Youth, Recession, and Downward Gender Convergence: Young People’s Employment, Education, and Homemaking in Finland, Spain, Taiwan, and the United States 2000–2013

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Abstract

Using data from the Luxembourg Income Study we conduct a gender comparison of how young people aged 20-34 in Finland (n=19,941), Spain (n=29,458), Taiwan (n=47,219) and the USA (n=184,581) participated in full time work, short-hours or temporary work, education and homemaking pre- and post- the Great Recession beginning 2008. Gender and country patterns varied substantially. In Finland, the GR was associated with higher proportions of young women homemaking, perhaps due to public support for home care of children. In Spain and USA, higher proportions of both young men and young women were un- or underemployed post-GR, suggesting downward gender convergence.
Youth, Recession, and Downward Gender Convergence

Introduction

The ‘Great Recession’ (GR) significantly affected labor markets across industrialized countries, with the number of unemployed persons increasing by an estimated 34 million globally between 2007 and 2009 (International Labor Organization (ILO) 2010). Some demographic groups are particularly vulnerable to economic downturn, with young people at especially high risk (Bell and Blanchflower 2011; Settersten and Ray 2010). Youth employment prospects were so negatively impacted that there were fears of a ‘lost generation’ of youth “who have dropped out of the labor market, having lost all hope of being able to work for a decent living” (ILO 2010, 2). However, successful youth transitions involve not only paid work, but also social connectedness and a sense of purpose and belonging (Wyn and Woodman 2006). Therefore, an important but under-examined indicator of how youth fared in the GR is how younger cohorts directed their time in the face of higher unemployment, and whether it was to other productive activities. Options include keeping a foothold in the labor market by accepting lower work hours or short-term jobs, up-skilling by seeking further education, or contributing to the household economy through domestic work.

Investigating a range of activities rather than focusing solely on employment is also important to understanding whether and how the GR differentially impacted young men and young women. Because women’s labor force participation is tied to other aspects of social and economic organization including the family and the welfare system (Gornick and Meyers 2003; Lewis 2009), the outcomes of recession differ by gender (Rubery and Rafferty 2013; Walby 2015; Barry and Conroy 2013). Although there has been a considerable amount of scholarship and policy analysis surrounding the general impact of the GR, an understanding of the gendered outcomes remains underdeveloped (Kushi and McManus 2017). Studies which pay attention to national context are
especially necessary since, as Rubery and Rafferty (2013, 21) contends, “... the role played by the state, in the form of the tax and welfare systems, [shapes] work incentives on the one hand or childcare support on the other”, and influences women’s voluntary or involuntary withdrawal from the labor market during recessionary times. The consequences of recession and upon whom they fall thus vary by country, affected by the extent and nature of the downturn, the policy responses to it, and the pre-existing pattern of female labor force participation and social attitudes to gender and work (Durbin, Page and Walby 2017; Kushi and McManus 2017).

This paper contributes to the literature on gendered outcomes of recession by looking at youth specifically, and examining patterns in young men and young women’s employment (full-time work, part time work) and non-employment (education, homemaking) activities, pre- and post-GR. We take a cross-national perspective, drawing on harmonized data from the Luxembourg Income Study (LIS), which allows us to compare standardized measures across multiple countries. To ensure we included countries across which the economic downturn differed and that represented differing welfare and gender policy frameworks, we chose one example from four regime types: Finland (Nordic social democracy), USA (market-based ‘liberal’ Anglo country), Spain (familialistic Southern Europe) and Taiwan (liberal-familialistic Asia) as backdrops against which to ask several questions. How did young cohorts’ participation in the selected activities vary pre- and post-GR? Were cohort activity differences more evident among young women than among young men? Were activity differences between pre- and post-GR cohorts of young men and young women more pronounced in some countries than others? What can the activity patterns tell us about the relationship between national context and gendered outcomes of recession amongst the young?

**Background**

*Recession, gender and youth*
A gender perspective is critical to understand the impact of recessions, because men and women are positioned differently in labor markets and in the domestic sphere. Gendered outcomes “...are related to the different characteristics and roles of women both in the labor market – as indicated by differences by gender in job allocation, working time and pay – and in the household economy and welfare state” (Rubery and Rafferty 2013, 415). That is, multiple contextual factors shape female and male work force participation and whether it is socially regarded as equally legitimate (Karamessini and Rubery 2013; Walby 2015). Women are positioned by some as ‘contingent and intermittent’ workers (Rubery 2015), and in many contexts, they are disproportionately concentrated into particular sectors and/or low-quality jobs which are likely first to disappear in difficult times (Kushi and McManus 2017; Williams and Tait 2011). Gender segregation and employment as secondary earners make women vulnerable during recessionary times if they are viewed as a voluntary or involuntary labor reserve, which can be used by employers flexibly as a ‘buffer’ to protect the male ‘core’ workforce (Rubery and Rafferty 2013).

However, the gendered impact of recession on employment could also run the other way. If male-dominated sectors, such as manufacturing, construction and financial services are hardest hit by the recession, male job loss will be highest, as occurred in the USA (Cho and Newhouse 2013; Williams and Tait 2011). This may create an ‘added worker effect’ wherein women seek to maintain living standards in the face of male job loss, so commit more time to the labor force than before the downturn (Mattingly and Smith 2010; Starr 2014; Congregado et. al. 2011). Also, changing attitudes and growth in female skills and education may mean that women are increasingly reluctant to reduce their hours or withdraw from the labor market to become homemakers. Rubery and Rafferty (2013) contend that UK women largely remaining in the labor market as the crisis unfolded was due to the new cultural norms about women’s employment.
Similarly, in some parts of Spain the GR resulted in higher female workforce participation, part of a strategy for households to absorb the loss of income following the significant job loss in male-dominated industries (Galvez and Rodriguez 2016; Puig-Barrachina et al. 2017). Women may also benefit from gender substitution practices by employers because they attract lower wages than men (Rubery and Rafferty 2013), and gender segregation could mean women are somewhat protected because more of them work in occupational sectors, notably the public service, that are less vulnerable to the business cycle and recessionary downturn (Barry and Conroy 2013).

However, women are more at risk from the public policy responses to recessions, particularly if governments move to bail out industries, socialize private sector losses and cut public sector spending (Craddock 2017; Durbin et al. 2017; Karamessini and Rubery 2014). Thus, the widespread introduction of ‘austerity’ measures in Europe risked disproportionately affecting women (Rubery 2013; Walby 2015). This is because women are more likely than men to be employed in the public sector, with jobs and conditions directly affected, as for example in Ireland, which froze public service recruitment and reduced wages across the board (Barry and Conroy 2013). Also, when social services such as child or elder care are cut back, more care must be provided by families, an outcome described as ‘refamilialization’ (Lombardo 2017; Craddock 2017; Saxonberg and Sirovátka 2008). This extra household labor is more likely to fall upon women than men, and thus further depress female employment. Evidence suggests cost-cutting reversed or stalled EU policy convergence towards an ‘equality agenda’, and shifted ‘he-cession’ into ‘she-austerity’ (Karamessini and Rubery 2013; Bettio et al. 2014; Lombardo 2017).

Yet there are issues of generational as well as gender equity. Like women, young people also constitute a buffer workforce, and are disproportionately subject to contingent, temporary and precarious employment (Bell and Blanchflower 2011). The difficulty of gaining a foothold in the
labor market can be so pronounced that (rather than encouraging ‘added workers’) there is a ‘discouraged worker’ effect wherein labor force participation drops because people feel they are unlikely to find work in a difficult market (Congregado, Golpea, and Stelbc 2011). This discouragement was thought to be particularly likely amongst young people (ILO 2010; Bell and Blanchflower 2011; Settersten and Ray 2010). The GR and its aftermath hit youth employment hard, compounding changes already underway in the nature and type of jobs available to young people, including more precarious conditions such as temporary contracts, casual hours and underemployment (Standing 2011).

This is a major concern because youth is a particularly vulnerable life stage (Bell and Blanchflower 2011; Wyn and Woodman 2006). The labor market provides financial underpinning on which young people can build their adult lives, but unemployment rates can tell only part of the story of how young people were affected by the GR. It is also important to know what young people did, or could do, in response to the rise in unemployment. Examining patterns in young people’s activities pre- and post-GR, including underemployment, education and homemaking, offers deeper understanding of how the crisis played out in daily lives than headline unemployment rates alone. It also offers a window into gender patterns in that generation, which may not follow those of the general population. For example, over the crisis in Ireland, older women’s workforce participation stayed relatively steady (albeit some with reduced conditions) whereas young women’s plummeted in tandem with young men’s (Barry and Conroy 2013). Similarly, in Australia, older women benefited from employment growth following the GR at the expense of younger men and women (Denny and Churchill 2016). There is reason to expect that young people would have more gender-equal activity patterns than older people. Gender attitudes have become more progressive (van Egmond et al. 2010), most young women now expect to earn a living, and many more now gain
tertiary qualifications which equip them to engage in more skilled and professional employment (Wyn 2009; DiPrete and Buchmann 2013). Notwithstanding, women’s career progression still lags men’s and gender pay gaps remain wide (Olsen et al. 2010). This suggests that young women do not receive the same economic ‘returns’ to education as young men, and are still positioned as secondary earners within some labor markets. They may need higher qualifications to successfully compete for jobs (Tembon and Fort 2008).

It is also important to note that greater equality amongst the young could result from downward convergence. That is, more young men in lower-status labor market positions than prior cohorts, rather than more young women gaining the high-status jobs previously available to men. Also, in such circumstances, an added worker effect may not mean successfully getting work. Greater female commitment to the workforce could be demonstrated through upskilling, but also through more young women describing themselves as unemployed. In this view, unemployment signals their continued interest in finding work (and perhaps in the meantime qualify for income support) rather than being ‘discouraged’ from the work force entirely. As this outcome is most likely when and where youth jobs are particularly scarce and precarious, and both genders are affected, this further underlines the relevance of national context.

Welfare regimes, gender and youth

There is a substantial body of scholarship on how policy and cultural context affects paid and unpaid labor outcomes for the general population of men and women (see for example Gornick and Myers 2003; Crompton, Lewis and Lyonette 2007; Lewis 2009). Gender scholars significantly improved the categorization of welfare regimes (Esping-Andersen 1990; Esping-Andersen, 2009), including by foregrounding the extent to which welfare is familIALIZED (provided by families) rather than supplied through public support and services (Arts and Gelissen 2002; O’Connor, Orloff, and
Shaver 1999; Sainsbury 1999; Shaver 2002). Where public services are few, more family care defaults to women, constraining their employment and career opportunities, even as the expectation that they will be part of the labor force becomes more standard cross nationally (Lewis 2009; Orloff 2009). Regime typologies and how they intersect with gender attitudes and practices are debated (Pascall and Lewis 2004), but widely accepted categories are social democratic (exemplified by the Nordic countries); corporatist (exemplified by Western Europe), familialist (exemplified by Southern Europe); and liberal/market oriented (exemplified by Anglo countries) (Arts and Gelissen 2010; Korpi 2000). East Asian countries have rarely been included in such typologies, but exhibit both liberal and familialist features (Kwon 2005; Lee 2005; Ochiai 2009).

Kushi and McManus (2017) conducted a gendered analysis of unemployment across welfare regimes over the course of the GR. They found that liberal and Nordic countries maintained greater equality between men and women in their respective labor markets, possibly reflecting that women’s labor force participation is not seen as contingent in these contexts. In contrast, in Western Europe, female unemployment rates were higher than male largely due to high workplace protection for the traditionally male-dominated ‘core’ workforce. Women in Southern and Eastern European welfare systems fared worst, which Kushi and McManus attributed to low social support for care (familialism) and thus fewer opportunities for female labor force participation.

To investigate intersections between gender and youth, we compare Finland, USA, Spain and Taiwan. They represent welfare regimes with different constellations of workforce participation, policy and attitudes relevant to how women and young people fare in recession, which we describe briefly below.

**Country context**
Finland espouses gender equality and facilitates it through public services, including subsidized childcare, which defamilialize social welfare. Tertiary education is free, and students can also access grants, loans and housing benefits (Oinonen 2003; Wallace and Bendit 2000; Majamaa 2011). Amongst those aged 25-34 years 48.5 percent of women have a tertiary degree compared to 32.4 percent of men. The proportion of young Finns who are neither in employment nor in education or training (NEET) is lower than the OECD average (OECD 2013). They can leave the parental home and establish independent households comparatively early (Lorentzen et al. 2012). In this context, we would not expect women’s labor overall to be contingent, or to operate as a ‘buffer’. However, it may do so amongst the young: it went down in a prior downturn in the 1990s, perhaps due to generous home care allowances (Sipilä & Korpinen 1998) and parental leaves (Evertsson & Duvander 2011).

Historically, “[t]he Spanish welfare model [exhibited] an unusually powerful ‘familalism’, including income pooling, the absorption of social risks and the provision of social care by private households” Baizán, Michielin and Billari (2002: 189). However, Spanish policy was steadily aligning with EU directives to institute more measures underpinning gender equality, until the GR ushered in austerity measures which threatened to reverse this process (Bettio et al. 2012; Lombardo 2017; Lombardo and León 2015). Young Spaniards in need are heavily reliant on family (Bourra 2015) and co-residence with parents is commonplace (Serrano Pascual and Martín Martín 2017). Spanish youth have a similar tertiary education profile as Finland: 45.7 percent for young women and 35.3 percent for young men. However, in 2012, just under one-quarter of those aged 15-24 years were NEET (Serrano Pascual and Martín Martín 2017). Spanish unemployment overall doubled between 2008 and 2012. For young people, rates went from around 25 to 50 percent unemployed over the same period, with young men most strongly affected (see Table 1).
Taiwan combines features of liberal and familial regimes. Social support is largely left to the family, and gender divisions of labor are wide (Ochiai 2009), consistent with conservative cultural attitudes towards gender and welfare (Chen 2010, 180). Taiwan strongly emphasizes education, especially tertiary qualifications, but a growing proportion of NEET Taiwanese youth now compete for jobs in a crowded, highly educated labor market (Huang 2013; Shi 2012). Extended co-residence with family well into young adulthood is becoming common, likely because of poorer employment outcomes for graduates (Shi 2012). Unemployment for the overall Taiwanese population remained unchanged between 2008 and 2012. For young people, rates were almost three times those of the working adult population, and young women had lower unemployment than young men (Table 1).

In the USA, public welfare supports are few. The workplace is relatively unregulated, and though there is formal gender equality, care is seen as an issue for families to organize privately rather than being publicly provided (Bergmann 2005; Orloff 2006). Male jobs were more affected by the GR than female (Williams and Tait 2011; Cho and Newhouse 2013). For the general population of women, the GR had an added worker effect, although research has also found that discrimination operated to protect some male jobs (Williams and Tait 2011). Public financial support for unemployed youth is very limited but family support is high (Scarpetta et al. 2010). Two-thirds of young Americans in their early twenties, and around two-fifths of those in their late twenties, receive some financial support from parents (Swartz et al. 2017) and nearly half (42%) of those aged between 20 and 24 were still living with their parents in 2010 (Swartz et al. 2012). Both pre- and post-GR, youth unemployment was double the overall rate and lower for young women than young men (Table 1).

[Table 1 about here]
In addition to policy and behavior patterns, prevalent social attitudes can provide further context to the way gender is organized within different countries and welfare regimes. Attitudes are “an indication of people’s latent tendencies to respond to the opportunities and constraints that are posed by the structural conditions of life” (Scott, Alwin and Braun 1996, 475). Drawing upon the World Values Survey, we examine attitudes towards the right to education and work for men and women to gain insight into how accepting these countries are of equal gender participation in these institutions. Across the four countries, views on whether men should have ‘more right to a job than women when jobs are scarce’ are mostly egalitarian, except in Taiwan, where over 40 percent agree with the proposition. Attitudes towards ‘university education [being] more important for boys than girls’ are also mainly egalitarian, although more so in Finland and the United States than in Spain and Taiwan. An implication of the differences between the two measures is that female right to a job and female right to education are not necessarily seen as commensurate (Table 1).

*Expectations*

We expect pre- and post-GR differences in young people’s activity patterns to be most where the recession hit hardest (Spain and the USA). We expect a wider range of pre- and post-GR activity differences among young women than among young men, because women’s work is more likely to be positioned as a ‘buffer’ than the male ‘core’ workforce (Rubery and Rafferty 2013, Karamessini and Rubery 2014; Walby 2015). Thus, we expect to find homemaking was influenced by the GR for women but not for men. The literature suggests countervailing possibilities as to how the pattern might vary across the countries. In one view, conservative and familialistic contexts (Taiwan and Spain) would generate a reserve labor effect, with more women homemaking (Lombardo, 2017), while non-familialistic and liberal countries (Finland and USA) would not (Kushi and McManus 2017). However, conversely, a sharp recession with high male job loss as in Spain and the USA
could generate a female added worker effect (Rubery 2015; Rubery and Rafferty 2013), while in Finland the supportive social welfare regime may actually encourage or enable more young women to act as buffer labor and quit the workforce in favor of homemaking (Evertsson and Duvander, 2011; Sipilä and Korpinen 1998). We also expect that where social supports are thin (USA and Taiwan), and/or austerity measures were introduced (Spain), a female added worker effect post GR could be manifested by higher proportions of young women signaling their work availability through classifying themselves as unemployed, or pursuing further education to better compete in the market, rather than being homemakers as they may have in the past.

**Data sources, concepts and methods**

The Luxembourg Income Study (LIS) database comprises nationally representative household surveys from upper and middle-income countries. The micro-datasets include information on income, wealth, employment and demographics. The harmonized variables across countries make them an ideal data source for cross-national comparisons. The database identifies young people’s *usual main activity*, which covers employment and non-employment activities including being in education, a homemaker (includes care of children, housework or care of others) and being unemployed. There is only one answer provided for the usual main activity variable for each respondent, eliminating multiple responses.

We analyzed data for cohorts of young people aged 20 to 34 years in USA, Taiwan, Finland and Spain for the period 2000 to 2013; that is, pre- and post- the onset of the GR. We compare the proportions of young people in the activities mentioned above. Using proportions as a measure allows us to include the entire sample of young people rather than only those who are in the labor force. This is not how prevalence rates are always defined; for example, the unemployment rate is typically measured as a percentage of unemployed divided by all currently in the labor force. Here
we look at the proportion of young people who are unemployed over the total population of young people in the sample, yielding a more inclusive and comprehensive picture of youth activity than prior research.

The LIS follows the ILO’s definition of usual employment, which is being active in the labor market for at least half of the reference period with the number of months employed larger than or equal to the number of months spent in unemployment (LIS documentation, 2016). Those who do not satisfy these criteria are defined as not mainly employed. Full-year full-time work is defined as being employed at full-time weekly hours for the entire reference year. If no such definition is provided by the country survey, LIS uses the threshold of at least 30 hours a week. Those who were usually employed in the previous year, but for fewer hours or shorter periods, are described as working not full-year, full-time. The LIS identified young people in each country who were in education, homemakers, or unemployed, through survey self-report.

**Analysis plan**

We present a descriptive overview of the proportion of young men and women aged 20-34 in the four countries engaged in each of the activities from 2000 to 2013. Data is presented for each year pre- and post-GR for each country to illustrate participation trends over time.

We conduct multivariate analyses using logistic regression models to predict the probability of young people participating in each activity. That is, the dependent variable is made up of binary responses of young people who reported their usual main activity for a particular year in each country. We looked at the responses for those who are in not full-year full-time work, education, unemployed and homemakers. To capture the effects of the GR, we constructed an independent dichotomous variable of the years before and after its onset (2000-7=0, 2010-13=1). The models
also control for other variables that may be independently related to the outcome activities; age (continuous), partnership status (single=0, live with a partner/married=1), housing tenure (renter=0, owner/purchaser=1), and highest education qualifications (1=low, 2=medium, 3=high). Due to multicollinearity we do not include education and partnership status in models in which, respectively, education and homemaking are the dependent variable. Sample sizes and proportions (unweighted) by country and periods pre- and post-GR are shown in Table A1.

We first estimate models separately by country and separately for men and women. We stratify because we are interested in whether, post-GR, young men and young women in each country differed from earlier cohorts of the same gender. We then we pool the country data and use an interaction term (post-GR*country) to test whether the effect of the GR on the activities differed by country.

**Results**

The employment and non-employment activities for young men and women in the four countries are presented in Figures 1 to 8. The shares of participation in each of these activities add up to 100 percent and are mutually exclusive.

**USA (see Figures 1 and 2)**

In 2000, the proportions of young people aged 20-34 years in the United States usually employed (either full or part time) was around 90 percent for men and 73 percent for women. Since then, this dropped, particularly following 2008. The proportion usually employed fell more for men (9.2 percent difference over the period) than women (5.6 percent difference over the period). The share of the usually employed who worked not full-year, full-time remained fairly consistent for all cohorts of young Americans, suggesting that rather than more young people working in shorter
hours or temporary jobs, more were engaged in activities other than work. Following the GR higher proportions of both young men and women were in education, and were unemployed. Patterns for women were particularly interesting. In 2000 17.3 percent of young women in the USA were homemakers and only 7.4 percent were studying. In 2013 the proportions were 15.9 and 11.9 percent respectively. Although the proportion of homemakers was still larger than students, the trend for women is a fall in homemaking and an increase in study as a main activity over time.

*Taiwan* (see Figures 3 and 4)

Patterns in Taiwan were quite different to those in the USA. For men there was a drop from 78.9 percent usually employed in 2000 to 71.4 percent in 2005. Overall participation stayed level thereafter, but within the total there was another clear decrease in the proportion in not full-year full-time employment between 2000-7 and 2010-13. In contrast to men, only 62 percent of young women in Taiwan were employed in 2000, and the proportion was slightly higher (65.3%) in 2013. As for men, the proportion of women employed in not full-year full-time work was lower in 2010 and 2013 than in 2000-7. Both genders were more likely to be in education at the end than at the beginning of the period 2000-2013. Again, the change was not contemporaneous with the GR, suggesting that Taiwan’s economic cycle differed from the other countries. For young men the proportion studying steeply increased (from 14.7 to 22%) between 2000 and 2005, with the level broadly maintained thereafter. This mirrors the lower proportions in full-year full-time work over the period. For young women, there was a trend suggesting a trade-off between homemaking and education. In 2000, 21 percent of young Taiwanese women were homemakers and 11.8 percent were in education; in 2013 only 10.3 percent were homemakers and 15.7 percent were studying. For both genders, unemployment was higher for later cohorts; the proportion rose from 6.5 percent to 8.6 percent for men, and from 5.2 percent to 8.8 percent for women.
**Finland** (see Figures 5 and 6)

Young men in Finland were less likely to be in employment in 2013 than 2000 (69.8% compared to 76.7%), but unlike in USA and Taiwan, there was simultaneously a substantial increase in not full-year full-time employment (from 22.9% to 29.3%). This suggests that in Finland male jobs lost over the period were disproportionately full-time. The proportion of young Finnish men in education was higher in 2013 (19%) than in the years prior (14-15%). There was also a rise over time in the proportion of young men unemployed (from 7.9 to 10.9%). Female workforce participation was consistently lower than male over the period, but the patterns of change were similar for both genders. Just over 60 percent of young Finnish women were employed in 2000-4, and there was substantial increase to 67.5 percent in 2007. Thereafter, the proportion employed dropped back to 56.9 in 2010, and returned to just over 60 percent in 2013. Also as for men, a higher proportion of women’s employment was not full-year full-time in the years 2007-13 than in 2000-4. Young Finnish women’s education participation and unemployment were fairly steady over the period. However, from a low base there was a jump in the proportion of homemakers (7.2% in 2000-4, compared to 17.2 and 14.6% respectively in 2010 and 13).

**Spain** (see Figures 7-8)

The proportion of young Spanish men employed was 74.2 percent in 2000, and 55.2 percent in 2013. The biggest single fall was between 2007 (81.9%) and 2010 (63%), indicating that the GR had a particularly dramatic effect on male youth employment in Spain. It was even lower again in 2013 (55.2%). There was also an increase in the proportion of men in jobs that were not full-year full-time (from 10.8% in 2000 to 15.5% in 2013). Underlining these changes in the paid workforce, unemployment of young Spanish men rose from 7.8 percent in 2000 to 25 percent in 2013. The proportion in education was slightly higher in 2013 (19.5%) than in 2000 (17.9%).
As in the other three countries, women’s activity patterns differed substantially from men’s. Only 48.1 percent of young Spanish women were usually employed in 2000, but the proportion rose in 2004 and in 2007. This change is likely to be over-estimated because homemaker data was not collected in those years. In any event, there was drop back to 56.3 percent in 2010, and by 2013 the proportion usually employed was even lower (47.2%) than it had been in 2000. The proportion in not full-year full-time employment was also higher for the later cohorts. Like their male counterparts, a substantially higher proportion of Spanish women were unemployed in 2013 (25.7%) than in 2000 (14.2%). The proportion in education also rose (from 17.5 to 23%). The proportion of homemakers dropped very substantially, from 17.5 in 2000 to 4.5 percent in 2013.

[Figures 1-8 about here]

We next turn to multivariate analysis to directly test whether the GR was related to working fewer hours, being in education, unemployed or homemaking in each of the four countries. The models are stratified by gender, with the results of the post-GR odds ratio variables shown in Table 2. As mentioned previously, the models included control variables, but for space reasons we do not discuss them in the text. Full results are available on request. We were not able to include models for homemaking for men due to small sample sizes (which confirm the gendered nature of this activity, and our expectation that it would be more relevant to young women than to young men).

Results show that unemployment was significantly higher post-GR for men in all countries and for women in the USA and Spain only. Participation in not full-year full-time work was significantly higher in the post-GR period for all countries except Taiwan. The odds were lowest in the USA, particularly for women, but broadly speaking, the results suggest that young people taking up shorter hours or temporary work as full-time employment fell was common in the USA, Finland and Spain. This means that in these countries young people of both genders were more likely to be
underemployed and in precarious jobs less likely than full time positions to provide long term career prospects.

Table 2 about here]

Participation in education was significantly higher post-GR for young people of both genders in the USA and Spain, and for women in Taiwan. This suggests that many in these younger cohorts tried to ameliorate the impacts of falling full-time work opportunities and increased competition for jobs by obtaining higher qualifications. There are interesting gender contrasts in Taiwan, where the only significant increase post-GR for men was in the odds of being unemployed whereas the only significant increase post-GR for women was an increase in education. In terms of homemaking, in most countries women were less likely post-GR to be homemakers. The exception was Finland, in which, following the GR, a significantly higher proportion of women directed their energies into home production or family care.

Table 3 shows the next set of models in which we pooled the country samples to test cross-national differences, net of other influences. We included a two-way interaction term between country and the period after 2007 to test whether the impacts of the GR differ significantly by country. We set USA as the base country against which the others are compared and used the same independent variables as in the first set of models as controls.

The country main effects capture the differences between USA and the other countries pre-GR. Before the downturn young Americans were much less likely to be in education than young people elsewhere. Except for Finland, young people in the other countries were less likely than young Americans to be in insecure or temporary not full-year full-time jobs. Conversely, pre-GR, Taiwanese men, and young people of both genders in Spain and Finland, were more likely than
those in the US to be unemployed. Compared to their US counterparts, young women in all the other countries had lower odds of being homemakers. Consistent with a supportive gender policy regime, Finnish women had lowest odds of all. They were only some third as likely as American women to be homemakers.

The interaction term Post-GR x country allows us to test whether the effect of the GR on the activities differed by country compared to the base-case, USA. The results in Table 4 show that the effect of the GR was largest in Spain and for men. For Spanish men, the odds of the GR positively affecting participation in activities was higher than it was for US men in relation to unemployment, not full-time, full-year work and education. Interestingly, the odds of the GR affecting participation in the activities were not different for Spanish and American women, except that the odds of the GR being positively associated with homemaking for women in Spain were a third of those for US women. The country-specific effect of the GR was quite different for Taiwan. The odds of the GR affecting men and women’s participation in not full-year full-time work and in education were significantly lower in Taiwan than they were in the USA. For Taiwanese women, this was also the case for unemployment and homemaking. For Finland, the odds of the GR affecting unemployment of both young men and women were about 40 percent lower than they were for their counterparts in the USA, while Finnish men’s odds of the GR affecting their participation in education were 70 percent of the odds of it affecting US men. The odds of the GR being positively associated with homemaking was over three times higher for Finnish than for US women. This should be understood in context of the low Finnish female homemaking rate pre-GR, indicated in Figures 2, 4, 6, and 8 and the country main effect discussed above.

[Table 4 about here]

Discussion
This study used cross-national data from Finland (Nordic social democracy), the USA (market-based, liberal), Spain (familialistic Southern Europe) and Taiwan (liberal-familialistic East Asia) to contribute to knowledge on relationships between social and economic policy context and the gendered outcomes of recession. We foregrounded young people, and extended prior research by examining patterns in both employment (full-time work, part time work) and non-employment (education, homemaking) activities, pre- and post-GR. As expected, we found that young cohorts’ high vulnerability to recession was shown in significant changes in their activity patterns before and after the GR, especially in Spain and the USA, where the downturn was sharpest. Also, as expected, we found more cohort activity differences among young women than among young men (largely because homemaking was negligible for young men at all time points) and that gender differences between pre- and post-GR cohorts were more pronounced in some countries than others. Below we discuss what the activity patterns imply about how differing contexts related to the gendered outcomes of recession amongst the young.

The case of young Spaniards was most extreme. Of all the groups studied, young Spanish men’s workforce participation was hit hardest by the GR, perhaps because they are typically in industries such as construction and tourism, which have high temporary and casual employment (Wölfli 2013). Young American men were also strongly affected, with the next-highest post-GR increase in the odds of unemployment and temporary work. These countries experienced high male job loss overall (Williams and Tait 2011; Congredado et al. 2011), but the effects on young men were particularly heavy. Also, Spain and the USA were the only two countries studied in which the odds of young women being unemployed were significantly higher post-GR. The countries both have thin welfare support and relatively unregulated workplace conditions, and our results suggest that in such contexts youth of both genders constitute part of a buffer workforce that can be flexibly laid
off in difficult times. Other research has found that in some parts of Spain and in the US (Williams and Tait 2011; Puig-Barrachina et al. 2017; Congegardo et al. 2011) women’s labor market participation held up, with an added worker effect meaning more women were in jobs. Together with our current findings, this suggests that young people of both genders, not necessarily women of all ages, were being used as contingent labor. The implication is that age rivals gender as a dominant risk factor in recessionary times.

Patterns in homemaking and education broaden the perspective and underline the point. On one view, it could have been expected that, in Spain, the ‘refamilializing’ austerity measures introduced would engender a female reserve labor effect (Lombardo 2017; Walby 2015; Karamessini and Rubery 2014) and we would find a higher proportion of young women in the home post-GR. Yet in Spain young women’s odds of homemaking plummeted. They were also lower post-GR in the USA, albeit less strongly. This supports the interpretation that rather than discouraging female labor force participation, the economic downturn meant higher proportions of young women wanted or needed to work, and signaled their availability through classifying themselves as unemployed. They demonstrated their continued interest in finding work (and perhaps in the meantime qualify for income support) rather than withdrawing in favor of a core male workforce, as may have happened in times past (Rubery and Rafferty 2013). Also, like their male compatriots, young female Spaniards and Americans were more likely post-GR to be in education, waiting out the downturn or upskilling. Homemaking still accounted for a larger proportion of young US women than did education, which in comparative terms had a low pre-GR starting base in that country. However, the gap between the two activities narrowed substantially, suggesting that the recession saw more young US women trying to improve their prospects of getting a job. In Spain, the proportion of young women in education was even higher. This fits with our expectation that where the downturn was severe,
welfare supports are thin and/or austerity measures introduced, for young women, an added worker effect would be manifested by preparing themselves for or seeking, rather than necessarily finding, market work.

It could also have been expected that in liberal-familialistic Taiwan, a reserve labor effect could see a higher proportion of young women being homemakers post-GR. This would have chimed with conservative social attitudes suggesting significant agreement with the proposition that if jobs are scarce, they should go to men (see Table 1). However, consistent with the findings for Spain and the USA, young Taiwanese women’s homemaking was much lower post- than pre-GR. In contrast to those two countries (and unlike their male compatriots), young Taiwanese women’s unemployment remained steady. However, they were significantly more likely to be in education post-GR. So, whereas young women in Spain and the USA traded-off unemployment, homemaking and education, young women in Taiwan traded-off homemaking and education. In Taiwan, perhaps because male education was already high (Shi 2012), it was only young women for whom the GR was associated with higher participation. It may be that Taiwanese young women had more need to up-skill to compete in the market, to try and match men’s job status and earnings. Thus, in Taiwan, where female labor is viewed as relatively contingent and unemployment income support lacking, young women did not demonstrate an added worker effect by being more likely to classify themselves as unemployed, but rather by trying to boost their job chances by investing more in their own human capital.

In marked contrast to the other three countries, the odds of younger cohorts of women in Finland being in education or unemployed was unchanged post-GR, but the odds of homemaking were significantly higher. These findings could indicate a discouraged-worker or reserve labor effect for young Finnish women, or that attitudes and behavior had become more traditional. However, the
shift was also possibly because young Finns had options unavailable in the other countries. Finland supports generous home care allowances (Sipilä and Korpinen 1998) and parental leaves (Evertsson and Duvander 2011). These measures may have facilitated female labor force withdrawal because it was possible for young couples to live on one wage, supplemented by benefit payments. That is, Finnish women could leave the workforce voluntarily because the choice was more economically viable than elsewhere.

A potential outcome of such sharing of risks through social welfare provisions is that the demographic consequences of the GR were relatively muted in Finland. The public support may have meant that young Finns could afford to move forward in their lives and undertake life course transitions which stalled in other countries (Goldstein et al. 2013; Cherlin and Cumberworth 2013; Schneider 2015). Supporting this possibility in our data is that the proportion of Finnish young people who were married or had a partner in the periods before and after the GR remained quite stable, whereas elsewhere they fell substantially (see Table A1). Viewed positively, the policy context smoothed the impact of the downturn. The Finnish welfare regime mitigated some of the financial risks of downturn so individuals and families did not have to absorb them unsupported. Feminist economists argue that home production adds to households’ financial wellbeing see for example (Folbre 2007; Nelson 2006) so shifting flexibly between the home and the market can be advantageous in difficult times. More negatively, long female work breaks slow career progression and widen economic disparities between the genders (Evertsson and Duvander, 2011). Although the rise in Finnish homemaking was from a low base, it could still represent a step backwards for gender equality. Also, it could mean more class disparity, with the home allowances likely to be particularly attractive to women in low socio-economic circumstances (Korpi et al. 2013).
It should be noted, however, that there are also negative implications of the opposite outcome, that where the GR was most severe and welfare supports were few, it had a gender-equalizing effect on what young people did. Our results above showed that in the US and Spain there was greater similarity in young men and women’s activities post-GR than before. The similarity was mostly driven by more young women being available for work or seeking further education, and not at all by young men being more likely to undertake home production. This is in sync with population-level gender convergence in paid and unpaid labor over time, which has been overwhelmingly because women, not men, have changed their behavior patterns (Bianchi and Milkie 2010; Sayer 2016). That is, women have taken on previously male roles (paid jobs), to a much greater extent than men have taken on previously female roles (domestic labor and care). And of course, more young women being available for work is no guarantee that jobs will be available to them. Similarly, there is no certainty that getting more education will be rewarded with well-paying positions, rather than causing qualification inflation (Cuervo et al. 2013). Our results show that where the GR was sharpest, workplaces most deregulated and social supports most lacking, more young women tried to find work without success. In the absence of jobs, they joined young men on the dole queues. Thus, the downturn ushered in more gender equality accompanied by lower economic wellbeing overall.

This is downward, rather than upward, convergence. The finding has sobering implications for future gender equality, including that it may be more likely to be realized by some classes of men losing status and earnings, rather than by women gaining them. Although movement towards workforce participation parity is usually seen as an advance for women, it is necessary to distinguish between relative and absolute economic gains. For example, press reports that post-GR US women earn more than men in a third of households are usually presented as meaning they are
taking over high-status positions (see e.g. Hartwell-Walker 2017; Ballinger 2010). However, since the GR has been followed by widespread wage stagnation, automation, deregulation, job precarity and downgrading of conditions (Barry and Conroy 2013; Lombardo 2017; Rubery and Rafferty 2015; Standing 2011), this is unlikely to be the general case. More probably, due to gender wage gaps and the lower status of most female jobs, the households in which women out-earn their husbands will be on average poorer than those in which men out-earn their wives. Also of concern is that class inequality has widened (Doyle and Stiglitz 2014), and will be compounded by the generational inequities of young men and women entering a more precarious labor market.

Our results imply that in many countries the future workforce will be more gender-similar, but also less secure and less well remunerated. This has significant consequences. However, to investigate this fully will require more research, beyond the scope of the current analysis, which is subject to several limitations. The harmonized data necessitated a high-level view, so we could not investigate detailed or within-country policy variation. Also, the data are cross-sectional by country and by year, so we were not able to follow individuals over time. For example, we could not analyze whether the impact of the GR was particularly high for young people who were employed and then lost their jobs. Future research using longitudinal data could consider the long-term impact of the GR on young people. It could examine the ‘scarring effects’ of the recession on employment, earnings and family formation, and whether the gendered activity patterns were maintained over time. It could be more definitive about the broader implications of the downward convergence identified here, including whether more labor force commitment by young women, alongside young men, occurs without overall improvements in social and economic wellbeing. Notwithstanding, we have contributed to knowledge on how the gendered effects of recession can intersect with age and vary across social and policy context. The findings of this paper should be of
interest to individuals and groups from academia, civil society, public and private sectors who are concerned about gender and generational equity, and in how these issues can be affected by public and workplace policy.
References


Williams, Joan, and Tait, Allison A. 2011. 'Mancession.' or 'momcession'? Good providers, a bad economy, and gender discrimination, *Chicago-Kent law review*, 86(2), 857.


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<th>US</th>
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<td><strong>Gender pay gap</strong></td>
<td>19.6</td>
<td>8.6</td>
<td>17.5</td>
<td>18.9</td>
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</table>

**Attitude (% Agree)**

- When jobs are scarce, men should have more right to a job than women: 9.6 17.1 43.5 6.7
- A university education is more important for a boy than a girl: 6.3 12.6 15.5 7.7

---

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<th>Country</th>
<th>Men</th>
<th>Women</th>
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<th>Women</th>
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<th>Women</th>
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<td>5.66***</td>
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Note: Base categories are pre-GR, high education, not homeowner or purchaser, did not live with partner/not married. Standard errors are presented in parentheses. *p<0.05, **p<0.01, ***p<0.001.
Table 3: Odds ratios and standard errors from logistic regression models predicting participation in activities by young men and women across countries

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<td>(0.03)</td>
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<td>(0.06)</td>
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<td>Finland</td>
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<td>2.04***</td>
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<td>(0.09)</td>
<td>(0.09)</td>
<td>(0.09)</td>
<td>(0.14)</td>
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<tr>
<td>Spain</td>
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<td>0.78***</td>
<td>2.58***</td>
<td>3.24***</td>
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<td>(0.04)</td>
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<tr>
<td>PostGR</td>
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<td>1.09**</td>
<td>1.44***</td>
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<td>PostGR x Taiwan</td>
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<td>0.29***</td>
<td>0.73***</td>
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<td>1.18</td>
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<td>Pseudo R²</td>
<td>0.07</td>
<td>0.05</td>
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<tr>
<td>n</td>
<td>50,009</td>
<td>34,373</td>
<td>135,606</td>
<td>143,986</td>
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Note: Base categories are USA, pre-GR, high education, not homeowner or purchaser, did not live with partner/not married. Standard errors are presented in parentheses. *p<0.05, **p<0.01, ***p<0.001.
Figure 1: Employment and non-employment activities of men aged 20-34 years in USA, 2000-2013 (%)

Figure 2: Employment and non-employment activities of women aged 20-34 years in USA, 2000-2013 (%)

Figure 3: Employment and non-employment activities of men aged 20-34 years in Taiwan, 2000-2013 (%)

Figure 4: Employment and non-employment activities of women aged 20-34 years in Taiwan, 2000-2013 (%)
Table A1: Sample sizes and proportions (unweighted) by country and periods pre- and post-GR

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<tr>
<td></td>
<td>n</td>
<td>%</td>
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<tr>
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<td>65,566</td>
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