. Finally, we present hypotheses on how family type may moderate the impact of unemployment insurance generosity on precarity during unemployment and reemployment.

Reemployment and Precarity During Unemployment: The Role of the Unemployment Insurance Generosity

There is well-established economics literature showing that unemployment insurance generosity increases unemployment duration and reduces reemployment. In contrast to earlier studies (Ehrenberg and Oaxaca 1976), more recent contributions draw on strong causal designs, disentangling unemployment insurance generosity from other institutional features. Shorter potential benefit duration has been shown to speed up employment in Austria (Lalive 2007, 2008), France (Le Barbanchon 2016; Marinescu and Skandalis 2020), the United States (Coombs et al. 2022), Slovenia (van Ours and Vodopivec 2006), and Switzerland (Cottier et al. 2020). Reductions in unemployment replacement rates (Carling et al. 2001; Mooi-Reci and Mills 2012; Rebollo-Sanz and Rodríguez-Planas 2020; Røed and Zhang 2003) and sanctions (Abbring et al. 2005) have also shown to result in faster reemployment. Given the solid body of evidence on overall effects, more recent contributions focus on effect heterogeneity (Cottier et al. 2020; Kyyrä and Pesola 2020)² and the mechanisms underlying the relationship between unemployment generosity and reemployment, such as an increase in how intensely individuals search for jobs (Lichter and Schiprowski 2021), liquidity constraints, and decreasing reservation wages (Cottier et al. 2020). At the same time, research shows that the welfare state generally (Di Nallo and Oesch 2021; Ehlert 2012), and unemployment insurance specifically (O'Campo et al. 2015), play an important role with respect to poverty prevention during unemployment. International comparisons suggest that the welfare state in continental Europe offers a better buffer against poverty than in Anglo Saxon countries with differences attributable to lower benefits across multiple social insurance programs (Upward and Wright 2019), and specifically to the fact that unemployment insurance covers income losses better in continental Europe (Di Nallo and Oesch 2021). One limitation of this literature drawing on international comparisons, is that alternative explanations, such as different labor markets or population compositions, cannot be ruled out. A second limitation is that this work generally examines the joint effect of multiple welfare state programs, making it difficult to pinpoint the effects of specific policy measures. One exception is the study by Scruggs and Allan (2006) who isolated effects of different measures of welfare generosity, finding in a 16-country analysis that unemployment insurance generosity had no effect on population level relative or absolute poverty rates, whereas pension and invalidity benefits did. Still, within-country studies have shown that poverty risks increase following welfare state retrenchment (Alm et al. 2020). In aggregate, studies suggest that unemployment insurance makes a difference with respect to poverty for those affected by unemployment.

Reemployment and Precarity During Unemployment: The Role of Family

The family influences the individuals transition out of unemployment and the households financial situation in several ways, acting as both a resource and a constraint. We first address four different ways in which family characteristics affect reemployment and economic precarity during unemployment: (1) the pres-

ence of a partner, (2) relative economic position within couples, (3) gender of the unemployed person, and (4) children.³

(1) The first factor is the *presence of a partner*. Historically, the family has been the first social safety net, predating welfare state institutions. Family members co-insure each other with their existing income and wealth and with the possibility of increasing their earnings when their partner loses their job, the added worker effect.⁴ This insurance within the household buffers income loss in case of unemployment. In contrast, single households cannot rely on others, suffering more dramatic relative household income losses (Choi and Valladares-Esteban 2020; Ehlert 2012) and more frequent transitions to poverty (Alm et al. 2020) when unemployed. Partners resources can also relieve the pressure to quickly find a job. According to job search theory, financial resources increase reservation wages and allow the time and flexibility to explore labor market opportunities (Mortensen and Pissarides 1999; Rogerson et al. 2005), with empirical studies confirming that partner wealth delays reemployment (e.g., Lentz and Tranæs 2005), though it is unclear whether partner income level plays the same role (Jacob and Kleinert 2014).

(2) Although a significant amount of research has examined the role of partner resources, the *relative economic position within the couple* seems to be an important and largely ignored factor affecting both reemployment and the risk of precarity following unemployment. When an unemployed individual contributes more to the family income, the relative loss of household income is greater, implying increasing pressure to find a job and potentially more flexibility in their job search as other household members may be more willing to adapt, for example by relocating or adapting their work schedule. In contrast, secondary earners have less flexibility in their job search as they are potentially more geographically and temporally tied due to partners jobs. Empirical evidence confirms this, showing that (male) breadwinners have faster reemployment, whereas secondary earners find jobs more slowly (Jacob and Kleinert 2014). A higher relative contribution to household income would also imply a greater risk of precarity as the unemployment spell means a greater loss of income for the household again confirmed by the empirical literature finding a higher poverty risk when the households main earner becomes unemployed (Ehlert 2012). The fact that, on average, men tend to contribute more financially to household income than women is an important explanation why relative household earnings loss following unemployment is larger for unemployed men than women (Ehlert 2012).

(3) *Gender* may also influence reemployment and precarity after unemployment in various ways beyond relative economic position. The male breadwinner norm is reflected in childcare, housework, occupational segregation, and discrimination (Dernberger and Pepin 2020; Hochschild 1989; Legerski and Cornwall 2010; Sullivan et al. 2018). Gendered expectations regarding breadwinning might impact individuals reaction to life events (West and Zimmerman 2009: 112-22), and thus including unemployment. During unemployment, norms might create more pressure on men to find a job, whereas for women alternatives to reemployment might be more socially acceptable. This would imply shorter unemployment spells for men. Some empirical evidence confirms this, for example, having a partner shortens unemployment spells more for unemployed men (Jacob and Kleinert 2014);

having a high-income partner is correlated with shorter unemployment spells for men and longer for women (Marcassa 2014); and women are less willing to commute when looking for a job (Le Barbanchon et al. 2021).⁵ For precarity, shorter unemployment spells for men might also indirectly reduce precarity risk, leading to lower precarity risk if men are unemployed holding other factors constant. The measurement and interpretation of gender differences are complex. Although previous studies have distinguished between men and women, it is unclear to what extent gender itself plays a role, insofar as women and men in the same objective family situation react differently.

(4) *Children* are the last mechanism regarding how family context affects reemployment and precarity. Children increase the households financial need, often increase unemployment benefit replacement rates, and decrease flexibility in job search due to caring duties and limited geographic flexibility (Frodermann and Müller 2019; Le Barbanchon et al. 2021). For reemployment this means there is more pressure to find a job, but more limitations in doing so. The mechanism by which children affect reemployment is gendered. Due to the division of labor within couples, children likely influence women's job search and unemployment duration more strongly than men's job search. Although a few studies on reemployment include children as control variables (Jacob and Kleinert 2014: Table 1), their role is not further discussed (Pollmann-Schult and Büchel 2005: being an exception). Both studies suggest longer unemployment spells for women with young children compared to women with older or no children, whereas fatherhood has no significant impact on unemployment duration.

Heterogeneous Effects of Unemployment Insurance by Family Type

In this section, we present hypotheses on how we expect the effects of unemployment generosity (PBD) on reemployment and economic precarity to vary by family type. We focus on the concept of *financial responsibility* which encompasses the four aforementioned mechanisms (partner, relative economic position for couple households, gender, and children). Financial responsibility is stronger for singles than for unemployed with a partner who contributes substantially to household income. For couples, financial responsibility is strongest for primary earners and lowest for secondary earners, whereas individuals in equal-earning couples, where both partners contribute considerably to the household income, lie in between. Finally, children generally increase financial responsibility, and might do so more strongly for fathers given gendered expectations. Taken together, main breadwinners have highest financial responsibility, and secondary earners lowest financial responsibility, with singles and equal earners lying in between. Financial responsibility is generally gendered, with men more likely to be main earners and women secondary earners. Beyond financial responsibility, one might expect additional differences by gender due to the male breadwinner norm (i.e., more pressure for men to take financial responsibility).

Heterogenous unemployment insurance generosity effects for reemployment. Studies on the effects of unemployment insurance generosity have largely ignored the idea that effects might be related to financial responsibility. There are two opposite

ways in which financial responsibility might moderate the effect of unemployment insurance generosity. On one hand, the psychological pressure and financial loss related to less generous unemployment insurance is highest for those with more financial responsibility. This could mean that those with high financial responsibility feel the pressure of less generous unemployment insurance more acutely and thus find a job more quickly. We refer to this as the pressure hypothesis. If it holds, stricter unemployment insurance will accelerate the reemployment of those with more financial responsibility for their household more. Considering the various aspects of financial responsibility, the pressure hypothesis would imply shorter potential benefit duration (PBD) speeds up reemployment for main earners more than for secondary earners with egalitarian earning couples and singles falling in between. Finally, as children increase financial responsibility, unemployment insurance generosity should impact the unemployed with children more than those without.

Pressure hypothesis (H1a): When potential benefit duration is shorter, the unemployed with greater financial responsibility for their household (no partner, a higher relative contribution to household income, and children) will be re-employed more quickly.

On the other hand, those with high financial responsibility already face high pressure to find a job irrespective of unemployment insurance generosity, so potentially stricter rules may have little impact on their reemployment. In contrast, individuals with weaker financial responsibility, such as secondary earners, experience generally somewhat less pressure to find a job and thus they may have more scope to react to higher pressure from less generous unemployment insurance, for example, by increasing search intensity.⁶ We refer to this as the *capacity hypothesis*, as those with financial responsibility have less capacity to react to the lower unemployment insurance generosity. If the capacity hypothesis holds, we expect that stricter unemployment insurance will lead unemployed with less financial responsibility to increase reemployment more rapidly. This would anticipate that shorter PBD affects secondary earners most strongly and has the smallest effect on main earners households. Finally, we would expect unemployed without children increase their reemployment more.

Capacity hypothesis (H1b): When potential benefit duration is shorter, the unemployed with less financial responsibility for their household (with a partner, a smaller relative contribution to household income, and no children) will be re-employed more quickly.

Although the previous literature has not addressed how family moderates the effects of unemployment insurance generosity on reemployment, the empirical literature typically analyzes men and women separately. Although most find that women speed up reemployment more with less generous unemployment insurance than men (Lalive 2008; Caliendo et al. 2013; Lalive 2007; Lalive et al. 2011; Røed and Zhang 2003), others find no significant differences (Kyyrä and Pesola 2020; van Ours and Vodopivec 2006).⁷ Notably these studies do not discuss gender differences and do not tease apart whether these differences are attributable

to gendered levels of financial responsibility versus other gender effects including gender norms.

To better understand gender differences, it is important to compare men and women within household types. One might anticipate that the effect of relative household income contribution or having a partner is largely the same for women and men. In other words, gender differences might at least partially be accounted for by financial responsibility. Remaining gender differences *within* household types, for example, between female breadwinners and male breadwinners, would then suggest that gender norms play a role. Gender norms might place greater pressure for men to provide for family income compared to women with the same socio-economic characteristics. If pressure amplifies the effect of shorter unemployment duration rights (pressure hypothesis), one might also expect stronger effects of unemployment insurance generosity for men than for women with the same level of objective financial responsibility, that is, within household types. As the capacity hypothesis refers to a more objective mechanism than the pressure hypothesis, gender differences should not play a main role after controlling for financial responsibility.

Gender hypothesis (H2): Comparing men and women with the same financial responsibility, men will reenter employment faster.

Heterogenous unemployment insurance generosity effects for household economic precarity. Several studies have addressed how welfare state generosity and family interact to influence the risk of economic precarity during unemployment. Evidence suggests that there might be an interaction in that family is more important when support from the welfare state is weaker (Di Nallo and Oesch 2021; Ehlert 2012). Single households and single parents have been found to suffer more severe post-unemployment poverty risks in weak welfare states (Ehlert 2012).

With shorter unemployment benefit duration rights, household income decreases sooner and, therefore, the risk of economic precarity increases. This seems particularly likely for singles, who do not have access to spousal support, and generally have less access to alternative welfare state programs when their unemployment insurance benefits run out. Similarly, when the main earner is unemployed, precarity risk increases more than when the secondary earner is unemployed, as the risk of falling below the precarity threshold increases with the amount of income lost. Considering that the income replacement rate in Switzerland is higher for unemployed with children, loss of benefits leads to a greater income loss and thus a greater increase in precarity. We formulate the following hypothesis:

Income-loss hypothesis (H3): The higher the financial responsibility of the unemployed individual for their household (no partner, a higher relative contribution to household income, and children), the stronger the risk of household precarity.

For gender differences, one expects unemployed men and women might experience different changes in precarity due to PBD reductions. There are three main pathways for how gender might impact the households economic precarity. First,

given men's higher financial responsibility, one expects that, on average, less generous unemployment insurance (shorter PBD) (generating a larger reduction in benefit income) might impact household precarity more for unemployed men. Second, on the other hand, women's generally lower earnings would predict that women with more financial responsibility are closer to the threshold and thus their households are more likely to be pushed into precarity. Third, although gender norms do not have a direct influence on household precarity, they may have an indirect impact through reemployment. If the gender hypothesis (H2) holds, stricter unemployment insurance should impact precarity less for households with unemployed men given their faster reemployment.

The income-loss hypothesis for precarity (H3) is restricted to the time individuals face cuts in unemployment benefits. There are no clear expectations on how unemployment insurance generosity affects precarity in the longer term, as these effects depend on several factors. First, faster reemployment due to less generous unemployment insurance (shorter PBD) might offset some of the income losses, and these reemployment effects might vary by financial responsibility (pressure and capacity hypotheses). Second, precarity risk depends on how unemployment insurance generosity affects earnings for each family type, whereas the empirical literature has mixed results on how PBD impacts earnings. Third, the experience of short-term precarity, which we anticipate among the unemployed with more financial responsibility, might create cumulative disadvantage leading to long-term precarity. Fourth, some unemployed have spouses who can increase income (the added worker effect). If increases endure beyond the unemployed partners' reemployment, household precarity might even decline in the long run. Finally, those with financial responsibility might be able to access other income sources, including welfare state programs or additional child support when their unemployment insurance benefits expire. In sum, family has various paths of influence such that the impact of declining unemployment insurance generosity on precarity might be enhanced, disappear, or even be reversed in the longer term. Even without clear theoretical expectations, from a policy perspective, it is still important, however, to consider the longer-term effects on precarity.

Data and Variables

Data

Our sample is based on individual-level data from several administrative data sources, linked using social security identification numbers. First, we use unemployment insurance registers which include information on unemployment spell start, number of months with paid contributions, PBD, and the economic and demographic characteristics of the insured individual (pre-unemployment education, occupation, age, gender, residence, nationality) (Swiss Federal Council 2006). These data are used to identify all individuals with an unemployment spell between 2012 and 2015. The second data source is the Swiss population and household register 2012 to 2016 which is used to identify couples, civil status, number of kids, and age of kids (Swiss Federal Statistical Office (SFSO) 2023a). Third, we add

social security data including earned employment income, self-employment, and social insurance income (unemployment benefits, motherhood insurance, military insurance, disability pension) for both partners from up to one year before unemployment and two years after (Central Compensation Office (CCO) 2018). Fourth, we include social assistance income (Swiss Federal Statistical Office (SFSO) 2023b). Compared to survey data, income is measured precisely at monthly intervals and covers the complete population, avoiding problems related to nonresponse and attrition⁸ and providing sufficient sample size for small population groups, such as female breadwinners and male secondary earners.

Temporary access to register data was possible through a project specific contract. Because the Swiss legislation requires the deletion of all data at the end of the project without exceptions, we cannot provide data for replication. However, the code for data analysis, data description, and instructions on how data can be requested for replication is provided on SwissUbase.⁹

Dependent Variables

We analyze two dependent variables:

1. Probability of reemployment (having any employment income)
2. Probability of household economic precarity

For economic precarity, income includes the sum of all income sources from both partners recorded in the social security register: earnings, unemployment insurance, maternity leave, military service, and social assistance. As our income measure differs slightly from disposable household income, the standard when measuring poverty, we refer to economic precarity instead. For the working age population analyzed here, we lack information on capital income, transfers from other households, child allowances, nonstatutory pensions, and information on expenses (taxes, mandatory health insurance premiums net of subsidies, as well as transfers to other households). For households at the lower end of the income distribution, capital income, taxes, and health care premiums play a negligible role, in particular given the likelihood of receiving health insurance subsidies. More problematic is lacking information on child allowances and transfers to and from other households. We might overestimate economic precarity for families and single-parent households who receive child support and/or alimony from the nonresident parent.¹⁰ However, this bias should affect the level of precarity, but not the change in precarity with variation in unemployment insurance generosity. To assure the robustness of our findings, we also estimated models including simulated child allowances (see online supplement A3.6).

The relevant unit for family income includes the unemployed person, his or her partner, and his or her own children registered in the household. We assume that income is pooled within this family unit and apply the square root equivalence scale. Other households, such as flat mates, siblings, or parents with adult children are not part of our sample.

To conduct this analysis, we had to choose a threshold to define economic precarity. We tested 60 percent of median income in our sample, the income threshold

defining the bottom quintile, and the poverty line as defined for the Swiss statistical office (Swiss Federal Statistical Office (SFSO) 2021). All three measures are relatively similar (2,790 CHF, 2,759 CHF, and 2,240 CHF) with the choice of threshold not impacting results (see online supplement A3.7). Presented results use the 60 percent measure.

In addition to our two dependent variables, we analyzed how unemployment generosity affects job quality, with results in the online supplement (A4). The online supplement also includes a figure illustrating the evolution of the share of the sample employed, receiving unemployment insurance, receiving social assistance, without income from state or employment, and in economic precarity (A1.2).

Independent Variables

We distinguish eight household types: single households, single-parent households, main earners in couples with and without children, egalitarian earners in couples with and without children, and secondary earners in couples with and without children. Main earners are defined as contributing at least two-thirds to family income. Only children under 18 years of age are included.

We define couples as follows. Couples are either married or cohabiting together six months before and after the start of the unemployment spell and have a maximum age difference of 15 years.¹¹ We include only heterosexual couples, as we could not distinguish roommates from unmarried homosexual couples, and therefore exclude all two-adult same-sex households. Households with more than two adults and two-person households who do not meet the criteria to be considered a (stable) couple amount to 28 percent of the unemployed and were excluded from the analysis. Findings including these other households are included in the online supplement (A2.6 and A3.8). Due to the heterogeneity of this group, it is difficult to interpret their effect, but we can say that they do not show a particularly different pattern regarding effects of unemployment insurance generosity.

As control variables, we include income before unemployment as recorded in the registration for unemployment benefits (insured income) and partners income before unemployment in addition to contribution months. Controlling for income level is crucial to account for nonrandom attribution to contribution month and thus to estimate the treatment effect (see online supplement A 1.1 for details). Controlling for partners income is important to disentangle partners absolute level of resources from the relative economic position within couples. By opting for partner income before unemployment, potential compensating effects of the partner are part of the investigated mechanism. That said, this effect is empirically negligible.¹² We did not include other controls for three main reasons. First, the role of control variables other than the running variable is not evident for the estimation of a treatment effect using a discontinuity design. Control variables impose additional assumptions and might be overcontrolling. Second, if the analysis's goal is a policy one, the focus should be on descriptive effects of unemployment insurance generosity, and not controlled effects for hypothetical household types. Third, the inclusion of additional control variables does not affect results (see online supplement A2.5 and A3.5).

Regression Discontinuity Design

Method of Analysis

To measure the effect of unemployment generosity (PBD), we use a regression discontinuity design (Hahn et al. 2001). Our running variable is the number of months with unemployment insurance contributions in the 24 months before the start of the unemployment insurance spell. The PBD is 400 daily allowances (18 months of benefit receipt) conditional on at least 18 contribution months and 260 daily allowances (12 months of benefit receipt) conditional on 12 to 17 contribution months. We exploit the discontinuity between 17 and 18 contribution months, to estimate the effect of PBD on the probability of employment and economic precarity. Our estimates are based on a dummy measuring 400 versus 260 days PBD controlling for the quadratic association between contribution months and our outcome variables. The regression discontinuity approach based on contribution months has been used by Card et al. (2007) and le Barbanchon (2016).

In the short-term (12 to 18 months post-unemployment), the two groups differ in their current unemployment insurance entitlement. In the longer term (19 to 24 months) all individuals in the sample have lost unemployment insurance benefits (except those who worked intermittently during unemployment). We report effects for both time periods to assess whether unemployment insurance has sustained effects on individuals employment and precarity. For both time periods, we pool all monthly observations and correct standard errors, clustering effects of repeated observations.¹³

Having dichotomous outcome variables, we use a linear probability model to analyze the probability of reemployment and economic precarity. In addition, we test the robustness of the results using logistic regression and different model specifications as illustrated in the online supplement.¹⁴ For gender effects, we analyze men and women in separate models and compare gender differences within household types across models. The online supplements (A2.1 and A3.1) show results from the model combining men and women and including gender or the interaction between gender and household types, to test whether there are significant gender differences.

Sample Selection

The sample includes individuals who had an unemployment insurance spell starting between July 2012 and December 2015, who were aged 25 to 53 at the start of unemployment.¹⁵ The upper age limit of 53 years was chosen to avoid overlapping with longer PBD entitlements for those 55 years and older.

Another selection criterion for the sample is the number of months of paid unemployment insurance contributions in the two years prior to becoming unemployed, which is the running variable for the discontinuity design. A minimum of 12 contribution months is required to be eligible for unemployment insurance. Figure 1 shows the distribution of contribution months to unemployment insurance, with full contributions (24 months) being the most frequent category. The sample includes those with 13 to 22 months contributions in the two years preceding

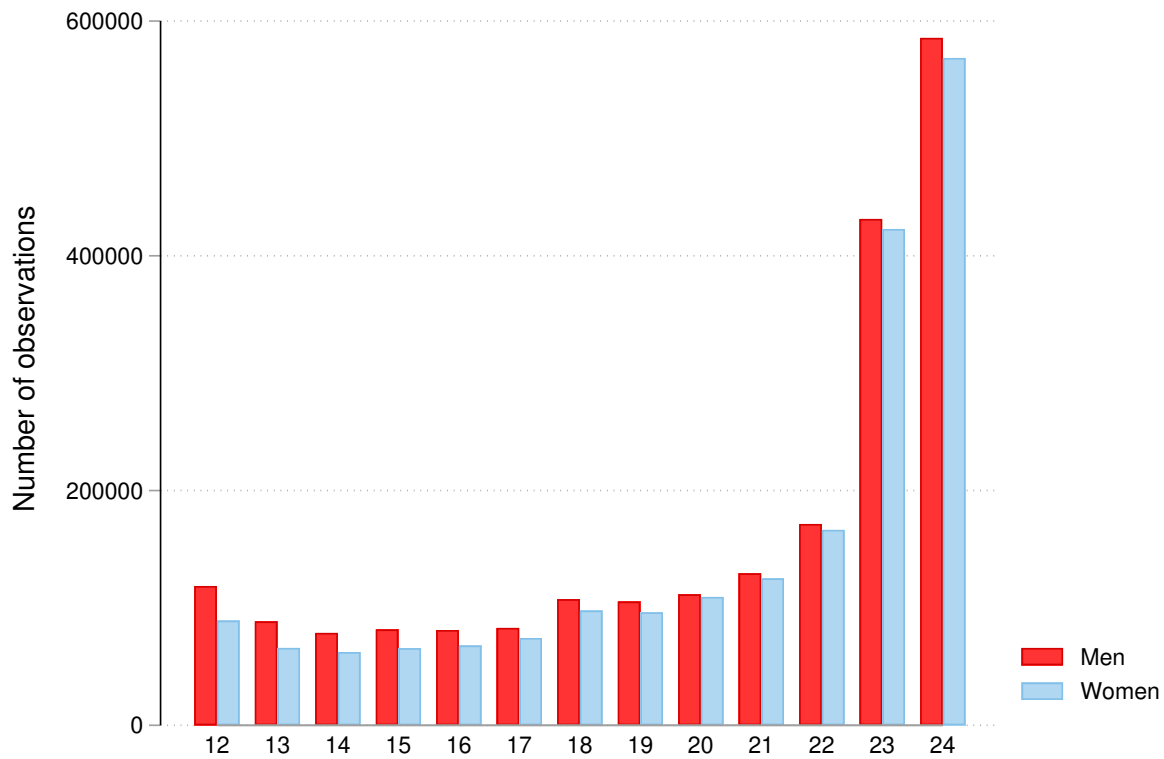


Figure 1: Distribution of months contributed to unemployment insurance.

unemployment, excluding individuals with 23 to 24 months to improve comparability, and excluding those with less than 13 months to have a symmetrical sample spanning five months with long PBD and five months with short PBD.¹⁶ The sample includes 58,146 unemployed individuals who are observed at least 12 months after the start of unemployment. As our data include only measures until 2016, the sample size declines over time following unemployment start. Table 1 shows the number of cases for each of the eight household types. Reflecting the distribution of contribution months, the sample is almost twice as large for the group with longer PBD (18 to 22 contribution months). Almost all groups include 500 or more observations, except for couples with a nontraditional division of labor (male secondary earners and female main earners).

It should be noted that by selecting on contribution month, our sample is not representative for all unemployed in Switzerland. In the analytical sample, individuals with low qualifications, low income, single parents, and foreigners (49 percent) are overrepresented, as they are more likely to have incomplete contributions. More than a quarter of the sample (27.6 percent) was below the precarity threshold in the year before unemployment.

Table 1: Sample size by household type.

Household type	Women short N=10,104		Women long N=18,834		Men short N=10,963		Men long N=18,245	
Single	2,313	(22.9%)	4,393	(23.3%)	4,374	(39.9%)	6,713	(36.8%)
Single parent	2,417	(23.9%)	3,962	(21.0%)	1,541	(14.1%)	2,496	(13.7%)
Main earner kids	342	(3.4%)	702	(3.7%)	1,324	(12.1%)	2,625	(14.4%)
Main earner, no kids	401	(4.0%)	691	(3.7%)	840	(7.7%)	1,434	(7.9%)
Equal earner, kids	1,159	(11.5%)	2,943	(15.6%)	1,040	(9.5%)	1,934	(10.6%)
Equal earner, no kids	1,220	(12.1%)	2,570	(13.6%)	1,215	(11.1%)	2,306	(12.6%)
Sec. earner kids	1,379	(13.6%)	2,501	(13.3%)	287	(2.6%)	357	(2.0%)
Sec. earner no kids	873	(8.6%)	1,072	(5.7%)	342	(3.1%)	380	(2.1%)

Short refers to shorter potential benefit duration (less generous unemployment insurance) for individuals with 13 to 17 months of contribution to unemployment insurance, long refers to longer potential benefit duration (more generous unemployment insurance) for individuals with 18 to 22 months of contribution to unemployment insurance.

Discontinuity Plots

We first examine the probability of employment around the discontinuity in potential benefit duration. Figure 2 illustrates the probability of being employed in the period 12 to 18 months after the start of unemployment by number of months with contributions. Comparing the probability of employment just to the left and right of the cutoff point (17 to 18 contribution months), there is a large reduction in employment due to longer benefit rights. In addition, the overall upward slope shows the positive relationship between the number of contribution months and the probability of reemployment, suggesting that individuals with more stable employment histories prior to unemployment tend to have shorter unemployment spells.

Figure 3 illustrates the discontinuity in the probability of economic precarity. The clear discontinuity with reduced precarity risks up to the cutoff point adds to the rather linear effect of the contribution period, indicating that individuals with more stable employment histories tend to have lower precarity risk. In online supplement A1.1, we discuss and test the assumptions for causal identification with regression discontinuity. We find no indication for manipulation of the assignment variable but do find differences in socioeconomic characteristics below and above the threshold. Once controlling for income before unemployment of the unemployed person and their partner, other variables show no further effects.

Results

Reemployment

For the discussion of the results, we follow the structure of the theoretical section. We start with the main effects of unemployment insurance generosity (PBD) on reemployment, continue with the effects of household types on reemployment (in-

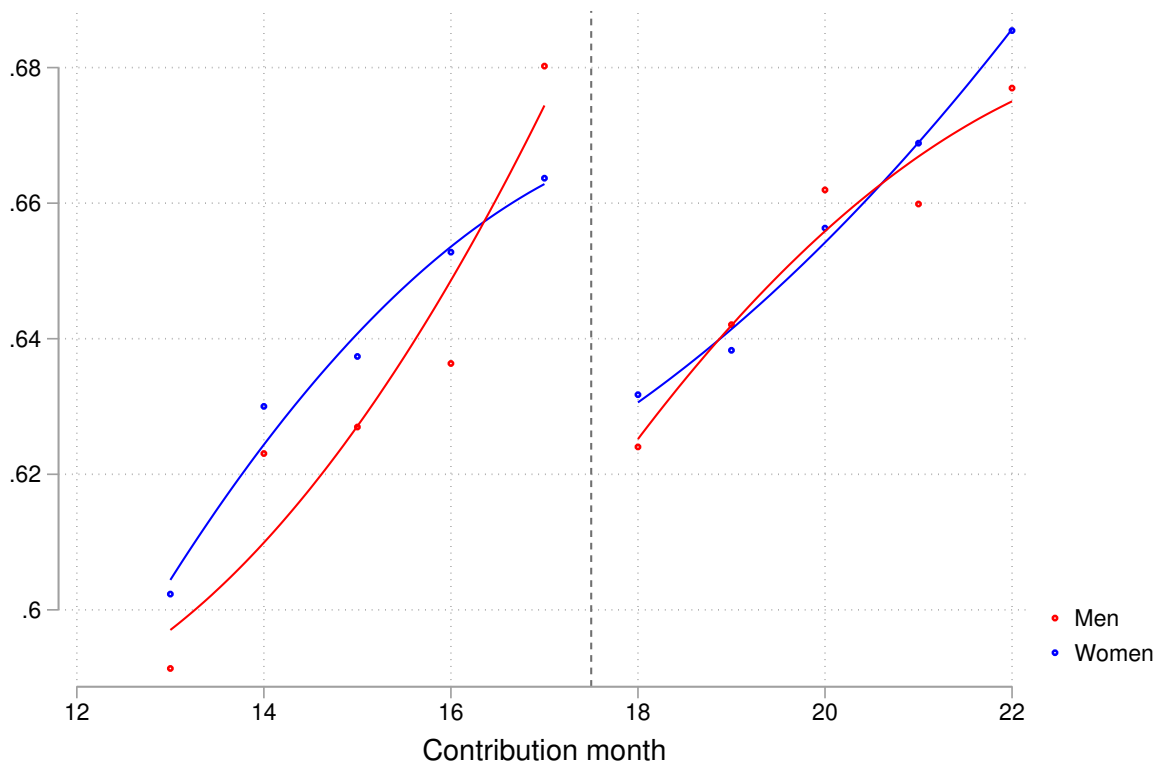


Figure 2: Employment probability in months 12 to 18 by number of contribution months and gender.

dependent of unemployment insurance generosity), and then examine the interaction between unemployment insurance generosity and household types, treating household types as moderating the effects of unemployment insurance generosity (i.e., testing the pressure and capacity hypotheses). We show the results graphically and refer to the online supplement for regression coefficients.

For unemployment insurance generosity, our results confirm previous studies showing faster reemployment with less generous unemployment insurance (shorter PBD) (Figure 4, left). Averaging over all household types, shorter PBD increases the employment rate by 4.2 to 8.4 ppts (95 percent confidence interval) for men in the period 12 to 18 months after unemployment start. The effect is similar for women, with less generous unemployment insurance increasing employment rates by 3.3 to 7.7 ppts. This increase in reemployment rates from 62.3 percent to 68.6 percent for men and from 63.3 percent to 68.9 percent for women is considerable in relative terms, an increase of 10.1 percent for men and 8.7 percent for women. In the period 19 to 24 months after unemployment start, when both groups are no longer eligible for unemployment insurance, the difference between generous and restrictive unemployment insurance is slightly lower though still positive (0.6 to 5.2 ppts for men, 0.4 to 5.1 for women). Surprisingly, there

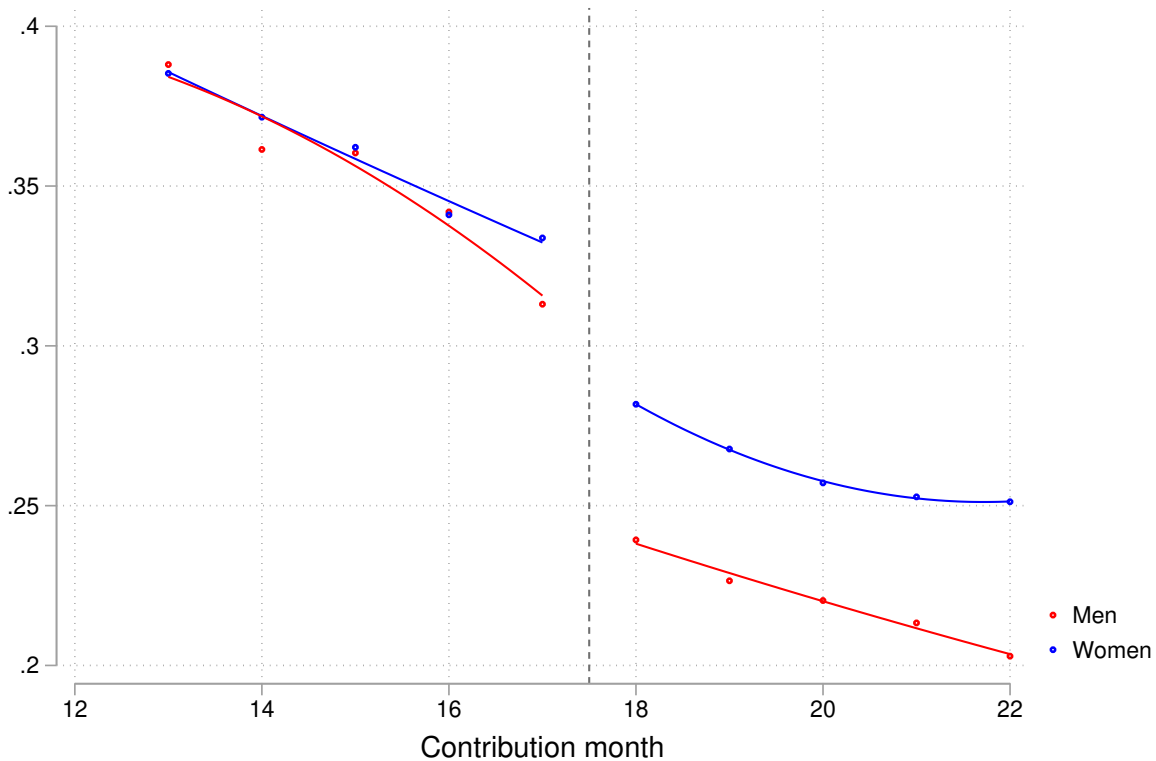


Figure 3: Economic precarity in months 12 to 18 by number of contribution months and gender.

are no significant gender differences in the effect of unemployment generosity on reemployment (see online supplement A2.1).

When looking at reemployment probability by household type, Figure 4 (right) shows that unemployment duration is strongly related to the family situation. Although these main effects of the family situation on reemployment (irrespective of unemployment insurance generosity) are not the focus of this contribution, they are important as replications of the findings reported by Jacob and Kleinert (2014) and relevant to our hypotheses, that is, the capacity hypothesis implicitly assumed individuals with low financial responsibility have lower reemployment rates and thus more room to increase them.

With respect to partners, our results corroborate Jacob and Kleinert (2014), in that primary and equal earners in couples have shorter unemployment spells than singles (female main earners with children being an exception). With respect to relative income contribution, for men, secondary earners have the lowest reemployment probability and thus longest unemployment spells, reflecting lower pressure to find a job. For women, differences in reemployment rates by relative income contribution are less clear. Looking within categories, by the presence of children, there are lower reemployment rates for secondary earners than for equal earners. That said, on average it is remarkable that female equal earners without children

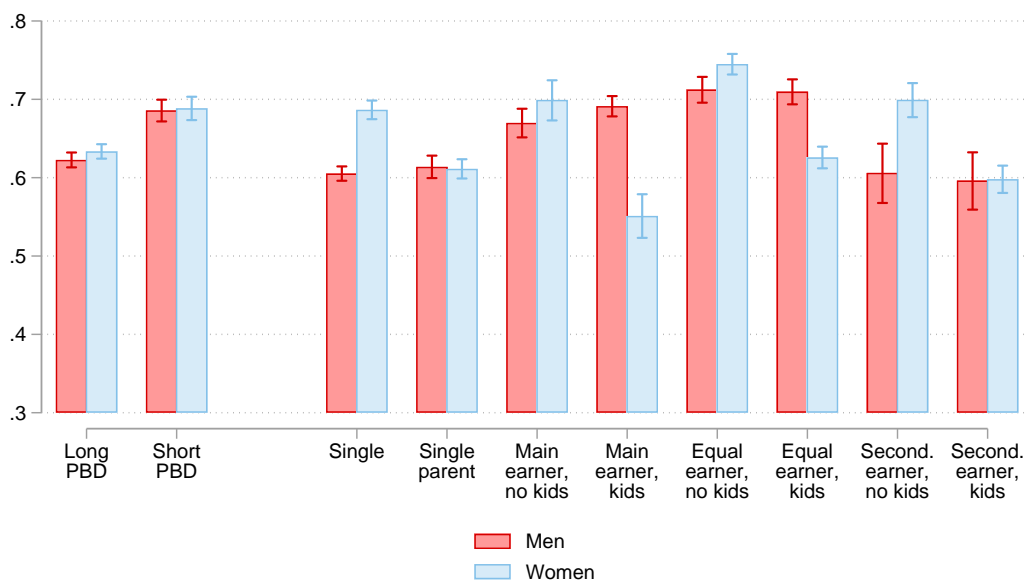


Figure 4: Predicted probability of employment in months 12 to 18 (short-term) by unemployment insurance generosity and household type.

have the highest reemployment probabilities despite having less financial responsibility than main earners, singles, and single parents.

Children do not seem to affect men's reemployment but appear as the strongest factor associated with women's reemployment. Within each household type, women with children take more time to find a job. This would imply that children are not related to financial responsibility, but to constraints for mothers in the job search. Finally, with respect to gender, within household group, generally women have the same or higher reemployment rates with the important exceptions of female primary breadwinners and equal earners with children, both of whom have lower reemployment rates compared to similar men.

Overall results suggest secondary earners and women with children might have the highest capacity to speed up reemployment, whereas equal earners and main earners might have the least, given already high reemployment rates. To test whether these lower reemployment rates translate into stronger reactions to unemployment generosity (as anticipated by the capacity hypothesis), we turn to the interaction effects.

To assess the pressure and capacity hypotheses on the heterogeneous effects of unemployment insurance generosity (H1a, H1b), Figure 5 visualizes marginal effects of stricter unemployment insurance by household type. Most importantly, stricter unemployment insurance has a significant positive impact on reemployment for all household types and for both men and women. With respect to the question of heterogeneity across household types, in the short term (12 to 18 months following unemployment), the confidence intervals of the estimates largely overlap. However, as we analyze population data, it is worth discussing some considerable differences in point estimates. For men, the estimated reemploy-

ment effect is smallest for main earners with children amounting to 4.5 ppts higher employment rates when unemployment insurance is stricter. A similar effect is found for equal earners and singles. In contrast, the reemployment rate of male secondary earners with children is 12.4 ppts higher when unemployment insurance (PBD) is stricter (8.4 ppts for secondary earners without children). For men, results regarding presence of a partner and relative economic position point to the capacity hypothesis rather than the pressure hypothesis. The difference between secondary earning men and others is likely insignificant because there are few men in this role. Differences by household type are much smaller for women. All women, irrespective of family, increase their employment about four to seven ppts in response to shorter unemployment insurance benefits. Children in the household and gender do not show a clear overall pattern suggesting neither support for the pressure or capacity hypotheses.

In the longer term (19 to 24 months after unemployment start) there is stronger evidence in favor of the capacity hypothesis, even if many differences are statistically insignificant. For men, secondary earners with children show a significantly stronger increase in reemployment (12.0 ppts) than most other household types when unemployment insurance is stricter. For women, those with less financial responsibility (equal and secondary earners) react more to reductions in unemployment insurance, with effects amounting to between 3.0 ppts (for secondary earners with children) and 4.8 (for equal earners with children). In contrast, those with more financial responsibility (single women, single mothers, and female main earners) do not show a significant longer-term increase in employment with shorter PBD. Aggregating by financial responsibility (singles and main earners vs. equal earners and secondary earners), women with more financial responsibility increase reemployment by only 1.5 ppts whereas those with less increase reemployment by 4.1 ppts — a significant difference. There are generally no differences based on the presence of children.

With respect to gender, once we look within household types, there are differences in how women and men react to unemployment generosity in terms of reemployment. In accordance with the capacity hypothesis, male secondary earners with kids have stronger reemployment effects with stricter PBD, but female secondary earners with kids have among the smallest relative increases in reemployment in two-adult households. For women, main earners with children stand out having the smallest reemployment effects due to less generous unemployment insurance. This is interesting, as male secondary earners with children and female main earners with children are both categories where relative economic position does not follow dominant gender norms. The gender differences suggest either that secondary-earning men with children are more pressured by gender norms during times of economic need (in line with the gender hypothesis), creating long-term effects on their employment status and/or that secondary-earning women with children cannot increase their reemployment in response to shorter PBD to the same extent because of their comparatively greater household obligations.¹⁷ Similarly, the weaker reaction of female main earners with children could be interpreted both in terms of lesser pressure on unemployed female main earners due to gender norms or more constraints due to care obligations.

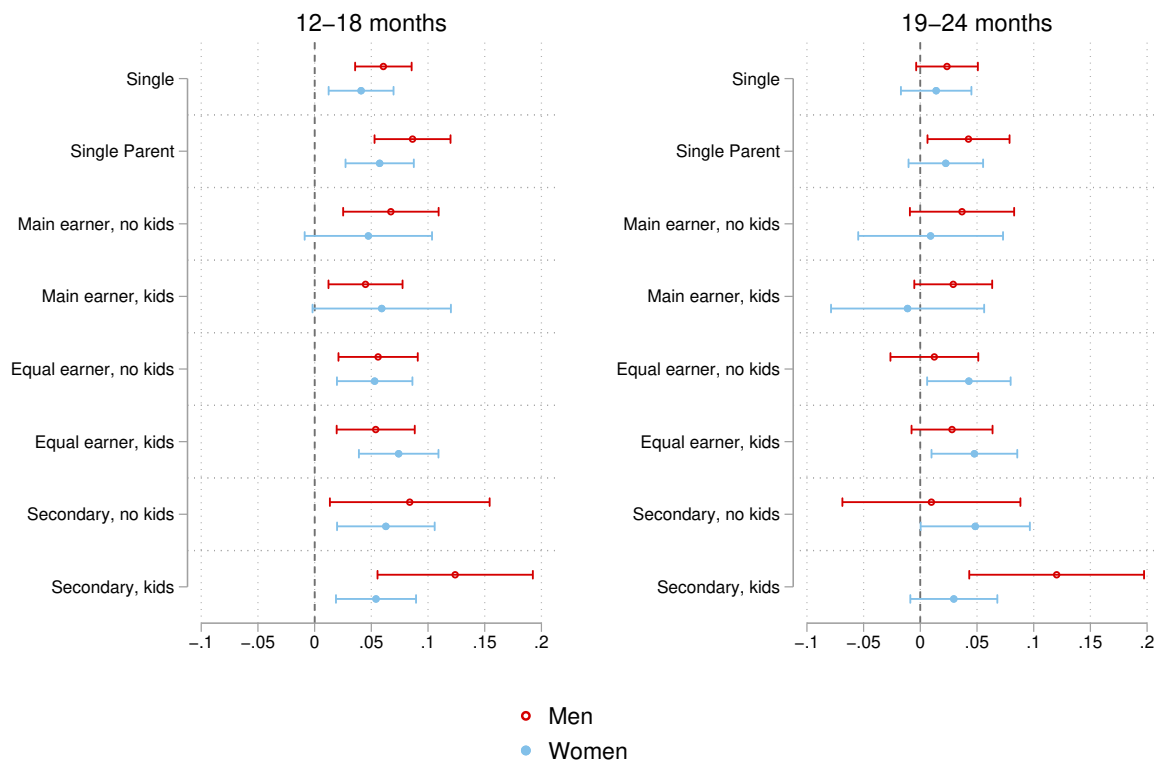


Figure 5: Marginal effects of less generous unemployment insurance on reemployment by household type.

Taken together, we can say that unemployment insurance generosity reduces unemployment spell duration considerably for all household types. The empirical results relevant to financial responsibility, such as presence of a partner and relative economic position within the household clearly reject the pressure hypothesis and tentatively point to the capacity hypothesis: the effects of stricter unemployment insurance are stronger when financial responsibility is weaker. In the short run, the evidence is weaker with overlapping confidence intervals, whereas in the long run, support for the capacity hypothesis is clearer, with both men and women with weak financial responsibility reacting more to unemployment insurance generosity, in particular secondary-earner men. In contrast, differences by gender offer weak support for the gender (pressure) hypothesis (H2) which one might characterize as the subjective experience of financial responsibility.

Economic Precarity

For the discussion of the results on precarity, we again present first main effects of unemployment generosity, second differences in precarity risk by household type, and third heterogeneous effects of unemployment insurance generosity by household type.

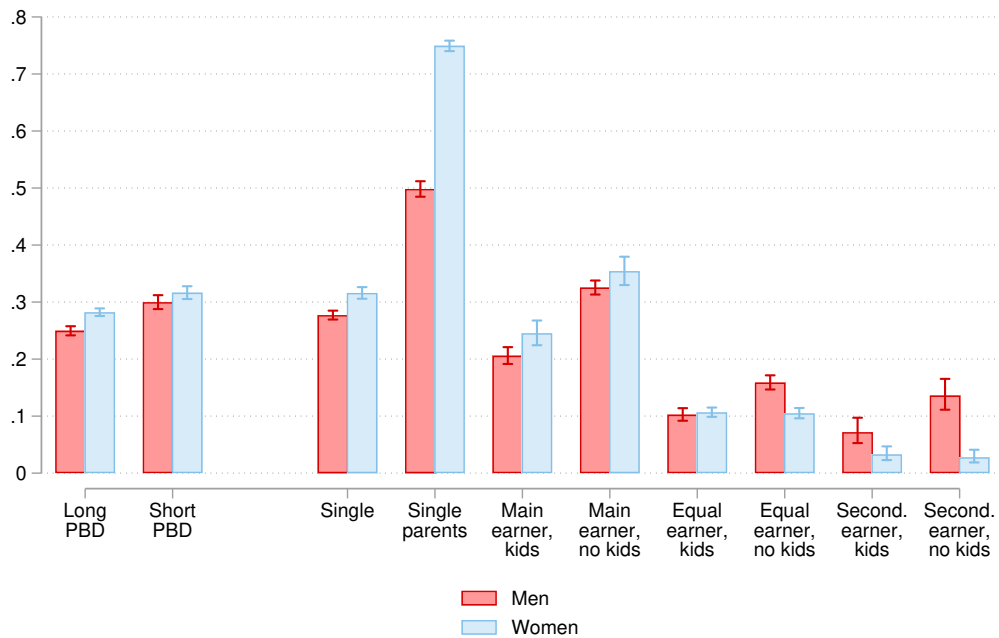


Figure 6: Predicted probability of economic precarity by household type and unemployment insurance generosity in the short-term (12 to 18 months).

Unemployment insurance generosity affects the risk of economic precarity of households faced with unemployment. When individuals reach the end of unemployment insurance eligibility, many face increased risk of financial precarity and some move onto social benefits (see online supplement A1.2). Averaging over household types in the short term (12 to 18 months following unemployment), Figure 6 (left panel) shows an increased precarity risk for households that are ineligible for unemployment insurance (with short PBD), compared to those still eligible (with long PBD). Shorter unemployment benefit rights increase precarity by about five ppts during the period where the short-term group is ineligible. The rise in precarity is significantly larger for men's unemployment than women's unemployment (see online supplement A3.1).

Coming to differences between family types (averaging over variation in insurance generosity), there are large differences in the risk of economic precarity in the short-term (Figure 6, right panel). Independent of unemployment insurance generosity, economic precarity is highest when individuals with high financial responsibility become unemployed. Single parents have the highest risk of economic precarity, in particular, single mothers (75 percent), followed by main earners with children and single households. Economic precarity is lowest for equal earners and for secondary earners who become unemployed. Children increase the risk of economic precarity, and women have a generally higher precarity risk reflecting their lower income.¹⁸ This pattern of economic precarity following unemployment corresponds to general poverty risks of different household types in the population.

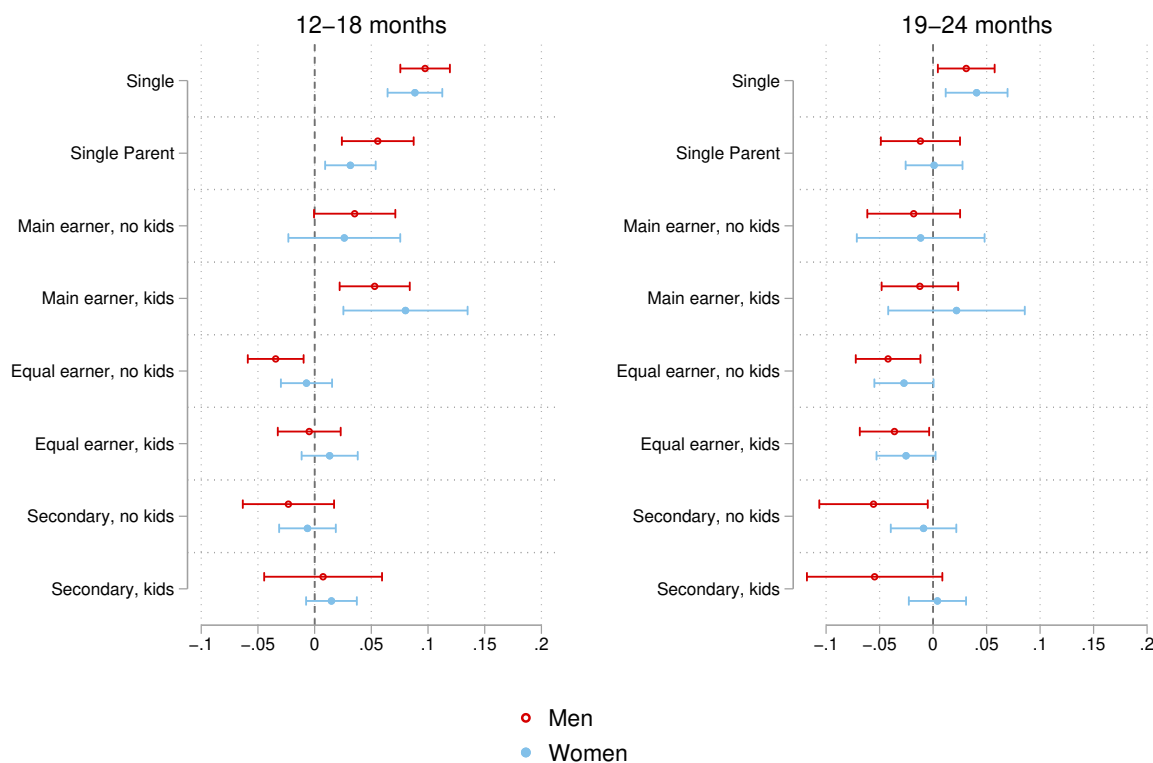


Figure 7: Marginal effects of less generous unemployment insurance on economic precarity by household type.

Figure 7 shows the (marginal) effect of less generous unemployment insurance by household type, finding heterogeneous effects. In the short term, singles, single parents, and main earners are most strongly affected by less generous unemployment insurance — all groups with high financial responsibility. For secondary earners and egalitarian couples, those with the least financial responsibility, less generous unemployment insurance does not increase the risk of precarity, highlighting the importance of the family safety net and confirming the income-loss hypothesis (H3). Although the presented results from linear probability models suggest that less generous unemployment insurance could even reduce precarity risk for some groups with low financial responsibility (male equal earners without children, male secondary earners without children), this result does not hold under logistic model specifications (see online supplement A1.3 and A3.2).¹⁹ These results suggest that stricter unemployment insurance is most detrimental when those with high responsibility are unemployed, controlling for prior income. This holds for presence of a partner, relative economic position, and to a lesser extent for presence of children in households with a main breadwinner.

In the longer term, 19 to 24 months after unemployment, when both groups are no longer eligible for unemployment insurance, stricter unemployment insurance

(shorter PBD) has no effect on economic precarity in the overall sample, though precarity risk remains higher for single households. Again, the negative effects showing reduced precarity for some household types are not confirmed in logistic model specifications except for male secondary earners who might potentially benefit from a shorter PBD.²⁰ This means that stricter unemployment insurance does not seem to have cumulative negative effects for most household types. One exception is single households, where the estimated effects suggest increased precarity, though estimates are not statistically significantly different from zero in the logistic models and analysis separating time points after employment shows a fade out for single households too (see online supplement A3.3).

Finally, there are no gender differences in how unemployment insurance generosity affects precarity within household types, neither in the short nor in the long term. Although gender is highly relevant for the precarity risk and on the effect of unemployment insurance generosity, the increase in precarity due to stricter unemployment insurance depends on the financial loss for the household, and — in line with our expectations — not on whether a man or a woman becomes unemployed once income level and household type are accounted for.

Conclusions

This analysis set out to better understand how unemployment insurance generosity — potential benefit duration or PBD — affects different household types, focusing on the return to employment and the risk of economic precarity. To our knowledge, this is the first study to address the interaction of the family and unemployment insurance generosity, both with respect to their impacts on reemployment as well as economic precarity. To look at the different household types, we used the concept of financial responsibility the unemployed person has for their household, accounting for presence of a partner, relative economic position within the household and presence of children in the household. Analyses were conducted separately for men and women. We analyze reemployment and precarity jointly because policy makers need to consider trade-offs between the two when setting PBD.

Our study confirms earlier results that more generous unemployment insurance prolongs unemployment spells and reduces economic precarity, at least in the short term (Alm et al. 2020; Ehlert 2012).

We found short-term effects of unemployment insurance generosity or PBD on reemployment to be rather homogeneous across household types. However, in the longer term (after there is no difference in eligibility), individuals with lower financial responsibility for the household (i.e., those with a partner and lower relative income contribution) tend to show the strongest increase in reemployment, whereas individuals with high financial responsibility show the weakest reemployment increase. For women, secondary and equal earners with and without children show the strongest increase in reemployment whereas for men, secondary earners with children had strongest increases in reemployment. Hence, there is support for the hypothesis that individuals with capacity react to more pressure due to less generous unemployment benefits. Our findings clearly reject the hypothesis that

individuals with high financial responsibility increase their reemployment more when unemployment insurance is less generous. These results add to the literature taking account of heterogeneous effects of unemployment insurance generosity (Kyyrä and Pesola 2020).

For economic precarity, unemployment insurance generosity has heterogeneous effects by household types. Single households, who have an already high prevalence of economic precarity before being unemployed, suffer most when unemployment insurance is more restrictive, confirming other studies (Alm et al. 2020; Choi and Valladares-Esteban 2020). When unemployment support ends, these households are left without a family safety net. This can be contrasted with equal earners, where the already low risk of economic precarity barely increases. As a result, we can see that the inequality in precarity risk between household types increases when unemployment benefit duration is reduced. That said, the harmful effects of unemployment generosity or PBD on economic precarity fade out in the long-term. Possible reasons for no cumulative disadvantages due to stricter unemployment insurance might be the offsetting effects of faster reemployment, the fact that stricter unemployment has no adverse effects on wages post-reemployment, or access to welfare state programs besides unemployment insurance.

With respect to gender, we found no significant differences in how women's and men's reemployment is affected by unemployment generosity, both overall and within household types, apart from those whose financial responsibility does not follow predominant gender norms. Secondary-earner men with children have more rapid reemployment when unemployment insurance is more restrictive, and main-earner women have the weakest reemployment effects. We interpret this as weak evidence relevant to subjective perceptions of financial responsibility, that is, that more pressure mostly affects men with more capacity. With respect to precarity, the household is more likely to fall into precarity when men are unemployed, and when benefits are less generous. However, as there are no gender differences within household type; financial responsibility is likely the main reason for these gender differences.

Three lessons can be learned from a policy perspective.

First, findings show the importance of unemployment insurance to prevent economic precarity. The welfare state is most important for individuals lacking a family safety net, in particular single households, single-parent households, households with children, and households where the main earner is unemployed. This confirms results from studies comparing different countries but using a stronger causal design. Both the family and the state play an important role in preventing economic precarity during unemployment.

Second, the results are of relevance considering the increasing diversity in household structure with more egalitarian earner couples, single households, and single-parent families. More single households means that the welfare state and unemployment insurance are increasingly important in preventing poverty, whereas for egalitarian couples (especially those without children), unemployment insurance is less critical.

Third, the results suggest that increased pressure resulting from less generous unemployment insurance can be more or less harmful depending on the house-

hold situation. For main earners with children and singles, where there are only small effects on reemployment but relatively strong effects for economic precarity, more pressure could be counterproductive. In contrast, for secondary earners (in particular male secondary earners), where reemployment is increased with no negative impacts in terms of economic precarity (possibly even positive effects), more pressure could be desirable. Although it might be problematic to apply different parameters in unemployment insurance generosity according to financial responsibility, such differentiation could be made in front-line work, with individually set job search or application requirements, use of sanctions, or offered support services. Central to this are regulated processes and appropriate staff training — both in terms of their ability to use their flexibility and in terms of the public's willingness to accept deliberate unequal treatment.

Several potential caveats of our study need to be mentioned. First, we studied a relatively generous unemployment scheme in terms of PBD, replacement rates, and eligibility. Moreover, the expected income loss following a reduction in unemployment benefit duration is limited due to a social assistance scheme in Switzerland assuring basic needs should household income fall below a threshold. We can imagine that cuts in a less generous welfare state have stronger overall effects and potentially more heterogeneous effects. Second, we analyzed the effect of PBD as a measure of unemployment insurance generosity. Results could be different for other measures of generosity, such as replacement rates. Third, our data lack information on alimony and child support, limiting the interpretation of findings on precarity of single parents. Finally, with respect to our policy interpretation, the trade-offs involved in setting unemployment generosity include far more than just reemployment and economic precarity. There are other outcomes at the individual level such as job quality, which we examined in the online supplement (finding no impact, confirming several previous studies) as well as other individual outcomes like stress and health (Kessler et al. 2022; Kessler and Hevenstone 2022). Further, macro level issues like budgets and political acceptability play a role in setting unemployment generosity.

Overall, we would conclude that our study provides some initial evidence that social insurance systems might consider the heterogeneous treatment of recipients considering their household situation. That said, significant work remains to be done to better understand how social insurance generosity heterogeneously impacts individuals depending on their household situation. In particular, studies using causal inference methods in less generous contexts would be an important additional contribution. Further, it is worth examining how existing flexibility in unemployment systems, such as different generosity based on household characteristics or different treatment on the front line, impacts reemployment and precarity risk.

Notes

- 1 Although some might consider job quality to be an important factor in this trade-off, there is neither substantial nor consistent evidence that generous unemployment insurance improves job quality. Most studies find no significant relationship between unem-

ployment generosity and job quality upon reemployment (Benmarker et al. 2013; Card et al. 2007; Eugster 2015; Lalive 2007; Le Barbanchon 2016; Rebollo-Sanz and Rodríguez-Planas 2020), though there are exceptions. Some studies report positive impact of less generous unemployment insurance on job quality (Cottier et al. 2020; de Groot and van der Klaauw 2019; Schmieder et al. 2016), and negative impacts for less qualified workers (Centeno and Novo 2009; Nekoei and Weber 2017) or for individuals with repeated unemployment spells (Kyyrä and Pesola 2020). The ambiguous results might be attributed to two countervailing forces: with longer unemployment insurance, individuals can be more selective in their job search and their mental health is partly protected. At the same time, the longer unemployment spells generated by longer potential benefit duration lead to skill depreciation, declining job opportunities, and less effective job search during unemployment (Marinescu and Skandalis 2020; Wanberg et al. 2020).

- 2 Kyyrä and Pesola (2020) report homogenous effects among age groups, educational levels, private or public sector of previous employment, labour market conditions, and wage in previous jobs. Cottier et al. (2020) distinguish industries with high R&D expenditures from others.
- 3 There are other pathways for how family influences reemployment, which we do not test empirically. Notably the social capital of the partner can help unemployed in the job search with their network, skills, and moral support (e.g., Verbakel and de Graaf 2009).
- 4 Empirical evidence on the added worker effect suggests that average effects are small and effects are concentrated among female partners with significant earnings potential who are at home with children but can go back to work or increase incomes when the husband loses his job (Halla et al. 2020; Hardoy and Schöne 2014; Harkness and Evans 2011; Hevenstone et al. 2023).
- 5 This list of potential mechanisms relating family and unemployment outcomes is not exhaustive. Several studies address differences between married and cohabiting couples (Jacob and Kleinert 2014; Choi and Valladares-Esteban 2017), which goes beyond the scope of our study.
- 6 Referring to mechanisms relating unemployment insurance generosity to reemployment, unemployed with low financial responsibility may have capacity to increase their search activities or engage more strongly in thinking, planning, and assessment of progress about their job search (Wanberg et al. 2020).
- 7 Although Kyyrä and Pesola (2020) find no significant gender differences for duration of unemployment spell, potential benefit duration has a significant impact on employment probability for women but not for men. The sample consists of Finnish residents who were previously unemployed. Notably, gender differences are less consistent in studies looking at unemployment insurance replacement rates. Although some studies find stronger effects on reemployment for men (Caliendo et al. 2013; Røed and Zhang 2003), others find stronger effects for women (Eugster 2015). Another study, not distinguishing between eligibility, replacement rates, and PBD, finds inconsistent gender effects (Mooi-Reci and Mills 2012).
- 8 Income was adjusted for inflation and is presented in 2011 CHF.
- 9 <https://doi.org/10.25597/tm2k-jf98>
- 10 Although in theory, we also might underestimate precarity for those who do not live with their child but pay child support, this seems not be relevant poverty factor in Switzerland (Fluder et al. 2022).
- 11 We exclude households with more than 15 years age difference to not accidentally include multigenerational households. Mismeasurement of cohabitation is relatively low:

87 percent of unmarried couples as identified using register data explicitly report being partners in a subsample surveyed in the Swiss Labor Force Survey (N=322).

- 12 First, we know from Hevenstone et al. (2023) that the added worker effect in Switzerland is independent from unemployment duration rights. Second, sensitivity analysis show that opting for current partner income to estimate the effect net of partners compensating effects does not affect the findings.
- 13 Results for specific time points after the start of unemployment (8, 12, 16, 20 and 24 months after unemployment) can be found in the online supplement A2.3 and A3.3.
- 14 Online supplement A1.3 discusses and shows the differences between logistic regression and the linear probability model and explains the choice of presenting linear probability models here. Results using logistic regression and linear probability model differed for some categories and interactions, but main conclusions are consistent (A2.2 and A3.2).
- 15 July 2012 is the start of the policy in place, December 2015 is chosen due to data availability.
- 16 See online supplement A2.4 for results including individuals with 12 contribution months.
- 17 Looking at the impact on job quality in online supplement A4, it is notable that the group experiencing the highest increase in reemployment, secondary men with children, had no negative wage effects. For some groups, like secondary-earning and breadwinning women with children, and to a lesser extent, primary and equally earning men, there seem to even be positive, though sometimes insignificant, wage effects.
- 18 When simulated child allowances are included in household income, the risk of economic precarity is reduced considerably for households with children but remain higher for household with children compared to households without children The interaction between household type and unemployment generosity remains unaffected by the inclusion of child allowances (see online supplement A3.6 for details).
- 19 When using logistic models rather than linear probability models, the differences between household types remain significant and effects are strongest for singles and weakest for egalitarian earners without children. However, marginal effects are positive, suggesting that less generous unemployment has no precarity-reducing effects. For male equal and secondary earners, and female equal and secondary earners without children, the precarity-increasing effect of less generous unemployment insurance is not significantly different from zero.
- 20 Using logistic models, none of the long-term effects differ significantly from zero.

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