8th International Conference of Panel Data Users in Switzerland

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Abstracts

Workshop 1A – Inequality & poverty I - room 2208

Inequality within wealthy nations: A comparison of the gender wealth gap in Switzerland and Australia

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Although the gender pay gap has been extensively researched both at a national and at a cross-national level (see Blau and Kahn, 2003), the other dimension of socio-economic inequality, the gender wealth gap, has received very little attention. Cross-national comparative research examining gender wealth gaps is particularly scarce. Wealth can be seen as a stock of accumulated resources over the life course and its accumulation is influenced not only by income, but also by many different personal, institutional and family-related factors. Generally, more economic resources produce higher living standards, stimulate a more varied consumption, increase independency and decrease the probability to fall into social security. Wealth, in particular, is able to protect individuals from income losses, to shape power relations within society and to modify social mobility through intergenerational transfers (Deere and Doss, 2006). The distribution of wealth among population groups and its determinants are therefore politically interesting topics that might attract even more attention in the future given the growing aging populations of many developed countries. Recent studies on the gender wealth gap have also proposed that questions about the effect of national institutions on wealth could be more easily studied comparing different countries (Yamokoski and Keister, 2006; Sierminska, Frick and Grabka, 2010). Our paper aims at addressing these particularly stimulating questions comparing two very different countries (Australia and Switzerland) that appear to be, on average, the two wealthiest countries in the world (Credit Suisse, 2012). Despite differences in home ownership rates and in institutions, two key drivers of wealth accumulation, the residents of Switzerland and Australia are consistently rated as the wealthiest in the world suggesting that there is some comparability in pro-rich policies and saving behaviours within these two nations. Australia is indeed the wealthiest country when looking at median wealth, overtaken only by Switzerland when average wealth is taken into account. Using Household, Income and Labour Dynamics in Australia (HILDA) data, Headey, Marks and Wooden (2005) found that the richest 10% in Australia owned 45% of 2002 total household wealth. Moreover, wealth seemed more unequally distributed than income, reaching a Gini coefficient of 0.61. If inequality characterises wealth in Australia, the situation is even worse in Switzerland, where the distribution of wealth is heavily skewed towards the top. Davies et al. 2009 estimated that in 2000, the richest 10% of the Swiss population owned 71% of total wealth and that the richest 1% owned 35% of total wealth. Wealth inequality declined between 1920 and 1970 in many western nations, but not in Switzerland, whose Gini coefficient in 2000 was 0.80. This inequality might partly reflect an imbalance in the relationship between genders. A recent interesting study indeed demonstrates that in 2006 there was a gender wealth gap among single households in Australia and that this gap might have been due to differences in wealth portfolios (Austen, Jefferson and Ong, 2014). Up until recently, research into levels of wealth inequality within and between nations has been unfortunately hampered by a lack of relevant data (Keister and Moller, 2000). However, the collection of comprehensive wealth data by the Swiss Household Panel (SHP) and the Household of Income and Labour Dynamics in Australia (HILDA) provides an opportunity to examine associations between socio-demographic characteristics and levels of wealth at the household level. By restricting our analysis to households with just one adult, we are able to examine whether a gender wealth gap exists and whether differences in institutional settings affect the existence of, and size of the gap. First, following suggestions by Austen et al. (2015) regarding the different trajectories of housing and non-housing wealth, we examine differences in wealth according to gender and wealth sources in both Switzerland and Australia. Second, we examine the impact of factors such as income, educational attainment, marital status, children and family background on the wealth distribution of women and men. Third, we compute semi-parametric decompositions in order to see whether one factor in particular influences the gender wealth gap and whether the same factors determine the intensity of the gap across these two nations. Preliminary results show that the gap in Australia is predominantly masked by inflation in housing prices. Once housing wealth is excluded from total net wealth, the gap in financial and other types of wealth favours largely men at the top of the distribution. Also in Switzerland, housing wealth seems to be more equally distributed than financial wealth. Financial wealth could be however more balanced if women and men had the same income and educational level. Moreover, having children constitutes a strong disadvantage in Switzerland, whereas it is not in Australia.

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Do opposites detract income inequality? The impact of assortative mating and of female labour supply on inequality in Switzerland

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The relationship between spouses' incomes is one of the factors that influence household income inequality. There is a particular concern on the fact that stronger assortative mating might contribute to rising income inequality (e.g. Esping-Andersen, 2007; Schwarz, 2013). More generally, a high correlation between spouses' incomes produces a strong desequalising effect on the household-income distribution. The literature on the role of household composition on income inequality in several countries indeed reveals an over time increase in correlation between labour incomes of couples. Besides stronger assortative mating, the increasing correlation could also be due to changed labour supply, notably to higher female labour force participation.

This paper sheds light on the relation between labour incomes of spouses in Switzerland. Previous research suggests that the correlation between spouses' earnings is negative and particularly low in Switzerland. Moreover, this low correlation is probably one of the reasons why the strong rise in female labour force participation has not inflated inequality over time. Replicating the design and the coding used in previous studies (see e.g. Harkness 2013 and Pasqua 2008, which did not include Switzerland), we find that the correlation oscillates around zero. Switzerland appears to have one of the lowest correlations between partners within 19 OECD countries. The second lowest correlations can be found in the Netherlands and in the US (Harkness, 2013; Pasqua 2008). Exactly like the Netherlands, the Swiss labour market is characterised by high female labour force participation and by women mostly working part-time. The low correlation in Switzerland could therefore be due to part-time work. From a policy point-of-view, it is important to understand the mechanism of this low correlation and to understand to what extent part-time work is driven by voluntary choices or "imposed" by institutions.

To understand the relation between spouses' earnings it is important to disentangle effects of patterns of couple formation -assortative mating- and of labour supply of partnered women (Pestel, 2014). To our knowledge, several studies have showed the change of the impact of assortative mating on inequality in the United States (see Schwartz 2013 for a review), but scarce information is available for Europe. Recent studies show that in many European countries patterns of educational assortative mating have changed in line with educational expansion. As a general trend, more highly educated women marry lower educated men, whereas in Switzerland, women tend to marry up with more educated men (Klesment & Van Bavel, 2015). Even if the number of couples with the same level of education is in line with European trends, hypogamy (women marrying lower educated men) is extremely rare (second lowest after Slovakia) and hypergamy (women marrying higher educated men) is extremely common (second highest after Romania). This evidence suggests that Switzerland has remained within traditional marital models and that assortative mating should have maintained inequality stable to its historical values. We therefore think that changes in inequality might derive from labour supply behaviours triggered by changes in partner's job conditions.

The empirical analysis of the paper is twofold. In the first part, we construct Gini indices and correlations to monitor the evolution of the relation of couple's earnings using 15 waves of the Swiss Household Panel (1999-2013). We separate the effects of couple sorting (assortative mating) from labour market decisions based on discrete labour supply models.

Our research adds to the literature in several ways. First, it shows historical trends of impacts of assortative mating on inequality in Switzerland. Second, it disentangles the effects of assortative mating and of female labour supply on inequality. Third, it examines reasons for employment rates decisions of partnered women, including institutional constraints, family and personal attitudes.

Preliminary results in Table 1 compare the the observed inequality in couples' earnings to inequality assuming maximum assortative mating (e.g. highest earning men with highest earning women), minimum assortative mating (e.g. highest earning men with lowest earning women), and random assignment of partners.

The observed inequality of couples's earnings is close to and even lower than inequality assuming random matching of partners. This shows that there is no desequalising effect of assortative mating in Switzerland. Table 1 indicates that nevertheless, assortative mating has the potential to considerably affect inequality (around 0.05 points of the Gini Index comparing minimum and maximum values). Further steps will monitor the adaptation of women to men's hourly wage and of its interaction with institutional incentives (taxation, childcare costs) and with gender values.
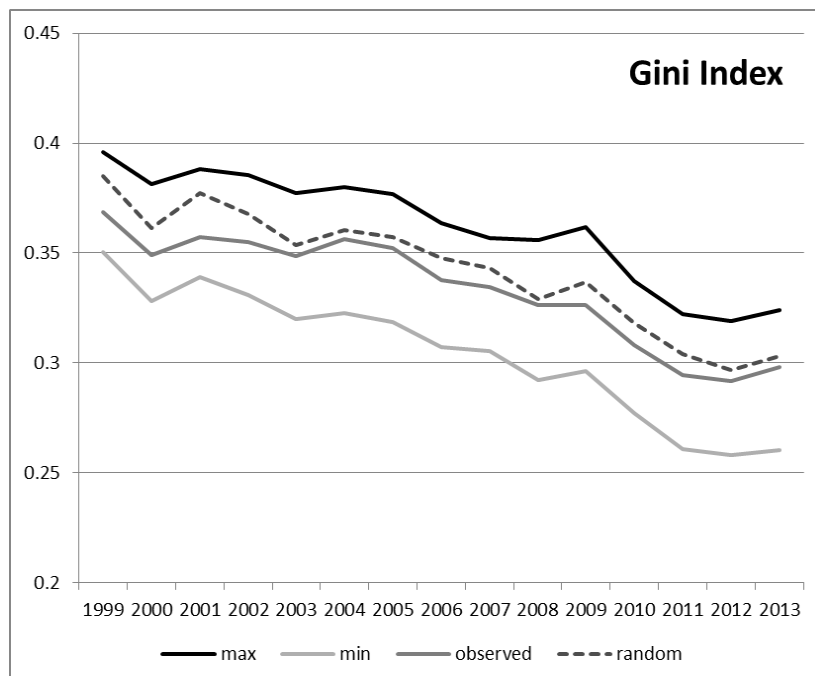

Table 1: Gini Index 1999-2013 with observed, maximum, minimum and random assortative mating.

Sources: Authors' computations with the SHP 1999-2013.

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Social Security - The importance of social benefits in low-income households

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Introduction

The expenditures of the welfare state are discussed in many European countries for years. National social reforms change social services and can move financial burdens. This study is focused on the importance of social benefits (public transfer) in low-income households. Using examples of Germany and Switzerland the question

will be examined, whether the proportion of social benefits in low-income households has significantly changed over time. For how many households with low incomes are social transfer the main income source? Or do public transfer rather supplement the income of households?

What effects have structural barriers for the importance of social benefits? Does, for example, difficult reconciliations of work and family life, as it is the case for single parents lead to a determining effect of social benefits comparing to other income components like wages because they are unable to work?

Does the importance of social benefits vary between different household types (e.g. households with or without children, single households, households with more than one person)? This study also discuss different constellation of labour market participation within households.

The presentation gives an overview about the income composition and changes over time using panel data from Switzerland and Germany, included in the so called Cross-National Equivalent File (CNEF), provided by the Swiss Household Panel (SHP) and the German Socio-Economic Panel (SOEP).

Data Basis

The German data were drawn from the German Socio-Economic Panel (SOEP) starting in 1984; and the Swiss data are from the Swiss Household Panel (SHP) started in 1999. Because of the availability of annual income data, the analyses have been restricted to the survey years 2000 to 2013. Both surveys provide longitudinal information on the annual income from the year prior to the survey year. In SOEP, annual income is estimated by combining the average monthly income from any source at individual and household level with the number of months in which different sources of income were received during the year. In SHP people were asked to indicate or to estimate the yearly or monthly income amount.

To describe the income situation of households, the analysis is based on annual income In the survey year (t), all income components affecting a surveyed household as a whole, and all the individual gross incomes of the current members of household surveyed are added together, in each case referring to the previous calendar year (t-1, the income year). In addition, income from statutory pensions and social transfer payments is taken into account. The annual income is calculated by employing a simulation of taxes and social security contributions—including one-off payments such as a 13th or 14th month's salary or a Christmas or vacation bonus.

In order to compare the income situations of households of different sizes and compositions, the household's entire income is converted into equivalised incomes using the (revised) OECD equivalence scale. The analysis is at the individual level and provides a statistical representation of the entire population of private households in Germany and Switzerland. The institutional population (for example, those living in retirement homes) is disregarded in both panels.

Income is standardized at 2000 prices. In each case, prices are adjusted to the respective income year. Finally, in the SOEP data each new sub-sample is only taken into account starting with the second survey wave in order to exclude fluctuations over time due to methodological factors influencing response behaviour. This restriction on the cases surveyed is based on analyses indicating that even representative longitudinal studies exhibit differing response behaviour in the first wave in questions on income (Frick et al. 2006).

Results

First results show significant differences between Switzerland and Germany concerning income level, income development and poverty. A striking difference concerning income poverty between the two countries is, that income poverty when using pre-government income is by far higher in Germany, but switching to post-government income result in nearly the same poverty levels. This is also mirrored in the higher inequality level for pre-government income in Germany. And for Switzerland it is striking that especially older women (65+) have a significantly higher risk of poverty than men.

The importance of public transfers are much more important for the income position of low income households in Germany than in Switzerland. The proportion of persons living in households where social benefits are the main income source is around 6 percent in Germany, whereas this proportion is only around one percent in Switzerland. In line with that, when focussing on households with low income, the proportion of social benefits on all income components is higher in Germany than in Switzerland for the entire time period. Comparing the situation of households at risk of poverty the share of social benefits are higher for german households than in Switzerland.

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Culture and Household Saving

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There are tremendous differemces in household saving and accumulated wealth across countries. Understanding these differences is important as only small changes in aggregate savings rates can affect a country's growth path while low wealth buffers can imperil an economy's financial stability in case of adverse income or expenditure shocks. Typically, economists attempt to explain these differences by economic, institutional, demographic and geographic conditions which vary across countries. These attempts have only been partly successful in explaining the observed differences. This paper analyzes the extent to which exposure to cultural groups can affect households' intertemporal financial decisions - in particular their decision to save. Moreover, it elicits potential channels of how culture affects these decisions.

But what is culture and why should it affect households' intertemporal decisions? Only recently, economists have transformed the notion of culture from a vague concept to a clear definition that allows the development of testable empirical predictions. In line with Guiso et al. (2006) and Fernandez (2011), I define cultural differences as *systematic variation in norms and preferences shared within social groups.*

In this paper, I focus on social groups that share a similar language. I argue that speaking a similar language is a necessary condition for any form of social interaction: it enables the transmission of beliefs and preferences from parents to their children (vertical transmission) or from their peers (horizontal transmission). In line with the existing literature, I test several specific dimensions of norms and preferences. I argue that different distributions of time preferences and norms of taking formal or informal consumer credit in financial distress can affect a households' decision to save: impatient households are more likely to consume today than to save (Sutter et al., 2013). Besides, the norm of mutual help in informal networks of family and friends in case of adverse income or expenditure shocks might lead to lower precautionary saving (Ortigueira and Siassi (2013), Bloch et al. (2008)).

Switzerland is a suitable laboratory to analyze the role of exposure to different language groups on households' intertemporal decisions. In Switzerland, there are two major language groups: the Romanic languages (French, Italian and Romansh) and German. The speakers of these languages are located in separate regions for historically reasons. These regions are geographically close and share a common language border. At this border, the share of Romanic-speaking individuals falls from 80% to about 20% within 5 kilometers (vice versa the share of German speaking individuals). A large part of this language border runs through the Swiss cantons. As policies are set either on the national or on the cantonal level, there is no associated change in policies and institutions at the parts of this border that run through cantons. Besides, there is no change in geographic conditions as the main geographical border, the Alps, runs in East-West direction while the language border mainly runs in North-South direction. In addition, it is reasonable to assume that many relevant economic conditions do not change at the parts of this border that run through cantons (e.g., business cycles, in addition, interest rates and supply of financial products).

Hence, by comparing the financial decisions of similar households on the German-speaking side of the language border to the ones on the Romanic-speaking side, I am able to isolate the effect of the exposure to these language groups on individual decisions from institutional, economic and geographic differences. Being able to do this is important as institutional conditions can affect households' propensity to save through differences in tax incentives, pension systems and unemployment insurance. Economic conditions might lead to different saving behavior in case of differences in interest rates, inflation, business cycles or unemployment expectations. Last, geographic proximity to financial institutions might be relevant for the access to and usage of financial products by households. To isolate the effect of language group exposure on households' financial decisions, I employ survey data from the Swiss Household Panel (waves 1999 until 2012). It includes characteristics of the person responsible for the management of household finances ("household head") (e.g., age, gender, education, etc.), her preferred language spoken (French, Italian or German) and her religious views. In addition, it contains a wide range of socioeconomic household characteristics such as income, the employment status and the exact location of each household on the municipality level. Besides, it includes variables that have been shown to be good proxies for impatience (e.g., past tobacco consumption).

I complement this data set with data on local unemployment rates on the district level and bank branches on the ZIP code level. The empirical strategy is a spatial regression discontinuity design: I test for discontinuities in household savings at the language border. The key identifying assumption of this local border contrast is that only the dominant language of each municipality but no other pre-determined variable changes household saving at the language border. I argue that this is reasonable to assume - especially for those parts of the language border that run through cantons.

I estimate the effect of households' exposure to language groups on their propensity to save and to spend excessively. Hereby, I mainly rely on a variable that indicates whether a household saves at least CHF 100 per month. Alternatively, I employ variables that indicate whether the household has a retirement savings account and whether a household's expenditures are higher than its income. To investigate the potential channels relevant for the cultural differences, I complement the main analysis with two further empirical exercises. First, I test whether different initial distributions of time preferences are consistent with the observed differences in saving. Second, I test whether households in the Romanic-speaking part are more likely to take formal or informal consumer credit in case of financial distress.

I document that households in the Romanic-speaking part are more than 12 percentage points less likely to save and 6 percentage points more likely to spend excessively. These results are robust to more formal testing when implementing the local border contrast. I find evidence that there are differences in norms of taking credit in financial distress and impatience that are consistent with the initial differences in household saving across language regions.

Existing research has analyzed the role of culture for household debt and portfolios using cross-country comparisons and exploiting financial decisions of immigrants to a country. While the first strand of the literature faces the problem of convincingly disentangle country-specific institutional and economic factors from cultural factors, the second strand faces multiple sample selection issues that arise when comparing different immigrant groups with each other and with the non-immigrant population. Besides, in both strands of the literature it remains unclear which of the norms and preferences that are common within cultural groups are relevant for the observed differences in the financial decisions. This paper overcomes these methodological drawbacks by comparing the financial decisions of a representative and homogeneous sample of households within a country. Hereby, I am able to isolate the effect of culture on financial decisions from differences in institutional, economic and geographic conditions and from differences in household characteristics.

By eliciting the channels at work, this paper contributes to the existing literature on how culture shapes differences in norms and preferences. A recently developed linguistic savings hypothesis argues that the future orientation of language can shape individual time preferences. These can, in turn, predict intertemporal financial decisions in controlled laboratory experiments and across countries. The present paper contributes to this literature by providing evidence that language group membership can be indeed relevant for individuals' financial decisions, in particular their decision to save. I find evidence that these decisions are consistent with different initial distributions of time preferences across language groups. An alternative strand of the literature argues that social norms imply non-pecuniary costs of defaulting on loans. This paper contributes to this strand of literature by showing that there are substantial differences in how households resolve financial distress across cultural groups. These differences are likely to be consistent with non-pecuniary costs - such as social stigma of taking consumer credit in financial distress.

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Workshop 1B – Family, gender & generations - room 2224

Is there a wrong time for a right decision? The impact of the timing of first births and the spacing of second births on women's careers

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Background

For West Germany, it is well-known that a trade-off between work and family is characteristic for women. Due to its long-standing conservative welfare regime (Esping-Andersen 1990) and its rather traditional gender culture (Pfau-Effinger 1996), a very gender-specific division of labor within families is prevalent (e.g. Grunow et al. 2007). Specifically – and as facilitated by German family policy – women typically interrupt their employment for several years in order to provide care for young children. Upon confiding their children to half-day care institutions and, hence, returning part-time, mothers tend to choose more flexible jobs that are closer to home over occupationally promising ones (Engelbrech 1997). Interrelated with that, employers face high costs emanating from mothers, resulting in statistical discrimination of women in general (Gangl/Ziefle 2009). As a result, mothers' income has been found to develop less steeply and on lower levels and no or downwards mobility has been found to be more likely (Ziefle 2004; Hirschle 2011).

Despite the extensive research on the matter, however, a question underrepresented in the academic debate has been if and how women's long-term careers are influenced by the specific way they embed their birth decisions into their life courses. More precisely, since two children are normatively and empirically prevalent in Germany, the following questions arise:

(1) How does women's *timing* of the first births and *spacing* of the second births affect their subsequent careers?

(2) Do the *activities* between both births (work interruption, return to part- or full-time employment) influence these career chances?

Also, it is well known that women's educational level strongly influences their family decisions, particularly with regard to reconciling work and family. Hence, another question is:

(3) Do the effects of timing and spacing vary across *educational groups*?

In previous research, theoretical and empirical focus has been on the timing of first births. According to a dynamic model of fertility, the benefit of an early timing, i.e. a long, intense time to enjoy with the children, opposes the often dominant aim of accumulating human capital and obtain its returns before childbirth. Regarding the spacing, previous research is less clear: to avoid human capital devaluation and to keep adverse employment interruptions short, mothers could either choose to block births and, hence, periods of unpaid caregiving tightly and subsequently strive for a definite return to the labor market – or they could space births widely, aiming for two separate yet shorter interruptions with a period of gainful employment between births. With regard to the impact of mothers' education, higher educated women have both higher opportunities and opportunity costs on the one hand and higher reflectivity on the other (Beets 2011). Hence, they can be assumed to plan the reconciliation of work and childcare more thoughtfully, choosing their timing and spacing according to the option providing the best compatibility.

Data and Methods

Empirical analyses are based on data from the adult cohort of the National Educational Panel Study (NEPS). To model women's career development across time, we observe mothers of two at different time points in their careers. We assess their occupational prestige, described by the Standard International Occupational Prestige Scale SIOPS (Treiman 1975), at labor market entry, one year before their first birth, and finally at the age of 45. Using linear regression, we estimate the impact on women's peak career at age 45 exerted by, i.a. women's preceding career developments, their birth timing and spacing behavior, and their educational background, in the factors' complex interrelationships.
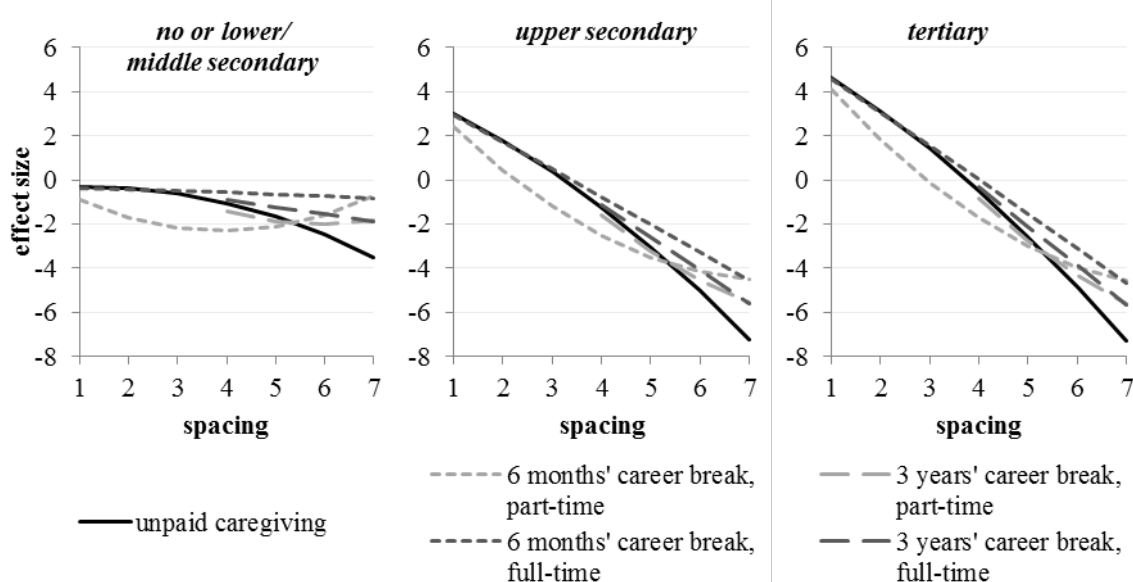
Results

With respect to the impact exerted by the timing of the first births and their spacing of the second on women's careers, the analyses do not yield a general effect of both aspects of women's birth behavior themselves. Instead, particularly for the spacing, the activities women participated in between both births prove to be of major, yet very unexpected relevance: while bridging the births' spacing by exclusively caring for the first child for some years can be shown to be the occupationally most rational decision, reentering the labor market part-time soon after the first birth turns out to be highly detrimental in most cases. A full-time employment, instead, only pays off after participating in the labor market for several years while postponing the second birth (cf. Figure 1).

Apparently, the West German institutional and normative framework, which encourages mothers to stay at home for several years to care for their children, confounds the positive consequences from labor market continuity and occupational commitment that could be obtained by returning quickly after the first child's birth. Additionally, the prestige diminishing effect of a part-time employment suggests the existence of a 'mommy track': even though working part-time often enables mothers to flexibly combine family and career, these benefits apparently come at considerable long-term costs to the career.

Regarding educational differences in the effects wielded by women's birth timing and spacing, analyses yield that education indeed influences the way in which women impact their career through their birth behavior. Firstly, the results suggest that higher educated women are able to time their first births in a way that proves to be beneficial, in terms of prestige, in the long-term. Secondly, we find that the overall shorter spacing of highly educated women can be explained by their very high occupational profit from spacing births shortly: while the West German institutional and normative framework discourages returning to the labor market during the first years after the first birth, highly educated women seem to circumvent these obstacles to labor market continuity and commitment by keeping the period of consecutive childcare short. This finding adds valuably to the literature that researches the reasons for higher educated women's short birth spacing (e.g. Kreyenfeld 2002). A short spacing of births gives highly educated women the chance to accumulate prestige even beyond the high attainment they achieve before their family formation – while mothers of two children with low education seem to fall beneath their prestige at career entry in any event.

Figure 1: effect on career across different activities during spacing, by educational degree

Note: timing constant at seven years.

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How employment quality impacts fertility intentions? Evidence from the Swiss Household Panel

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Theoretical background

Fertility has dropped to very low levels over the last half-century. Different mechanisms explain these low fertility rates. Childbearing has been postponed to later ages and rates of childlessness have increased substantially, in particular among highly educated women. Different aspects of the labor market play a key role in fertility intentions: Economic uncertainty, unemployment, perceived job insecurity and precariousness affect negatively childbearing decisions (Kreyenfeld, Andersson, & Pailhé, 2012). In addition, the gap between the high gender equality in the public sphere and the lower gender equality in the domestic sphere negatively influences childbearing intentions (McDonald, 2000). Using the Swiss Household Panel (SHP 2002–2011), the aim of this paper is to better understand the importance of work instability on childbearing intentions taking into account gender equality in the Swiss context, which is particularly interesting: Switzerland has a high childlessness rate, is the only European country having no paid paternity leave policy yet, and promoting conservative family policy.

Specifically, we address the following questions: to what extent, the quality of a job is associated with the intention to have a child for men and women in Switzerland? Does job quality matter equally for first and subsequent child intentions, and are there gender-based differences? Does an unequal gender-role attitude change the effects of job quality on the childbearing intentions of men and women?

Data, sample, method

We selected a subsample of the SHP data set from 2002 to 2011. Men (aged 22 to 50) and women (aged 22 to 45) living with a partner (married or cohabiting) for whom we have their partner's interview data and who are active on the labor market have been selected.

The dependent variable is the intention to have a child (or another child) within 24 months following the interview. The explanatory variables are composed of two job quality measures - job instability and occupational prestige- and one gender-role attitude indicator reflecting approval of maternal employment. We control for a set of socio-demographic variables: age, marital status, level of education, household income and contribution to the household income.

In order to estimate the associations between our explanatory variables and the intention to have a child, we apply nested hierarchical two-level logit models. Our intra-individual measures are time-dependent and are retrieved from up to ten time points nested in the individual respondent. Models were estimated using HLM software (method of estimation: restricted maximum likelihood).

Results

Results concerning the extent to which job quality is associated with child intentions are mixed. We demonstrate first a negative relationship between job instability and intentions to have a first child among women. It seems important for women to have a stable professional context before starting to build a family.

For men, professional prestige is barely significant for the intention to have a child or another child: it tends to confirm the widespread norms about good fathering that define fathers as stable income providers.

For childless men, having a partner in training is negatively linked with the intention to have a first child. It goes in the direction that men value their partner to be involved on the labor market before starting a family.

Concerning the second question which aims at understanding to what extend job quality measures matter equally for a first and subsequent child, we can say that for women this is for the start of the family that the personal job stability matters. Results from the effect of gender attitudes are mixed. Thinking that a child suffers with a wortking mother leads to child intentions for childless men. This result demonstrates the traditional perspective of childless men -or men who do not have children yet- on the family. Interactions between job quality measures and gender attitudes demonstrate that the effect of employment characteristics variables changes in function of the family attitude. Men in jobs with high prestige believing that a child suffers with a working mother were

slightly less likely to have another child: This shows that plans to increase family size would destabilize the family equilibrium.

We may argue that fathers with a gender-inegalitarian attitude in prestige jobs would see their jobs compromised by the arrival of a child or another child. In addition results demonstrate that men in unstable jobs believing that a child suffers with a working mother are prone to have another child.

Conclusion

General results support a traditional and normative representation of the family as well as a strong effect of the position in the life course on childbearing decisions is highlighted (Bernardi, Ryser & LeGoff, 2013). As expected, intentions to have children were strongly age-related. For both parents and non-parents, there is a defined moment in time when the intention to have a child is more likely to be discussed. In addition the partner intention to have a child is strongly associated with childbearing intentions which demonstrate that childbearing intentions are embedded in the history of couples. While both men and women already have at least one child, the presence of young child in the household is crucial for the intention to have a second or another child. Couple characteristics are also important: but only to start a family, marriage is crucial, while couple already have children, marriage is not important at all. Our main results lead to the conclusion that men integrated their role of the male breadwinner; Whereas women and mothers intergrated an image of the part-time working women mainly involved in the family sphere. These results are in line with the master status theses developed by Krüger and Levy (2001).

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Employment within partnerships and school-aged children's socio-emotional and cognitive development

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Theoretical background

Women's educational attainment has risen steadily over the last few decades. In varying alignment across OECD countries, so too has women's labour market participation. A consequence has been that maternal employment during children's school-aged years has become more commonplace. Empirical evidence of changes in maternal education on child development is, in the main, positive; whereas evidence of whether mother's employment positively impacts children is mixed.

One line of reasoning as to why we might expect maternal employment to negatively affect child outcomes focuses on the fixed amount of time parents are able to invest in two competing domains: market work in opposition to care work (Haveman and Wolf 1995). Stress is laid on the cost that accompanies maternal employment: the loss of mother-child time. A frequent assumption is that fathers' time divisions are either unresponsive to their partners, or do not fully compensate for the child's lost time with their mother. Several recent economic texts have approached the effects of maternal employment on child development from this perspective, and find evidence of a detrimental effect of mothers' paid work hours for young children and adolescents (Bernal 2008; Ruhm 2008; Ermisch and Francesconi 2013).

Another strand of research argues that while working mothers may spend less time with their children, time they do spend caring may be time most beneficial for their child's cognitive and socio-emotional growth. Maternal employment is expected to have little to no negative effects on children's development, since working mothers strive to preserve quality mother-child time (Bianchi 2000: 403). By this logic, not all mother-child time is of equal value for positive developmental outcomes. Further, employed mothers tend to forego indirect, 'unstructured', time with their child and prioritise time spent engaged with their child in joint activities most conducive to children's growth, or ones that reduce behavioural problems (Hsin and Felfe 2014: 1882). Time-use studies have shown that among couples, maternal employment increases the frequency of both fathers and mothers time spent in child-centred activities, such as reading to or playing games with their children (e.g. Zick *et al.* 2001).

A consistent theme to emerge in sociological, economic, and psychological research is that the effects of parent's employment on child outcomes are moderated by *quantity-quality* aspects of the job. Further, they operate through children's experiences of differential parenting or emotional environments (Beyer 1995).

As regards working hours, evidence points to some benefits to part-time maternal employment, which switches to negative effects for full-time employment (Youn *et al.* 2012). Additionally, working in mentally demanding jobs may increase a mother's awareness and a child's preference for educational engagement, either through carrying out activities that actively foster this, or imitation on a child's part (Kalmijn 1994). As such, children of parents who work in more complex jobs (Kohn and Schooler 1982), or fewer hours, are perhaps most likely to reap any beneficial effects in terms of increased socio-emotional adjustment and learning capacity (Yetis-Bayraktar et al. 2012).

Education is seen to play a key role in bringing positive change to parenting (Cuhna and Heckmann 2007). Domina and Roksa (2012) find that over time the act of attaining further education among mothers elevates children's resource pool through an increase in organised family activities, such as joint art projects, and an increase in the number of children's books in the home (Domina and Roksa 2012: 704). Thus, the way in which mothers raise their children is responsive to changing conditions, namely greater exposure to educational environments.

In this paper we examine the potential for paid work, which is arguably open to more variation over the life course than is educational attainment, to similarly act as a better or worse 'educational and informational' resource, or alternatively, to create greater or lesser degrees of separation in relations between parents and children. We focus on couples' work divisions, and analyse differences between children nested in partnerships with varying employment setups – in terms of hours worked and 'educational' work environments.

Research Questions

The leading question we address is whether supportive parenting differs according to couple's time-share divisions: First, do parenting practices differ in terms of i) the regularity by which parents and children engage in joint activities; ii) the organization of extra-curricular activities for their children; iii) how much the mother-child relationship provides a child with emotional support. Second, to what extent a child's cognitive and socio-emotional development is associated with time-share divisions within partnerships. In other words, is a child's growth trajectory more or less supported where parents work (1) long hours and in occupations with a high share of higher-educated workers; (2) long hours and with low shares of higher-educated; (3) fewer hours in occupations with high shares of higher-educated; and (4) fewer hours with low shares of higher-educated.

Data and Methods

The paper uses longitudinal data from the *Swiss Survey of Children and Youth* COCON, a representative panel of German and French-speaking regions in Switzerland. Data on a cohort of children (N= 1 273) born in 1999/2000 are analysed at ages six (2006), nine (2009) and twelve (2012). Our sample is restricted to children of two-parent households, whose mother and partner remain in a stable partnership over the study period and whose mothers report being the primary caregiver. While this holds the potential to bias the sample towards children with lower developmental problems, these couples represent the majority of the original child cohort sample collected at these ages.

In multi-stage analyses, we estimate the effect of couples' employment setups on several parent-child outcomes: (1) the degree of support in the mother-child relationship is assessed using two items that provide information on strength of 'love and affection mother holds for her child' and regularity of discussing the child's day-to-day experiences, and the other parenting items are caregiver reported measures of the frequency of a (2) child's extra-curricular activities and (3) mother-child activities. We use multi-level modelling to examine differences between children on several child outcome variables: (1) a child's basic cognitive abilities (2) caregiver-reported self-esteem and (3) empathy. The key predictor in our analysis is a couple's division of hours in paid work. We examine this in several forms. First, we examine contemporaneous effects. Second, following previous cohort studies of children's socio-emotional adjustment (Hope *et al.* 2014) and child obesity (Phipps *et al.* 2006) we examine cumulative effects of couple's employment trajectories on child outcomes at 12 years of age. To divide educational 'quality' across occupations, and between mother's and father's work environment, we match in data from the Swiss Labour Force Survey (SAKE), and generate an occupational aggregate of shares of higher educated by occupation, averaged across the years 2008 and 2009.

Keywords: *parental employment ∘ parenting practices ∘ child development*

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Young adults and their parents. Transitions, dependence, and intergenerational cohesion

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Young adults today face major challenges of various kinds. Young adulthood is characterised by crucial developmental tasks and transitions in all areas of life, such as finding one's place in the world of work and gaining financial independence, leaving the parental home and entering into a relationship with a partner. Although the timing and sequencing of these "landmarks" has become more flexible and reversible (Konietzka 2010), this greater freedom at the same time requires that young adults make the proper biographical decisions, which have consequences for their entire future life. In finding their own path through life, young adults thus not only encounter a host of opportunities but also substantial obstacles and uncertainties.

These manifold challenges may occur in the professional or educational situation of young adults as well as within the family of origin. In times of insecure labour markets, flexibilisation and the rising importance of tertiary education, young adulthood is characterized by a prolonged dependency from the parental generation. This makes it necessary for young adults to renegotiate the relationship with their parents towards a balance between autonomy and attachment (Berger und Fend 2005). At the same time, increased divorce rates and growing diversity of family forms demand higher efforts to maintain close family ties. It is emotional ties between young adult children and their parents that are central to this study.

Families, after all, can provide a "safety net" that offers flexible and episodic support as needed (Höpflinger and Stuckelberger 1999; Swartz et al. 2011).

Nevertheless, there are still significant research gaps. When investigating intergenerational relationships, the perspective of the children, especially at such a dynamic stage in the life course, is still underrepresented. This is particularly true for Switzerland and also applies to emotional closeness. Thus, several research questions are addressed in this paper. Firstly, how close do young adults feel to their parents in general? Secondly, does ongoing dependency strain the relationship, and, thirdly, are there long-term consequences associated with critical life events?

Theoretical Background

Emotional closeness of a relationship describes the emotional bond between people and represents one of three main dimensions of intergenerational solidarity (Bengtson and Roberts 1991; Szydlik 2000). Based on a general model of intergenerational solidarity, four groups of determinants can be identified, namely opportunity, need, family and cultural-contextual structures. While opportunities may promote cohesion, need structures indicate a need for social interaction. We argue that need situations such as financial dependence or crucial transitions can lead to stress between young adult children and their parents. Family structures include important factors such as parental separation, gender of children and parents as well as the child's partnership status, whereas cultural-contextual structures comprise migratory status, educational level and region.

Data and Methods

The empirical analyses draw on data from the Swiss TREE study. In order to employ a longitudinal perspective on life course events, we use information from all eight panel waves and include family background variables from PISA. Thus, only respondents who have participated in all these waves are selected. This yields a sample of 2,226 respondents, aged 26 years on average. Since the participants rated the relationship with their mothers and fathers separately, we reshaped the dataset into 4,306 child-parent dyads. The multivariate modelling of the categorical dependent variable (with answers ranging from "very close" to "not close at all") uses ordered probit regressions. For each of the four possible gender constellations (daughter-mother, son-mother, daughter-father, son-father) separate models are estimated in order to identify interactions.

Conclusions

The major challenges that young adults face today typically do not lead to cutting the cord to their family of origin. More than half of the young adults state that they have very close relationships with at least one parent, and only three per cent report that their relationships with their parents are not close at all. Daughters and mothers are more likely to maintain close intergenerational ties than sons and fathers, which supports the kinkeeper hypothesis. Furthermore, the relevance of other factors often depends on gender. Wealth and good health prove to be resources for intergenerational affection. Furthermore, the cultural context shows to be relevant, as in the case of migrants and Italian Switzerland.

Despite all the emphasis on close ties in troubled times, there are factors which can put a considerable amount of strain on intergenerational bonds. Unemployment of young adults, for instance, is associated with looser bonds, even in Switzerland with its favourable labour market. The pluralisation of family forms, as in the event of parents separating, results in looser relationships, especially with fathers. Educational mobility is another factor that can diminish intergenerational cohesion. The longitudinal analyses show that critical events earlier in life have a sustained impact. This applies to leaving home early, past unemployment and early separation of one's parents.

We can conclude that families in Switzerland have remarkable potential to withstand the aforementioned challenges. Nevertheless, the generations are also under considerable strain, which, in a long-term perspective, can eventually lead to a loosening of the bonds between adult children and their parents.

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Education and close relationship events in Switzerland – reversing trends?

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This presentation looks at the evolution of the educational gradient of close relationship events in Switzerland. Specifically, it investigates trends in the meaning of educational attainment for the entry into first marriages, first marriages' divorce, entry into first non-marital cohabitations (NMC) and dissolutions of first NMCs. Hypotheses are derived from theoretical considerations regarding the value-composition of educational groups (diffusion of norms, social mobility), overall changes in the normative context influencing union formation and separation and changes in the meaning of income for relationship events (changing income and independence effects). Generally, these hypotheses assume that educational gradients are becoming lower in absolute terms. *With respect to specific events educational gradients are expected to have had become less negative for the entry into marriage and less positive for divorce and entry into non-marital cohabitation.* For the seperation of NMCs, conflicting theoretical arguments impede the formulation of a hypothesis.
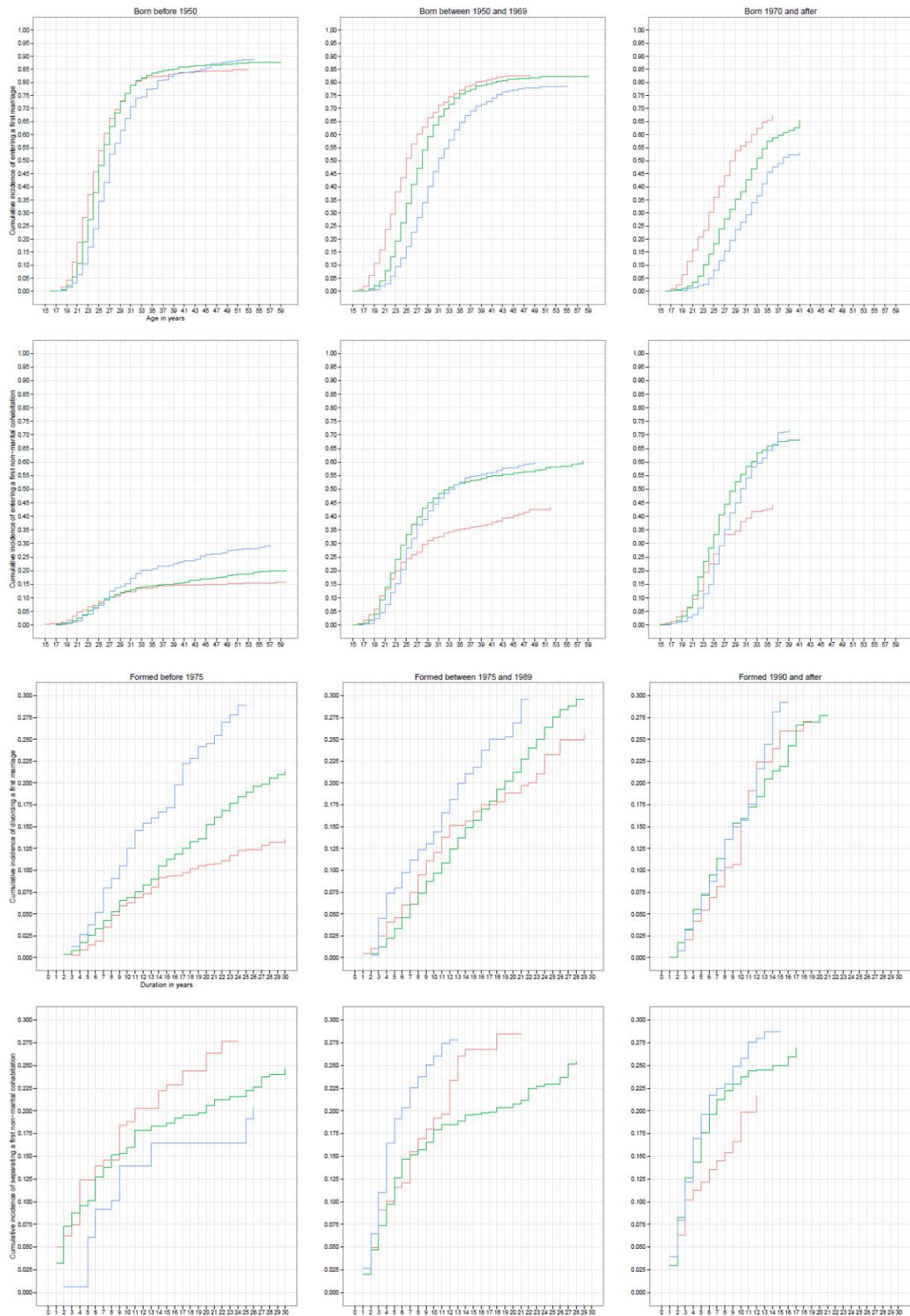
Analyses are performed using biographical data from the first and third sample of the Swiss Household Panel. In 2001, 2002 and 2013 11650 men and women living in 6235 housholds born between 1909 and 1998 (aged 15 and older at the time of the interview) responded to life calendar questionnaires. Dimensions surveyed allow for the reconstruction of family events, civil status histories, living arrangement and professional activity trajectories over the life courses until the interview. People reported 7609 first marriages of which 1212 got divorced or lawfully separated and 4753 entries into cohabitations that were non-marital in the year of formation and of which a total of 1102 got separated while people were still unmarried. Additional information is retrieved from the grid, household or wave data. Data are organized in episodes for descriptive time-to-event analyses and in person-year format for the estimation of discrete-time event history models.

Preliminary results confirm well-known demographic trends such as increased marriage-postponement and nonmarriage and increases in divorce and NMC for later cohorts. Also, they show decreasing stability of first NMCs. Within these trends however, no overall reduction of the educational gradient of relationship events can be observed.

Descriptive evidence (see figure) contradicts hypotheses for the entry into marriage. For the cohorts born before 1950 it is the highly educated that are the most likely ever to enter marriage, whereas for the middle cohorts (born between 1950 and 1969) it is the most educated that have the highest rates of nonmarriage at phases of life when the hazard of a first marriage tends towards 0. The differential between the highest and the lowest educated at age 35 was 5% (77% vs. 82%) for the oldest, 12% (65% vs. 77%) for the middle and 19% (42% vs. 61%) for the youngest cohorts. This increasing negative educational gradient of marriage-postponement is likely to also lead to an increased negative educational gradient of nonmarriage. Birth-cohort interaction effects with education in a multivariate model predicting marriage confirm this trend. With respect to the likeliness of entry into NMCs, the least educated most consistently lag behind the most educated for all cohorts. As a consequence of the vast increases within middle educational groups, however, the overall educational gradient of entry into NMCs nevertheless has decreased.

Trends in the educational gradient of divorce most clearly follow the hypothesized pattern: the reduction in the educational gradient had been the highest for divorce. For pre-1975-marriage cohorts, after 15 years of marriage about 17% of all marriages observed of the highly educated and 9% of the least educated had been divorced. This ratio decreased to 28%/24% for post-1989 cohorts. While the incidence ratio between the high and middle educational groups at 12 years of marriage had been around 2:1 for the oldest cohorts, these two groups show virtually no differences in divorce hazard in every year until the 12th year of marriage for the youngest cohorts. The educational gradient of NMC-stability seems to have seen an inversion. Stability used to be highest among the highest educated. For more recent cohorts, it is these groups that dissolute NMCs most quickly. Multivariate analyses confirm this exceptional pattern of the separation of NMC with an increasingly positive educational gradient.

Entry into NMCs and divorce most clearly follow the pattern of the evolution of "innovative and burdensome events". When hurdles are high, occurrence is highest within groups disposing of most cultural and economic resources. With decreasing hurdles, increasing commonness coincides with a catch-up by the lower socioeconomic groups. This can be interpreted as an outcome of the deinstitutionalization of marriage with less restriction to its dissolution or the choice of other forms of a common life with a partner in the first place. The results of trends in all four events suggest more general processes being at work as well. Additionally to the substitution of marriage by NMC (as part of the deinstitutionalization of marriage), there also seems to be a general trend to facilitated stay in or entry into singlehood as well if increasingly unstable NMCs (especially among the highest educated) are considered a good indicator for such processes.

Highest-education-specific (red= no vocational degree, green= vocational degree or maturity, blue= university degree (incl. applied sciences, teachers)) cumulative incidence of first marriage (first row), first non-marital cohabitation (second row), divorce of first marriage (third row) and separations of first non-marital cohabitations (fourth row) for three groups of birth and formation cohorts.

Remember the children, honey! Spouses' gender-role attitudes and working mothers' work-to-family conflict

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Introduction

The traditional male breadwinner-female homemaker model became less prevalent over the last decades, at least in western industrial societies. For example, female labor force participation has considerably increased during the past decades in many OECD countries, indicating a shift towards more gender equality, at least in the work domain. Nevertheless, this shift is less evident in parents because for parents, work and family responsibilities tend to remain highly gender segmented, with fathers assuming the role of the breadwinner and mothers assuming the role of the homemaker and mother (e.g., Craig & Mullan, 2010). This reflects, in part, persisting traditional gender-role attitudes and ideals about intensive mothering that assign the main caregiver responsibilities to mothers (Hays, 1996). By engaging in the workforce, working mothers violate these societal expectations, and accordingly may experience feelings of ambivalence and guilt (Arendell, 2000). Another negative outcome of this norm violation may be work-to-family conflict (WFC), i.e., an inter-role conflict that arises when pressures in the work role interfere with participation in the family role or detract from the quality of life experienced in the family role (Parasuraman & Greenhaus, 2002). WFC is associated with various negative outcomes in family and work (e.g., Amstad, Meier, Fasel, Elfering & Semmer, 2011). Understanding its antecedents is thus important. Accordingly, antecedents of WFC have been studied intensively and significant progress in understanding variations in the level of WFC that people experience has been made (Michel, Kotrba, Mitchelson, Clark, & Baltes, 2011).

Building on cognitive dissonance and ecological systems theory, we assumed that working mothers' WFC depends on their own as well as on their husbands' traditional gender-role attitudes. That is we assumed that working mothers who hold more traditional gender-role attitudes or who live with a husband who holds more traditional gender-role attitudes experience more WFC. Additionally, we assumed that the strength of these effects further depends on factors within the work and family domains, namely mothers' workload and age of the children.

Method

This study uses data from the Swiss Household Panel (SHP), an ongoing annual survey funded by the Swiss National Science Foundation and run by the Swiss Center of Expertise in the Social Sciences.

At the moment that this study was conducted, focal variables were available for measurement waves 2002 through 2009, i.e., for eight waves. We applied the following inclusion criteria to constitute our sample of heterosexual dual-earner parents: In all eight waves with available data (1) both spouses were employed; (2) mothers worked at least five hours per week in paid employment, assuring a minimum of investment in the work role; (3) spouses lived together with at least one dependent child (younger than 18 years). Furthermore, a particular wave was included if spouses lived together in the same household and both spouses participated in that particular wave. The application of these criteria led to a sample of 339 couples. An additional 28 couples had to be excluded due to missing values. Finally, another 89 couples had to be excluded because they participated in one wave only (fixed effects multilevel models can only be applied with at least two observations per unit).

The final sample consisted of 222 couples (444 participants). On average, couples participated in four and a half waves (M = 4.53, SD = 1.98), with 148 couples participating in up to five waves and 74 couples participating in six waves or more, resulting in a total of 1005 observations over all couples and waves. In 2002, the majority of couples were married (92.5 %). Mothers were on average 37.68 years (SD = 5.03) and their husbands 39.83 years old (SD = 5.69). Among mothers, 13.1% completed obligatory school, 56.1% completed professional training and 30.8% held a degree of higher education. Among husbands, 4.7% completed obligatory school, 46.7% completed professional training and 48.6% held a higher education degree. Most mothers (90.7%) worked part-time (5 to 36 hour per week), with an average of 20.37 hours per week (SD = 10.63). Most husbands (83.2%) worked full-time (37 hour per week or more) with an average of 43.85 hours per week (SD = 10.29). On household chores (e.g., washing, cooking, cleaning), mothers spent on average 20.86 hours (SD = 10.41) and husbands 6.41 hours per week (SD = 5.68). On average, couples had been together for 14.72 years (SD = 5.72), and had 2.07 children (SD = 0.84), with the youngest child being 5.58 years old (SD =3.66). We analysed data with fixed effects multilevel models.

Results

Concerning the impact of working mother's own gender-role attitudes on WFC, the following results emerged. Contrary to our expectation, working mothers' traditional gender-role attitudes were unrelated to their WFC. However, our general hypothesis that a larger incongruence between working mothers' traditional gender-role attitudes and their work role investment would predict more WFC received some support. More specifically, the expected interaction between working mothers' gender-role attitudes and their level of investment in the work role was significant. As expected, working mothers' traditional gender-role attitudes increased WFC for mothers who worked many hours per week (weekly working hours +1 SD; b = 0.079, p = .029). For mothers who worked few hours per week, traditional gender-role attitudes were unrelated to WFC (weekly working hours -1 SD; b = -0.009, p = .782). The hypothesized interactions between working mothers' gender-role attitudes and age of the youngest child and between working mothers' gender-role attitudes, time investment in the work role and age of the youngest child did not reach significance.

Concerning the crossover effects, i.e., the impact of husbands' gender-role attitudes on working mother's WFC, the following results emerged: As expected, fathers' traditional gender-role attitudes were positively related to working mothers' WFC: Working mothers with husbands holding more traditional gender-role attitudes experienced more WFC than working mothers with husbands holding less traditional gender-role attitudes. This effect was not further moderated by mothers' time investment in the work role and/or age of the youngest child (all hypothesized interactions ns).

In sum, results showed that working mothers experienced more WFC if they held more traditional gender-role attitudes but only if they had a high workload. Additionally, working mothers experienced more WFC if their husbands held more traditional gender-role attitudes, independently of mothers' workload or age of the children.

Workshop 1C – Health and quality of life I – room 2230

Estimating the healthy immigrant effect using nonparametric models

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It is acknowledged in the literature that immigrants are in better health upon arrival in the host country compared to natives but that this health advantage erodes over time. This hypothesis has been generally confirmed in existing studies by the use of parametric regression methods (e.g.Jasso et al. (2004); McDonald and Kennedy (2004); Newbold (2005); Lara et al.(2005); Antecol and Bedard (2006); Biddle et al.(2007)).

However, the parametric relationship between health and years since migration could be misspecified which, in turn, may lead to incorrect inferences about the health effect of the duration-of-residence variable. While testing for correctly specified parametric regression models is a first step in checking the consistency of parametric assumptions (e.g. through the RESET test; see Ramsey (1969); Wooldridge, (2010)), this paper proposes to rely on a nonparametric model to estimate the true effect of years since migration on specific health outcomes. In other words, the nonparametric model should provide better predictions than its parametric counterpart. Nonparametric econometric methods are very powerful because they do not require specifying functional forms for objects being estimated. Put differently, the advantage of nonparametric econometric methods is that they relax the parametric assumptions imposed on the data generating process and allow the data to determine an appropriate model (for extended reviews, see Li and Racine (2007); Racine (2008)). Thus, nonparametric estimates should serve as the benchmark for evaluating parametric models.

Using data of the \Swiss Household Panel" (SHP) and the Monitoring migrants health (GMM) dataset, we rely on a nonparametric estimator initially developed by Racine and Li (2004) to estimate the following model:
$DV_i = f(FB_i; Y\,SM_i; \text{controls}_i) + u_i$ where FB_i is a dummy variable indicating whether an individual i is foreign born, $Y\,SM_i$ is a continuous variable denoting how many years an immigrant has resided in the host country, u_i is the disturbance term, and f is unknown. In order to provide meaningful predictions of various health profiles, the dependent variable DV_i will ideally consist of a set of continuous variables such as the BMI index, the cholesterol rate and blood sugar level. Ordinal health indicators are also relevant, since we can re-scale them to take values ranging from 0 to 100 as continuous variables.

Preliminary results provide empirical support for the developed hypotheses.

Linkages between Parental Education, Utilization of Health Care Facilities and Health Status of Children: Evidence from India

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In this paper we explored the multiple channels by which parental education affects child health status. We developed two empirical models using data from the three rounds of National Family Health Survey in India. First, we developed an ordered-probit model to assess the impact of utilization of health care facilities and parental education on the health status of children after controlling other determining factors. The health status is defined in six categories which are ordered from very good to very bad health conditions on the basis of their survival status and body mass index (BMI). The results show that both utilization of these services and mother's education directly improve the health status of a child (Table I). But the significance of the interaction term between uneducated parents and utilisation of health services confirms that lack of education among parents dampens the direct impact of the utilization of available facilities on the health of a child. In other words, educated parents appear to be better placed at managing child care practises, which offers them an additional edge over uneducated parents who availed those facilities.

In the second part of our analysis, we developed a set of probit models to study the factors that influence the decision of a household to utilise two health facilities that are critical for maternal and child health, viz., institutional place of delivery and antenatal care. The key variables of interest here are parental education, availability of health care services and their interaction term, along with other control variables. The results confirm that additional provision of health care facilities leads to significant increase in utilization of both these facilities (Table II). The results also show that mere provision of more health care services alone will not help to reduce the mortality rates of children at the rate required to achieve acceptable levels of child health status. The model reveals the fact that, schooling affects health seeking behaviour among women which leads to greater utilization of institutional benefits in a region where the facilities are present. Here, father's education does not have any significant impact on the probability of utilization. Thus, female education must be enhanced to increase the utilization of antenatal care at a faster rate.

The two models put together bring out the multiple channels through which parental education, especially mother's education, affects the survival and health status of children. These can be summarised as follows: (a) parental education directly improves child health status; (b) amongst all those who utilised institutional health care facilities children of educated parents have a better health status; (c) educated mothers are more likely to utilise institutional health care whether or not such facilities are available within their village; and (d) educated parents are more likely to utilise health care services in a village where the health care centre is available, compared to uneducated parents.

Table I: The estimated models for health status of children using ordered probit model

Variable	Model
Intercept1	-0.691***
Intercept2	0.023
Intercept3	0.392***
Intercept4	0.483***
Intercept5	0.697***
Mother education in years (MEY)	0.006***
Availed both facilities (ABF)	0.297***
Availed either one facilities (AEF)	0.238***
Availed health facilities (AHF) × Parents not educated	-0.062***
ABF × Round3	-0.159***
AEF × Round3	-0.132***
Safe drinking water	0.032**
Sanitation in own house	0.024*
Wanted pregnancy	0.029**
Caesarean	-0.130***
Breastfeeding practise	0.483***
Pucca / semi-pucca house[1]	0.052***
Electricity	0.046***
SC	-0.047***
ST	-0.136***
Adult child ratio	0.030***
Relation to household head (parents)	0.081***
Household head (male)	-0.055***
Marital status (married)	0.131***
Age at first marriage	0.005***
Round 2005-06	0.416***
Round 1998-99	-0.056***
No. of Obs.	46931
Likelihood Ratio Test	2750.99***
Score Test	2739.69***
Wald Test	2687.29***

Source: Authors' estimates using NFHS data (Rounds 1, 2 & 3 pooled)

Notes: Data consists of children born between 4-5 years before each NFHS survey

Round3 is a dummy variable takes value 1 for NFHS 2005-06 and 0 otherwise.

***, ** and * represent 1%, 5% and 10% significant levels for a two-tail test.

"×" refers to interaction terms between two variables

[1] Pucca house refers to dwellings that are entirely built of stone, brick, cement, concrete or timber whereas for semi-pucca house, only floor and walls are made of these materials.

Table II: Estimated models for the utilization of health facilities using probit model

Variables	Utilization of health facilities	Antenatal care	Place of delivery (health centre)
Intercept	-1.742*** -0.421***	-0.632***	-1.458***
Public health facility (PUBHF)	0.179***	0.192***	0.132***
Private health facility (PRIHF)	0.172***	0.118***	0.258***
PRIHF X Round2	-0.110***	-0.064	-0.219***
Mother education in years (MEY)	0.075***	0.070***	0.077***
MEY × Round2	-0.001	0.002	-0.012**
Availability of health care (AHC) × MEY	0.013**	0.022***	0.005
Normalised asset index	0.014***	0.020***	0.008***
Normalised asset index × Round2	-0.010***	-0.018***	-0.005**
Radio/TV	0.097***	0.101***	0.083***
Electricity	0.318***	0.352***	0.234***
Motorised vehicle	0.091***	0.06	0.110***
Hindu	-0.167***	-0.125***	-0.218***
Muslim	-0.188***	-0.171***	-0.213***
SC	-0.089***	-0.011	-0.199***
ST	-0.228***	-0.146***	-0.372***
Adult child ratio	0.046***	0.033***	0.053***
Relation to household head (parents)	0.246***	0.240***	0.232***
Sex household head (male)	-0.366***	-0.303***	-0.402***
Age of household head	0.003***	0.003***	0.002**
Age of mother at first marriage	0.042***	0.033***	0.047***
Birth order	-0.086***	-0.076***	-0.096***
Round2	0.169***	0.142***	0.316***
Rural	-0.348***	-0.181***	-0.461***
No. of Obs.	21256	21256	21256
Concordant Ratio	79.5	79.1	84.5
Likelihood Ratio Test	9863.6***	6002.8***	7356.1***
Score Test	8079.6***	5020.3***	6942.6***
Wald Test	8263.8***	4327.6***	5532.8***

Source: Authors' estimates using NFHS data
(Rounds 1, 2 & 3 pooled)

Notes: Data consists of children born between 4-5 years before each NFHS survey

Round2 is a dummy variable takes value 1 for NFHS 1998-99 and 0 otherwise.

***, ** and * represent 1%, 5% and 10% significant levels for a two-tail test.
"X" refers to interaction terms between two variables

Decoupling the effects of wayfinding competence, trait-anxiety and subjective well-being from a GESIS German Sample

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Introduction

Wayfinding is important for achieving daily functional needs, such as going to the corner store for groceries, managing personal finance at the bank, or meeting up with friends at a new vegan restaurant in unfamiliar neighborhood. Lawton defined finding one's way in three-dimensional environments involves the tactical and strategic cognitive elements of navigation that guide one's movements (Lawton (2010, p. 328). Spatial cognition consists of sense direction, mental map and cardinal direction. It follows that the better sense of direction, the better the performance in way-finding and self-efficacy is developed and accumulate over successive trials.

The belief that one could accomplish daily spatial challenges is associated with satisfaction with major life priorities. This belief, also refer to as self-efficacy, were founded to be a mediator between physical activity and daily activities (McAuley et al., 2006, 2007). Self-efficacy, as the key factor in social cognitive theory (Bandura, 1986, 1997), reflects the individual's beliefs in his or her capabilities to successfully carry out courses of action. When there is a lack of belief, it leads to anxiety associated with overcoming navigational needs in the spatial environment. What is not well understood is how the dimensions of spatial cognition play differentiate role in subjective well-being. Further, there is little evidence on how the impact of wayfinding is mediated due to individual predisposition.

The present study proposes trait-anxiety may act as a mediator. Past research have reported a reliable association between self-efficacy and emotional stability. Cornell, Sorenson, and Mio (2003) found that perceived sense of direction is positively related to way-finding performance. The author tests the idea that the worse one feels about one's sense direction, leading to fear and anxiety towards way-finding tasks, the lesser one will perform in finding one's way. Self-efficacy may be temporal and contribute positively to subjective well-being. Anxiety-trait is enduring and is consistently manifested as one's predisposition. Anxiety-related tendency is associated with decline of subjective well-being.

For older person, navigating outside can be daunting as subtle age-related changes in spatial functioning can influence their ability to negotiate obstacles. For instance, evidence of aging comes from the decline in several domains of cognition which include processing speed, some aspects of attention, visuospatial skills, memory and executive functions but changes to knowledge based skills such as vocabulary and semantic memory are unaffected (Christensen et al., 2004; Park et al., 2003; Rabbitt et al., 2004; Salthouse, 2004). Some of these skills are embedded in complex spatial navigation. Way-finding performance is poor among individuals with dementia (Sheehan, Burton, & Mitchell, 2006), and has been linked to the hippocampus (Head & Isom, 2010), a brain region associated with structural and functional decline in aging populations (Driscoll et al., 2009; Raz et al., 2005).

It has been well-established that self-reported difficulty in lifting and picking up items on the ground in older persons are associated with physical activity participation (Paterson & Warburton, 2010) and that such limitations have implications for compromised quality of life (Rejeski & Mihalko, 2001; Stuifbergen, Blozis, Harrison, & Becker, 2006). Given that these limitations are risk factors for subsequent disability and institutionalization (Onder et al., 2005; Paterson, Govindasamy, Vidmar, Cunningham, & Koval, 2004) and for maintaining an independent lifestyle, understanding how spatial cognition affect quality of life represents an important public health endeavor. Base on these reasons, the present study will also examine the extent trait-anxiety differ across age cohorts.

Methods

The sample consists of the German speaking population who resides in German permanently. The total sample provided by GESIS was 7599 responses, which was based on respondents aged between 18 and 70 years. According to the GESIS, all participants are invited by mail and were offered a monetary incentive of 5 Euros. The data was made available to the author by the GESIS Panel Longitudinal Core Study located at GESIS Leibniz Institute for the Social Sciences in Mannheim, Germany. The entire data structure collected respondents' personality, personal values, political behavior and orientations, well-being, environmental attitudes and behavior, and IT usage.

Measures of competence in navigational and spatial orientation were represented by the German Questionnaire of Spatial Strategies (GQSS) (Fragebogen Raumliche Strategien, FRS, Munzer & Holscher, 2011). The GQSS comprises three dimensions with incremental validity on predictors of cognitive and spatial orientation (Munzer & Holscher, 2011).

The first self-reported measure refers to global belief in competence to orient oneself related to directional and route-based strategies (GQSS-1). It refers to knowledge of directions and knowledge of routes or sense of direction. The second and third refers to survey-based strategies, or indicators of mental map competence (GQSS-2). The third refers to cardinal directions such as the ability to point and distinguish between North, South, East and West (GQSS-3). The fourth measure includes the use of technology as navigation aid (GQSS-4).

The Positive and Negative Affect Schedule (PANAS) measures both at the positive and negative affects that is perceived generally in a dispositional level. PANAS refers to 20-item inventory for the assessment of dispositional affect. The German PANAS was adapted from the original English PANAS (Krohne, Egloff, Kohlmann & Tausch, 1996; Watson, Clark & Tellegen, 1988). The present study used only words related to the variable of concern (i.e., guilty, scared, irritable, ashamed, nervous, jittery, afraid). Hence, the abbreviation of PANAS-sub is used.

The measure of subjective well-being in this study aligns the guidelines by the Organisation for Economic Co-operation and Development (OCED, 2013), which included a) life evaluation measure and b) time-dependent affective measure. For the former, it refers to how one is happy and satisfied with their life (including past, present and future). It also probed into specific domains in terms of importance and satisfaction on specific life facets (e.g., family, work, leisure, friends, neighbors and financial situation). The latter (or affective measure) refers to eight affective time-dependent states (i.e., depress, exhausted, restless, happy, lonely, enjoyed life, sadness, sluggish).

Results & Discussions

The mediating effect was tested according to the procedures outlined by Baron and Kenny (1986). For the first measure of subjective well-being (i.e., life evaluation), the regression model indicated that trait-anxiety mediated the effect of sense of direction (GQSS-1) but not other dimensions of GQSS. It appears that trait-anxiety partially mediated the effect of sense of direction, as there was still some direct link between sense of direction and subjective well-being. The effect of way-finding on subjective well-being was partially explained by the mediator. The effect size of trait-anxiety on subjective well-being was -.17. This effect was small but statistically significant and it applies irrespective of demographic such as gender, age, nationality, marital status, household size, income and occupation. The findings support the suggestion that subjective well-being is influenced by anxiety arise from way-finding of the external environment. In particular, subjective well-being was poorer if one feels anxious about finding ways and it becomes worse if one lacks the necessary spatial cognition competence. For the second measure of subjective well-being (i.e., time-dependent affect), the regression model indicates that GQSS-1 & -2 met a full and partial mediation model respectively. The hypothesis from the first part of the study is confirmed.

The second part of the hypothesis assessed how age of respondents contributed to better understanding of the mediation model. Respondents were split into two groups: those 59 years of age or under; those 60 years or over. The above hierarchical model dictated the analysis and the results for those in the former remained unchanged – that is, GQSS-1 is partially mediated by trait-anxiety on subjective well-being. For those older respondents, the model revealed the effect of GQSS-1 is **fully** mediated via trait-anxiety (step-2 ß for GQSS-1 = .13, p < .01; step-3 ß for GQSS-1 = .10, p > .05). The results open up discussions on the role trait-anxiety for older persons play in the link between spatial cognition and subjective well-being.

Workshop 2A – Inequality & poverty II - room 2208

Demographics and Income Inequality in Switzerland – A Shift-Share Analysis

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Introduction

Over the last decades the demographic structure of Switzerland has changed in three ways that have been identified in other countries as possible influences on income inequality. Over the last decades the percentage of elderly, single households and people holding a tertiary education increased in Switzerland. In studies conducted in other countries, these three changes have been identified as some of the potential factors influencing income inequality.

Other explanations for the increase in inequality and poverty have been brought forward, namely rising unemployment, increasing dispersion of market returns, changes in the tax systems and changes in other socio-economic attributes (Biewen (2012), Lemieux (2006) or   (Burtless, 1999, 2009)). To our knowledge no study has been conducted that analyses the effect of such structural changes for Switzerland. A shift-share analysis is used to decompose inequality into a component arising from inter-temporal developments within the subgroups and inequality arising from outside the subgroups. By holding the subgroups constant, the effect of demographic changes can be observed (Faik (2011)).

Data and Method

A shift-share analysis is used to analyse the effect of these three changes on the inequality in Switzerland. The Theil index is an inequality measure that is decomposable, i.e. it is a weighted average of inequality within subgroups (intra-group component), plus inequality among those subgroups (inter-group component). For example, inequality within the total population is the average of the inequality within each age group, weighted by age group, plus the inequality among age groups.

Assuming the population is divided in $g = 1, ..., G$ subgroups. $w_{g,t}$ denotes the population share of subgroup g at time t, the decomposition of Theil index T in an intra-group and an inter-group component is:

$$T_t = \sum_{g=1}^{G} w_{g,t} \ \frac{\bar{I}_{g,t}}{\bar{I}_t} T_{g,t} + \sum_{g=1}^{G} w_{g,t} log\left(\frac{\bar{I}_{g,t}}{\bar{I}_t}\right),$$

where $T_{g,t}$ denotes for the Theil index of the subgroup g at time t and $\bar{I}_{g,t}$ stands for the average income of the subgroup g in t. Coefficients without the subscript g are the corresponding values of the whole population.
This subgroup decomposition allows calculating the Theil index in counterfactual situations, when the intra-group inequality is kept constant:

$$T_t = \sum_{g=1}^{G} w_{g,t-x} \ \frac{\bar{I}_{g,t}}{\bar{I}_t} T_{g,t} + \sum_{g=1}^{G} w_{g,t-x} log\left(\frac{\bar{I}_{g,t}}{\bar{I}_t}\right),$$

$t - x$ is the evaluated time interval.

Data from the Swiss Household Panel (SHP) are used for the analysis, covering the time periods from 2004 to 2012. To analyse the effects of an ageing society the data were divided in three groups: under 30 years old, 30 to 59 years old and 60 years and older. The data of the SHP matchs the data from the actual data published from the Swiss Federal Office (BfS) well: In the SHP, the average age rose from 39.2 years in 2004 to 40.6 in 2012. The BfS recorded an increase in average age from 39.1 years in 2004 to 40.9 years in 2012.

For the decomposition of the household structure the following categories are used: lone persons, couples without children, couples with child/children, lone parents, multifamily households, non-family households with multiple persons, other multi-person households. Due to the small share of the remaining categories, they were combined into the category "others". Over the time of the analysis the household structure in the SHP remained stable: The share of couples with children rose from 52.4% in 2004 to 53.4% in 2012 and the share of couples without children decreased from 26.5% in 2004 to 24% in 2012. The share of lone parents rose from 5.3% in 2004 to 6.4% in 2012. The household structure in the SHP only matches in part the actual household structure in the Swiss population. While the increase of single parents can be seen in both datasets, the number of couples with and without children differed.

For the subgroup decomposition in education the data were divided in 6 groups. People with an incomplete compulsory school education formed the first group. In the second group are the people who have finished the Compulsory or elementary vocational training. The third group contains all of the following education levels: general training school, domestic science course or 1 year school of commerce, apprenticeship (CFC, EFZ), and fulltime vocational school. In the fourth group are the people who have finished the maturity/bachelor and those who have a vocational high school. In the fifth group are the people who have finished vocational high school with master certificate or federal certificate, and those with a technical or vocational school. The sixth category contains people with a university or academic high school education (including HEP, PH, HES, FH). The share of the third category increased from 10.3% in 2004 to 15% in 2012 whereas the share of the first group decreased from 12.2% to 14.7% in 2012. This trend matches the officially published data, which report an increasing share of people attending tertiary schools.

Results

Our analysis suggests a decrease in inequality due to the ageing population. The Theil index decreased from 2004 to 2012 from 0.168 to 0.147. The counterfactual with constant population weights indicates that the Theil Index would not have decreased as much. With constant population shares, the Theil index in 2012 would be 0.148. The effect of an increasing education level is even stronger with constant population shares the Theil index in 2012 would be lower at 0.121. For household there is no observable difference. The Theil index is 0.145 in 2012.
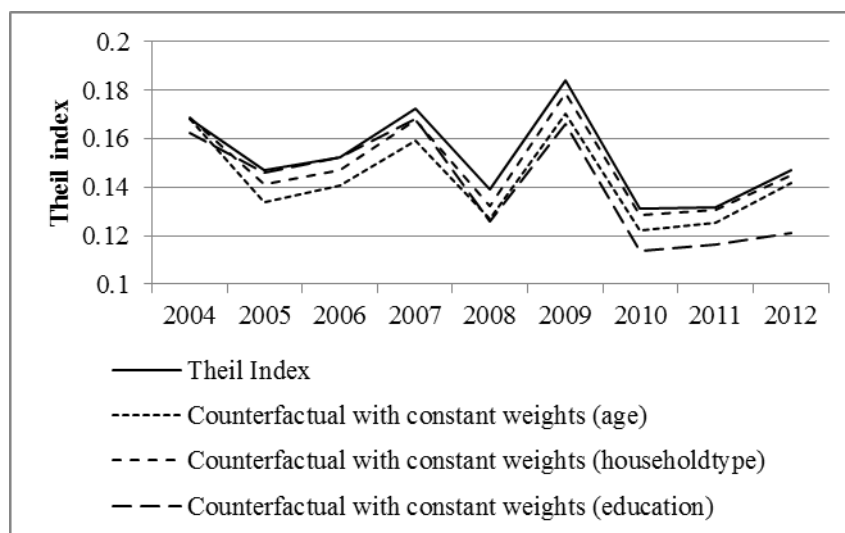

Figure 1: Result shift-share analysis

Conclusion

Our analysis suggested a slight decrease in income inequality due to an aging population, an increase due to higher levels of education, and no observable effect due to the rising number of smaller households. The inconclusive result regarding this third factor may have been due to the sample used. For future research we intend to include other factors in the analysis. The use of a shift-share analysis is a very simple approach and does not provide exact decompositions, for future research we intend to test our results with other methods and include other factors in the analysis.

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Material deprivation and its determinants in time: results for Switzerland since 1999

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Purpose

In the context of a larger research project funded by SNF on the evolution of socioeconomic inequality in Switzerland, we investigate material deprivation and its dynamic in Switzerland from 1999 to 2013 at a micro level. Material deprivation, as defined by Peter Townsend (1979, *Poverty in the United Kingdom: A Survey of Household Resources and Standard of living*. London: Penguin), focuses on inequality at the bottom of the welfare distribution and those situations of a household which can't match the common and socially approved

standard of living in a given society. When research on economic and social inequality mainly focuses on distribution of income (and wealth) in the population, material deprivation provides a more direct and more stable measure of the standard of living of households.

Our presentation focuses on the determinants of material deprivation of households in a longitudinal perspective. These determinants can be divided in four sets, namely household attributes and composition, ascriptive inequalities and demographic attributes (gender, ethnicity/nationality, age/generation), socioeconomic position and vertical inequality dimensions (income, educational level, employment status and trajectory, social class), and critical life event and life course transitions (job loss, separation, health condition, retirement).

Data

In order to analyze the effect of time on material deprivation, we use data from the Swiss Household Panel (SHP), conducted since 1999 with yearly interviews of two joint household panels (SHP I from 1999 with 5,074 households; SHP II from 2004 with 2,538 households). Actually, other datasets were not available for time series (Euromodule 1999/2000 for example) or only for a shorter period (SILC). In addition, SHP delivers information on the situation of every person in household, making possible the construction of variables gathering characteristics of all household members. SHP collects information on around 17 deprivation items, with some changes in the annual list over the 15 available waves (1999 to 2013). Ten unchanged items are available for longitudinal analysis.
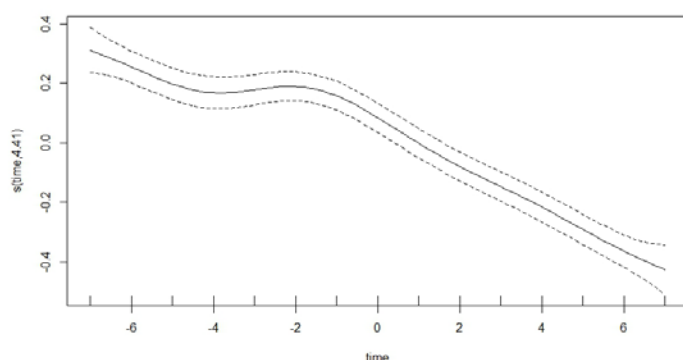
Method

Material deprivation is mostly analyzed at the individual level. However, as household members are mainly supposed to share their economic resources, material deprivation relates to the household level. Considering this level (household), we aim providing innovative findings on the determinants of material deprivation taking into account the complexity of the household situations. Household characteristics are constructed considering the situation of every household member (e.g. household composition, jobless household, etc.) or the situation of the head (defined as the main income provider member and its partner if any). In order to take into account the panel structure of SHP data, i.e. the repeated measure within households (time), we use multilevel models with household as random effect. We modellize the chance of being deprived considering a simple binary deprivation index where 1 = min. 1 item renounced for financial reason.

Results

As we can see in Figure 1, material deprivation declined from 1999 to 2013 (linear decrease of the log odds of deprivation over time), suggesting an improvement in the welfare of Swiss households during that period. Actually, the disruptive increase in 2004 (Time = -2) has to be related to the introduction of the refreshment sample SHP II: As households facing material deprivation in first wave are more incline to leave the panel, the refreshment reintroduces more deprived household in the survey (see Gazareth and Suter 2010, Privation et risque d'appauvrisssement en Suisse, 1999–2007, *Swiss Journal of Sociology*, 213–234). The real evolution of material deprivation has therefore to be controlled for this attrition effect but also for possible cohort effects related to decreasing chance of deprivation over life course (see below).

Figure 1 Effect of time on material deprivation, 1999–2013 (time 0 = 2006)

Four groups of determinants transpire from initial univariate models regarding the strength of the relation to material deprivation. First, two factors emerge as main determinants: financial balance (compared to households spending what they earn, households eating their assets or going into debts have more chance to be deprived, and those saving money less chance) and log of net equivalised household income (the more income, the less chance of deprivation).

Second determinants are: household type (compared to couples without dependent child, all other households are more likely to be deprived, especially single parents, single women and couples with 3 or more dependent children), education of the head person/couple (compared to household with head in medium education, chance of deprivation reduces when any in head achieved higher education, and increases when any in head did not achieve any degree above compulsory school), and housing status (owners have less chances to be deprived).

The third group brings together factors with less explicative relation to material deprivation: age of main earner (compared to the 40–49 group, youngers are more likely to be deprived and olders less likely; this result highlights a life course effect without reinforcement in chance of deprivation after retirement, diverging to what was found in other countries), nationalities in household (compared to households with Swiss citizens only, deprivation is more likely in households including any foreigner), number of dependent children in household (the more children, the more chance to be deprived), region (households living in Lake Geneva or North Switzerland are less likely to be deprived compared to those in central Switzerland), social origin of head (chance of deprivation is higher when head's mother or father only achieved compulsory school than when one reached middle education), work volume in head (compared to the traditional Swiss arrangement of full-time+part-time in couples, chance of deprivation increases when any in head is inactive or when both work part-time), joblessness in head (compared to employment for both at the time of interview as at previous year, being deprived is more likely when any in head is jobless or was jobless one year before), reproduction of financial precariousness (higher chance of deprivation when any in head faced financial problems at the age of 15), separation in head (higher chance of deprivation if any in head experimented a separation within the last twelve months), and health impediment in head (chance of deprivation increases when any in head faces health impediment). In the last group, the analyses reveals no relation between material deprivation and various life events faced by the head during the twelve months preceding the interview, like illness, deterioration in health status, more than five days out due to health condition, death of a close person.

Our best multivariate model for material deprivation brings together the factors of the first and second groups, as well as the age of the main earner. This last factor is interesting in a life course perspective but its contribution to the model is very low. Effect size of this model, measured through a Mc Faden indicator, is 9.90%.

The welfare cost of inequalities: reconciling growth and equity sides in public evaluation using subjective well-being data for France

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Background – The shortcomings of traditional scoreboards of economic performance for decision making

Usual scoreboards for assessing economic performance and social progress bring together a wide variety of indicators. Some capture dimensions of efficiency of economic policy such as, for the most common, GDP growth rate. Other capture dimensions of equity in economic and social trends, such as Gini inequality indices. Under certain economic circumstances, these indicators deliver a consistent diagnosis on the evolution of social welfare in the population. The recent economic crisis translated for instance into a sharp decrease of GDP in volume between 2007 and 2011 and a substantial rise in socio-economic inequalities (+1.3 points of at-risk of poverty rates between 2008 and 2011). However in many instances, diagnoses made from macro- and from micro-indicators are not consistent. Empirical and theoretical arguments can explain this fact. Recent works from Atkinson, Piketty and Saez on top incomes evolution over the long run in a wide range of countries clearly show that growth does not always translate into long term and sustainable reduction of inequality levels. On the other hand, redistributive policies induce economic distorsions, on labor supply/demand behaviors or investment behaviors, which can have a detrimental effect on long term growth. In absence of unambiguous diagnosis on the benefits of specific policy measures on social welfare, traditional scoreboards of indicators fall short of being fully convincing or at least transparent and well-founded policy decision metrics.

In this context, (how) can we build a social welfare criterium that would be more valuable for decision making ? We propose one which synthetizes growth and equity dimensions of performance, which is more transparent on the tradeoff between these two competitive goals of economic policy, and better founded, in the sense that it is rooted in the aggregation of invidual preferences.

An utilitarian approach to synthetizing growth and equity considerations in policy decision

Departing from the utilitarianism of (benthamian) welfare economics, "new welfare economics" have long relied on Pareto-optimality to compare social situations. Under this approach, a policy is Pareto-improving if it has no detrimental effect on any agent of the economy and increase the welfare of at least one agent. This criterium has several well know problems. Pareto-optimality is compatible with high and outraging levels of inequality. It crucially lacks operationality, because in real-world, most economic and social measures do induce transfers between agents or groups of agents. In this sense, Pareto-optimality is a very conservative way to assess economic and social performance. Its success comes from the very weak assumptions it requires on individual preferences: while Benthamian utilitarianism required interpersonally comparable individual utility functions, Pareto-optimality framework only requires that individuals be able to order different situations. However, when such utility comparisons are excluded, it becomes impossible to draw conclusions on social welfare from the aggregation of individual preferences, as Arrow (1951) stated in his famous General Possibiliy Theorem. To overcome this impossibility of social choice, interpersonal comparability of gains and loss of individual utilities must be allowed (Sen (1998), Layard and Walters (1994)). Rather fortunately, a large literature on psychological, behavioral (Kahneman (1999)) and happiness economics (Layard (2005)) provide convincing empirical results on the possibility to measure directly individual utility functions and on their interpersonal comparability, by means of subjective life satisfaction questions in sample surveys.

Taking advantage of this new literature, we allow the interpersonal comparability of personal utility functions of income. Building on the works of Harsanyi (1953, 1955) on preference aggregation, we aggregate growth and distributional considerations into Atkinson's (1970) utilitarian based Equally-Distributed Equivalent Income (EDEI). Such criterion is defined as the level of income that, if distributed identically to each individual in the society, would leave social welfare, measured as the sum of individual utility of income, unchanged. It increases with total income growth (efficiency side) and decreases when its distribution across people becomes more unequal (equity side). The precise mix of both objectives in the EDEI depends on the curvature of the personal utility function of income. It also represents the degree of inequality aversion of the society as a whole.

Data and empirical strategy

We use subjective well-being data coming from the French counterpart of the European Union Statistics on Income and Living Conditions survey (EU-SILC) to estimate this fundamental aversion to inequality parameter. Since 2010, FR-SILC includes a small set of subjective questions on satisfaction with regard to different dimension of life and well-being. The life satisfaction question goes as follow: "On a scale from 0 (not satisfied at all) to 10 (fully satisfied), please indicate how satisfied you are with your actual life." The literature on happiness shows that the construct behind this question and the answers from interviewee are very closely related to the concept of decision utility, as commonly used by economists. In addition, results show that the measure is empirically founded. It is relatively well stable over time in absence of major events affecting life circumstances. It is well correlated with other measures of well-being based on physiological and neurological criteria. Finally, and most importantly for our framework, some works show that individual answers to life satisfaction questions are not purely idiosyncratic judgements over well-being but do include a common collective judgement basis: the ranking from an individual is highly correlated to the judgement of friends and family members on the satisfaction of this individual.

We rely on 2010 and 2011 waves of the French panel FR-SILC for the estimation. Cross-sections sample size for life satisfaction questions is around13,000 individuals. About 10,600 individuals are followed across both waves and allow for longitudinal analyses. Household income is measured by means of a linking of sample data with administrative registers on taxable income and social benefits.

The estimation strategy consists in identifying the relationship between utility and income, and in particular its curvature, through the estimation of the relationship between satisfaction and income. Following Layard, Mayraz and Nickell (2008), we model satisfaction as a very general function of indirect utility of income and other individual characteristics, with utility being a CRRA function of income as in Atkinson (1970). We decompose the relationship between satisfaction and utility in two different steps. A first evaluation step: the interviewee must build a judgement on his utility when the question comes. We assume that this evaluation function is affine, homogeneous across individual up to an additive individual constant effect and stable over time up to an additive time effect. In the second step, the individual must rank its evaluation over the 0-10 proposed scale. Here we allow the quantification function to be non-linear and we estimate a multinomial logit model of the discrete satisfaction variable. The model is estimated through maximum likelihood method following the efficient procedure developed in Baetschmann, Stud and Winkelmann (2011).

Results

Our central specification with individual effects leads to a point estimate of aversion to risk/inequality parameter of 1.74, which is significantly higher that what can be found in previous literature. This translates into a monetary equivalent of the welfare cost of income inequality in France around 19%. Provided an egalitarianistic policy would have no detrimental effect on aggregate income, social welfare would be 19% higher with equal incomes for all. Our estimation results are in line with Layard et al. (2008) when we rely on a strictly comparable procedure, in particular when we exclude "outliers", in the sense of observations that accounts for aversion parameter different from 1. They also lie in between other estimates of aversion to risk (Arrondel and Masson (2005)) using subjective lotteries or estimates of social welfare weights (Bourguignon and Spadaro (2012)) using inverted optimal tax function to reveal social preferences.

Workshop 2B – Ethnic minorities - room 2224

The liberalizing effect of education? A longitudinal analysis of immigration attitudes and Euroscepticism in Switzerland

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Introduction

Compared to those with lower educational attainment, individuals with higher educational attainment are known to express a stronger willingness to open the nation's symbolic boundaries, such as through supporting immigration (Hainmuelle & Hiscox, 2007) or adhering to supranational entities (Hakhverdian, Van Elsas, Van der Brug, & Kuhn, 2013). While the effect of education is undisputed, the underlying mechanisms—value-based vs. economic—remain debated.

On the one hand, the educational systems in most Western countries transmit values such as freedom, equality of treatment, and tolerance for non-conformity. Exposure to such values is then assumed to impact more concrete social and political attitudes, such as those toward immigrants or the European Union. Besides changing values, education also improves analytical skills, which help individuals to avoid oversimplifications when reflecting upon complex social and political topics. On the other hand, individuals with higher levels of education—who are, as a consequence, generally higher skilled too—are less likely to compete with immigrants for the same goods (e.g., jobs, benefits). Consequently, higher educated individuals feel less threatened by immigration, and are less likely to oppose immigrants. In the same vein, in the wealthiest countries integration to Europe benefits foremost to those with a high income.

Despite diverging theoretical grounds, both explanations share the idea that it is getting an education that leads individuals to develop more open attitudes (this is the so-called "libarelizing" effect of education). Most empirical work on the topic, however, relies exclusively on cross-sectional analyses; The examination of longitudinal data is thus necessary to test for the impact of acquiring an education. The only study that examined, to our knowlege, the impact of educational track over time found that adolescents in higher levels of education had more positive initial attitudes towards immigrants, and the gap with lower educated individuals widened as they grew older (Hooghe, Meeusen, & Quintelier, 2013). However, both the time frame (16-21 years old) and the topic (attitudes toward immigrants) of this study were limited. To offer a broader picture, we used the data from the Swiss Household Panel to examine in two studies the cross-sectional and longitudinal impact of Swiss young adults' educational attainment on attitudes toward immigrants (Lancee & Sarrasin, 2015) and the European Union (manuscript in preparation).

Method

We used data from the Swiss Househould Panel (1999-2011). Because we examined the impact of getting an edudaction among the national majority, we restricted our analysis to Swiss citizens aged 13 to 30. Our final samples contained 4'339 and 4'698 respondents respectively.

We measured individuals' opinion towards i) equal opportunities between citizens and immigrants ii) joining the Europe Union. In both cases, the answering categories were: 1 = equality of opportunities/joining the EU, 2 = neither, and 3 = better opportunities for Swiss citizens/staying outside the EU. For the analyses, we constructed dichotomous variables (1 = better opportunities for Swiss citizens/staying outside the EU vs. 0 = otherwise).

While attitudes toward immigrants remain quite stable over time (i.e., in average around 30% of the sample declared that Swiss citizens should be favoured over immigrants), the willingness to stay outside EU rose sharply over the years (from 36% in 1999 to 85% in 2011).

Respondents asked to indicate, in a 17-category scheme, the highest level of education they have achieved. Based on Bergman et al. (2009), we computed six main educational levels: Primary education, secondary without Matura, secondary vocational, secondary with Matura, tertiary vocational, and university. In addition, we used a dichotomous variable to tap employement status (1 = to be in full or part-time employment, 0 = not to be in employment). Finally, we controlled for the following variables: age, gender, having left the parental home, life satisfaction, satisfaction with household income and political interest (note that in the case of attitudes toward immigrants, we also controlled for the percentage of immigrants and the unemployment at the canton level).

Results

To obtain a precise picture of the impact of acquiring education, we compared between-person differences (as is done in cross-sectional analyses) to within-person differences (as is done in longitudinal analyses). To this end, we used, in a first step, hybrid models (Allison, 2009). Then, in a second step, we focused on specific transitions (for instance, from being in education to being in the labour market).

Replicating previous research, results of the hybrid models showed strong differences between individuals differing in educational attainment: Those with higher educational attainment (e.g., with a university degree) expressed more positive attitudes toward immigrants and the EU (for details as to the prediction of attitudes toward immigrants, see Lancee & Sarrasin, 2015). In addition, not being satisfied with the household finances and being employed were related to more negative attitudes toward immigrants and toward joining the EU. In contrast, we found that virtually all variation in education disappeared when only within-individual variance was modelled. In this part of the model, only leaving the parental home and being increasingly insatisfied with the household finances had a significant impact on attitudes toward immigrants, while we found no significant impact at all in the case of attitudes toward the EU.

Additional analyses were performed to observe whether attitudes changes after specific life-course transitions (e.g., from one educational level to another; when entering the labour market). The only within-individual changes were observed among the highly educated, who became less positive toward immigration during the transition from education to full time employment. A similar but less strong impact was observed for the willingness to joing the EU during the transition from university to entering the labour market.

Discussion

Overall, our results suggest that differences between educational groups exist prior to education, and are not due to the alleged liberalizing effect of education. Thus, at least part of the education effect reported in cross-sectional analyses is owing to self-selection. However, young Swiss citizens were found to become more negative towards immigrants when they entered the labour market. This is in line with ethnic competition theory: individuals become more negative towards immigrants when they face or perceive competition for goods (e.g., jobs, housing). Yet, this effect was found here predominantly for the higher educated. An explanation might be that individuals with a secondary vocational education are more experienced with the actual and/or perceived competition in the labour market, which they entered when they began their apprenticeship. It is therefore likely that vocational students do not suddenly face a new reality and experience an unexpected increase of competition, as the tertiary vocational or university students may do. Finally, entering the labour market might have had a less strong impact on attitudes toward the EU because euroscepticism has generally sharply risen over the years in Switzerland.

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Keeping or changing mother tongue among Rhaeto-Romance speakers in Switzerland
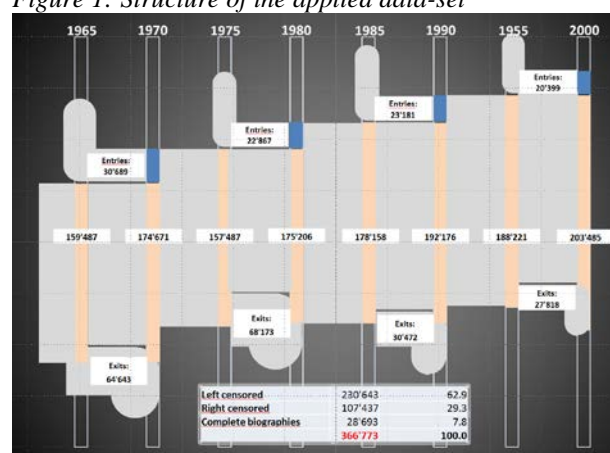
Beat Fux University of Salzburg
Benjamin Gröschl, University of Salzburg
Ruth Abramowski, University of Salzburg

From a cross-sectional perspective, the proportion of the Rhaeto-Romance language speaking people in the canton Grisons continuously decreased from approximately 43% in 1860 to about 19% in 2000. The erosion of the Romance-speaking community was significantly less pronounced between 1910 and 1941 and more accentuated in the 1950s and 1960s.

The Swiss National Cohort (SNC), an individual-based linkage of all Swiss census records during the period 1960 to 2000. Regarding a number of variables, the individual life histories are also linked with register data. Out of the SNC, we selected the universe of Romance-speaking people in Switzerland and - since the huge majority of this language group has its roots in Grisons – the non-Romance speaking population in this canton as control group. This unique data-source allows for the first time to analyze the "erosion" of a linguistic minority from a longitudinal perspective. Figure 1 provides basic information on the structure of the applied data-set.

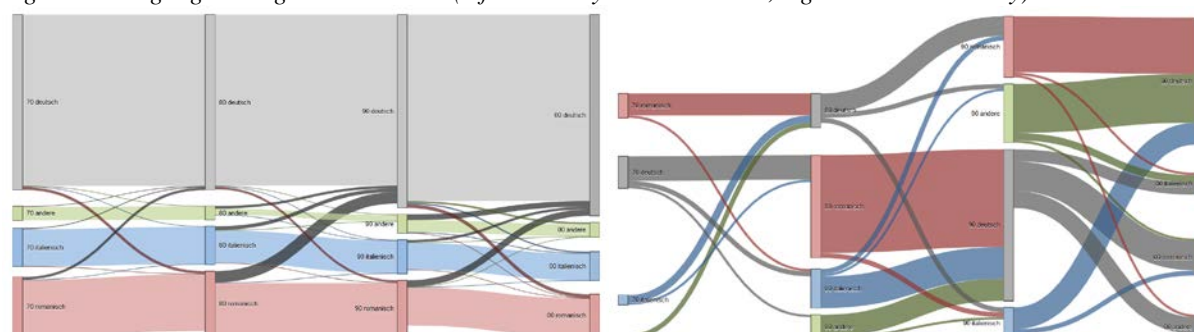*Figure 1: Structure of the applied data-set*

In our presentation, we document individual language histories by discussing the impact of contextual factors like labor market opportunities or language policies (schooling, media) as well as individual determinants (e.g. education, family formation, work histories) for entering into or leaving the Rhaeto-Romance language community.

Our findings partly contradict a simple "dying out"-hypothesis. One the one hand, we observe flows in both directions, therefore also people who enter the Romance community, often dependent on the educational and work biographies. On the other hand there exist indicators which let assume that an increasing part of the populations is using several languages parallel.
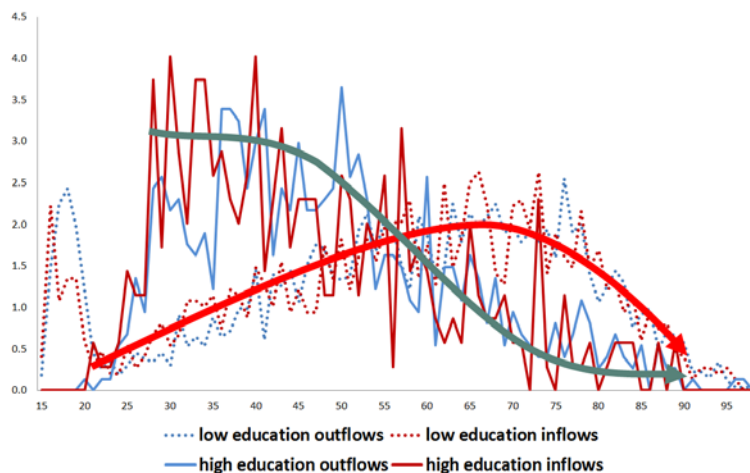
Figure 2 is providing an overall picture of the language change according to our data. On the left side, one clearly can see the drift in the proportions of the language group. Particularly during the decade 1970 to 1980, there is a growth of the German community, while the Romance language group decreased. The right side of the figure indicates only the aggregated flows. One can observe that there exists a marked language migration in both directions as well as that proportion of returns to the Romance community increased towards the end of the millennium. According to our hypotheses, the frequent losses in the 1990s depend predominantly on social structural and economic factors (e.g. expansion of the education, postponed structural modernization in the autochthone Rhaeto-Romance region). In contrast to this pronounced language drain, the proactive incentives in favor of the Romance community (e.g. standard language, schooling, TV, radio and media in Rhaeto-Romance language) reduced the outflows as well as the inflows began to increase.

Figure 2: Language change 1960 to 2000 (left side: stayers and movers; right side movers only)
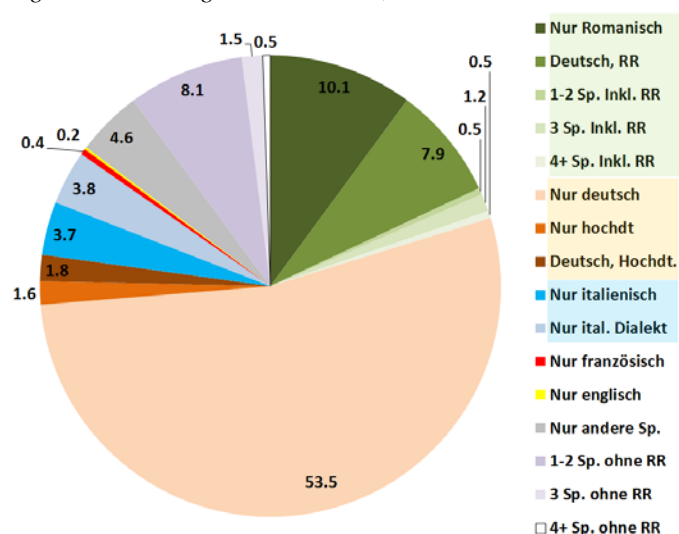
When broken down the language migration by age and educational status (see Figure 3), one can observe significant differences in the dynamics between low and high educated people. Those with a lower educational status change their language less frequently. They also change their mother tongue later in life. In striking contrast, well-educated individuals migrate between languages twice as much and these changes are clearly linked to education and the professional career, therefore most frequently before age 40.

Figure 3: Aggregated In- and outflows by age and education

A further hypotheses assumes that language change can be characterized as a process in direction of multilinguism rather than a simple erosion of a traditional language. The censuses 1990 and 2000 allow to analyse this question in a more detailed manner, since there was asked not only for the main language but also for primary and secondary used languages and distinct contexts.

Figure 4: Multilinguism in Grisons, 2000

The figure firstly shows at first glance a flourishing plurality in the use of languages. But a closer view also indicates that bilingualism is proportionally less frequent among the dominant language (German). However, utmost every second Rhaeto-Romance or Italian speaking individual is able to communicate at least in two languages.

Our preliminary conclusion: There is no doubt that Rhaeto-Romance is under pressure and tends to erode. Nevertheless a longitudinal view on language change also can show reverse trends and in particular a trend towards bi- and multi-lingualisation.

Determinants of recent emigration flows from Switzerland

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Introduction

Migration research has so far mainly focused on immigration and the social and economic integration of foreigners. Studies on emigration are rare and many questions remain unanswered. And yet it is by far not a marginal phenomenon in Switzerland, as today more than 100,000 residents leave the country each year. The group of emigrants is diverse and includes not only Swiss-born but also foreign-born residents that either return to their country of birth or move to a different country, after having spent some years in Switzerland. Applying a quantitative approach, this communication is oriented on the description of recent emigration flows from Switzerland as well as on the identification of individual factors intervening in the emigration process.

Explaining emigration

The life course and the age of the potential migrants are two critical markers that influence the timing and the factors of emigration (Rogers and Castro 1981). Moreover, the latter vary according to gender, namely regarding labor migration, where women are rather willing to follow their partner than the other way around (Vandenbrande et al. 2006).

Several studies also underline the selectivity in the emigration process: whereas marriage or having solarized children decreases the probability to emigrate, being highly educated, young, single and childless increases it (Engler et al. 2015; Pecoraro 2012; OECD 2008). A high human capital allows for a better access to information as well as to higher income levels (Zhao et al. 2000) and therefore to migration opportunities.

Finally, citizenship and the migratory background are two further characteristics explaining emigration. Pecoraro (2012) found for instance that the emigration strategies vary as a function of foreign citizenship. The migrant's embeddedness in the host country, often approximated by the length of stay or labor market integration, impacts negatively on return migration (Pungas et al. 2012; Constant and Massey 2003). The return migration selection model suggested by Borjas and Bratsberg (1996) states that migrants leave the host country either when their migratory trajectory does not reach the anticipated goals (failure in the migrant's initial plans) or when they achieve their targeted objectives. For natives however, the decision is more difficult to take as the country of destination and its opportunities is not always known in advance.

Data and methods

The analyses presented in this communication rely on a newly created longitudinal database[1], which follows inter alia residents and emigrants from Switzerland between 2010 and 2012. It combines general socio-demographic characteristics (including household composition and migratory related attributes) from the exhaustive Swiss population register (STATPOP) with socio-professional information from the Structural Survey (RS) for a subsample of the total resident population (Steiner and Wanner forthcoming). In this analysis, Swiss born and foreign born residents aged 18 years or over are considered, in order to only include individuals responsible for their emigration decision.

Emigration rates and logistic regression models are calculated on the basis of the linked RS/STATPOP data (RS data 2010/2011and if it applies STATPOP emigration movements 2011/2012). We therefore consider 559,200 individuals that were interviewed in the RS 2010 and 2011, among which 5993 emigrated from Switzerland before the end of the year 2012. Compared to the exhaustive statistics of emigrants (STATPOP), this latter number seems to slightly underestimate emigration flows; supposedly because more mobile individuals were not reached or did not take part in the survey. The representativeness of the surveyed persons is however assumed, because for different characteristics such as age, gender or citizenship, the distribution of the sample is almost the same as the one in the STATPOP statistic.

Results

Swiss-born residents (0.26%, N=1654) present lower emigration rates than the foreign-born (1.83%, N=4339). Moreover, emigration rates of naturalized individuals (0.6%, N=651) are lower than for foreign citizens (2.1%, N=3741). Regarding the latter, the risk to be internationally mobile is on the one hand significantly lower for citizens from European countries that are not part of the EU/EFTA compared to all other nationalities. On the other hand, citizens from OECD countries other than Switzerland's neighboring countries show the highest propensity to emigrate. These results underline the different migratory strategies according to citizenship as well as the selectivity in the access to international mobility.

In general, the results of the logistic regression underline the importance of the embeddedness in the host country for Swiss-born as well as foreign-born residents. The probability to leave Switzerland decreases with an increasing duration of residence, with labor market integration (part time or full time), with real estate possession in the host country or when living with a partner or/and a child. Detaining a tertiary level of education by contrast, fosters emigration, confirming their better access to international mobility.

Differing results are observed between Swiss-born and foreign-born individuals regarding age and gender. While Swiss-born residents show a clear gradient for age – the higher the age, the lower is the probability to emigrate – foreign-born individuals present the highest risk at 55-64 years, indicating return migration before retirement. Finally, whereas foreign-born women show a significantly smaller risk to leave Switzerland compared to men, no gender differentials are observed among Swiss-born residents.

Conclusions

Our results are in line with the integration theories as well as the selectivity of the emigration process. In general, the theory of the new economy of labor migration (Haug 2008; Faist 1997; Massey et al. 1993; Stark 1991), which also takes family aspects and networks into account, therefore seems most suited to explain emigration patterns and determinants of Swiss-born and foreign-born residents.

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[1]The database was built in the framework of a wider project on migration (NCCR – on the move); applying deterministic record linkages based on the social security numbers (AHV/AVS).

More than This: The Occupational Share of Foreigners and Attitudes to Equal Opportunities

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Introduction

In most Western democracies, immigrant populations have grown rapidly. Some individuals have followed these developments with unease and have negative attitudes towards immigrants and foreign citizens. A naive economic model often serves as the basis, assuming that opposition towards immigrants and foreigners is a direct consequence of unwanted competition in the labour market. However, much of the literature does not pay adequate attention to the segmented nature of the labour market. The reduction of the labour market into low- and high-skilled workers in many existing studies renders these unable to make valid inferences about actual labour force competition and its impact on attitudes towards immigrants and foreigners.

Data

The empirical analysis in this study is based on data from the Swiss Household Panel (SHP) survey 2004(-2009). The dependent variable, derived from the question 'Are you in favour of Switzerland offering foreigners the same opportunities as those offered to Swiss citizens, or in favour of Switzerland offering Swiss citizens better opportunities?' with three possible outcomes (1 = in favour of better opportunities for Swiss citizens, 2 = neither of them, 3 = in favour of equal opportunities for foreigners), denotes the propensity to exhibit positive attitudes towards foreigners. The SHP data are complemented by aggregate/contextual data on foreign workers derived from the Swiss Labour Force Survey (SLFS). Since 2003, it includes an additional sample of 15,000 immigrant individuals, and is then capable of providing reliable information on the occupational share of immigrants.

Methods and Expectations

As is common in the literature, we draw on competitive threat theory. Attitudes towards foreigners are regarded as a reaction to unwanted competition in the labour market where skills of foreign and native workers are substitutable. The intuition behind competitive threat in our case is that a higher concentration of foreign workers potentially lowers wages in the sector an individual works in, and could increase the risk of unemployment. This is an economic threat, and the assumption is that this threat is expressed in terms of negative attitudes.

Our modelling strategy is built on Dustmann and Preston (2001, EJ) who studied the relationship between attitudes and local (geographical) concentration of ethnic minorities. We modify the baseline model proposed by Dustmann and Preston to capture the effects of the concentration of foreigners within occupational categories:

$$y_i = \alpha\, R_{j(i)} + \tilde{\alpha}\, \tilde{R}_{j(i)}) + \text{control variables}_i\, \boldsymbol{\beta} + \text{other controls}_i\, \boldsymbol{\delta} + \text{error}_i.$$

where j(i) denotes the occupation j in which individual i has chosen to work. R refers to the occupational composition of foreigners. The corresponding regression coefficient is α. A derived measure is $\tilde{R}$: the occupational share of foreigners holding a B-permit relative to all foreigners, with a corresponding regression coefficient of $\tilde{\alpha}$. Control variables include sex, age, age squared and education level. Other controls are canton and sample dummies. The above equation is estimated using the ordered probit method.

Hypothesis 1a:

If attitudes towards foreigners are a reaction to competition in the labour market, it is necessary to take into consideration the segmented nature of the labour market. We expect that a larger share of foreigners in an occupation is associated with more negative attitudes towards foreigners, formally, $\alpha < 0$.

Hypothesis 1b:

Even with a focus on labour market segments, not all foreign workers constitute unwanted competition. In segments where immigrant and native skills are complementary, foreign workers do not constitute competitors. This is particularly relevant in sectors with labour shortage, in which case employers frequently resort to immigrant workers. We assume that the relative share of recently arrived foreigners working in a sector is indicative of a sector with labour shortages. In this situation, a larger share of foreign workers with a B-permit (relative to all foreigners) is beneficial for the native workers, and attitudes are expected to be positive. Formally, we expect $\tilde{\alpha} > 0$.

Hypothesis 2:

Demographic composition of a job can serve as a proxy for (uncontrolled) job skills when there is sorting on labour quality (Hirsch and Macpherson, 2004, JOLE). The quality sorting hypothesis is a related explanation for the attitude/ethnic composition relationship. If foreigners but not Swiss workers are crowded into low-paying occupations because of past or present discriminatory barriers due to the Swiss immigration policy, then the ethnic composition of a job becomes an index of labour quality for Swiss workers. That is, relatively **less productive** Swiss workers accept lower-paying jobs in occupations predominantly held by foreigners and that may explain why these Swiss workers appear to have **less positive attitudes**.

Results

Estimation results, presented in the first table below, indicate that working in occupations with a higher share of foreigners is associated with more negative attitudes. This finding is in line with the labour market competition hypothesis: Swiss workers who are more exposed to foreigners' competition in their occupation are more likely to express negative sentiments towards foreigners. On the other hand, in occupations with a higher share of recent foreign workers (relative to all foreigners), attitudes towards foreigners are relatively more positive. This finding confirms the complementary nature of recent labour migration to Switzerland in the sense that the influx of new workers can be considered as a way to overcome labour shortages. Then, following standard controls, our first set of results is consistent with labour competition theory: where individuals are exposed to increased competition with foreign workers, their attitudes are relatively more negative; where there are labour shortages and native workers benefit from immigrant workers, attitudes are relatively more positive.

When indicators of job skills/indicators are added to the model, the negative effect of foreigners' occupational concentration on positive attitudes is no more significant. In other words, the quality sorting explanation is supported, i.e. less positive attitudes are caused by a sorting of Swiss workers in low-quality jobs. Note that the relative concentration of recent foreigners by occupation has still a positive effect on positive attitudes. That is, the quality sorting explanation is partially supported, suggesting that the immigrant–native complementarity explanation also plays some role. It should be noted that all results are robust to potential self-selection of Swiss citizens with negative attitudes into occupations with few foreigners.

Ordered Probit estimates: Main model (without job indicators)

	Coefficient	Marginal Effects y = 1	y = 2	y = 3
R: *Share of foreigners*	-1.016**	0.351**	0.037**	-0.388**
	(0.192)	(0.066)	(0.008)	(0.073)
R̃: *Relative share of foreigners*	0.913**	-0.316**	-0.034**	0.349**
with a B-permit	(0.154)	(0.053)	(0.006)	(0.059)
Control variables	yes			
Canton and sample dummies	yes			
Observations	4,008			
Percentage correctly predicted	63.7%			

Source: *Swiss Household Panel 2004, data are weighted.*
Notes: *Linearized standard errors in parentheses, ** p<0.05, * p<0.10.*
y: *positive attitudes towards equal opportunity for foreigners.*

Additional results: Sorting on occupational quality?

	Without job indicator Coeff	ME for y = 3	With job indicators Coeff	ME for y = 3
R: *Share of foreigners*	-1.016**	-0.388**	-0.533	-0.203
	(0.192)	(0.073)	(0.356)	(0.136)
R̃: *Relative share of foreigners*	0.913**	0.349**	0.353*	0.135*
with a B-permit	(0.154)	(0.059)	(0.192)	(0.073)
Control variables	yes		yes	
Canton and sample dummies	yes		yes	
Job indicators	no		yes	
Observations	4,008		4,008	
Percentage correctly predicted	63.7%		63.8%	

Source: *Swiss Household Panel 2004, data are weighted.*
Notes: *Linearized standard errors in parentheses, ** p<0.05, * p<0.10.*
Job indicators = *occupational means, working conditions and 1-digit ISCO code.*
Occupational means for the control variables calculated at the 4-digit ISCO level.

First and Second Child Among Immigrants and Their Descendants in Switzerland: Results and difficulties to find results in Switzerland

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Abstract

Many studies analyse the difference in life trajectories of immigrants, trying to understand their level of integration in the host country. The children of those immigrants, commonly referred to as "second-generation" immigrants, have also been studied in Europe (Crul, 2012). Descendants of immigrants reach adult age and a large number of studies have aimed to understand the differences in adaptation between first-generation immigrants and their children, with reference to the native population; the research covers school contextual effects (Kogan 2007; Rendall et al. 2010), adaptation process in early adulthood (Bolzman et al. 2003; Portes & Rumbaut 2005; Santelli 2007), professional trajectories after school (Sweet et al. 2010), economic performance (Algan et al. 2010), and transition to parenthood (Milewski, 2011; Scott & Stanfors 2011).

Research on fertility of immigrants' children is still relatively young (De Valk & Milewski, 2011). Among other things many of the second generations in question have not yet reached the end of their reproductive ages. Yet, studying fertility behaviour of individuals in their late 20s early 30s is in many cases indicative of the completed fertility (Kreyenfeld, 2014). The existing research on the fertility of descendants of migrants focuses on the comparison a) between generations of immigrants (first and second), b) between descendants of migrants and natives, and c) between descendants of migrants with different origins (or migrant groups). Most studies suggest "that the fertility of the descendants of migrants moving from high to low-fertility countries is lower than the one of their parents" (Andersson, 2014, p. 6), but that it remains relatively higher than that of the majority population (Andersson, 2014; Milewski, 2007; De Valk & Milewski, 2011).

In Switzerland, the early studies on second generation immigrants were mainly based on children of immigrants coming from Southern Europe, showing that this group was successfully integrated in the Swiss labour market and in Swiss society in general (Bolzman & Fibbi, 2003; Fibbi et al., 2004). Nowadays the Swiss "new second generation" is entering the age of transition to adulthood and studying family dynamics and the professional insertion of the "new secondos" becomes essential for understanding their position in society (Bolzman, 2007; Fibbi et al. 2007; Bader & Fibbi, 2012). According to our knowledge, there are no studies exploring the first and second birth of immigrants and their descendants in Switzerland in terms of timing and occurrence.

Our analyses are mainly based on the data from the Swiss Household Panel (SHP). We investigate a key events in family formation: transition to first and second birth of immigrants and their descendants by comparing their patterns to those of the native population in Switzerland. Using event-history techniques, the empirical evidence shows that all second-generation immigrants (2G) have similar probabilities of becoming parents (first birth) than Swiss natives. Moreover, we found that first generation immigrants (1G) with Eastern-European origins and Southern-European origins are not only more likely to become parents, but they also have children at younger ages than the natives. The results remain robust after including control variables for gender, cohort, educational level, number of children, and educational level of parents.

In regard to the second child, the natives have a higher likelihood than the immigrant groups to give birth to a second child. Furthermore, the time interval between the first and second birth is smaller for the Swiss in comparison with migrants (1G and 2G). These results are quite unexpected, since most of the European countries have found exactly the opposite: usually the native populations have a lower probability of becoming parents the second time.

In order to confirm our findings, we repeated the analysis with data from the Swiss Federal Statistical Office (FSO). The survey "Enquête sur les familles et les générations 2013" (EFG) has the aim of providing statistical information on the current situation and the evolution of families as well as information on relations between the generations. Using this data we found similar results for the first and second birth, which confirm that the Swiss case differs in regard to the second birth from the other European countries.

In summary, we found that the 2G's and the Swiss natives have similar patterns for their first child: the likelihood and timing of giving birth to the first child is quite the same. It seems that the 2G adapt to the parenthood norms and values of their parent's host country. The 1G, however, have a higher probability to have a first child and to have it at a younger age than the 2G and the Swiss natives. For the second birth of a child, however, it is the Swiss natives who seem to have the higher birth likelihood. Populations having an immigrant background, both, 1G & 2G, seem to have a lower birth likelihood. We explain this with two main reasons; first, immigrants probably have smaller social networks, which could support them during parenthood (e.g. with child care). Secondly, the arrival of a child is also linked to costs. For immigrants, social and economic resources might have a very important impact on the decision when and if a child is conceived.

Workshop 2C – Health and quality of life II - room 2230

Education, Taxes, Life-Course Smoking Behavior, Self-reported health, and Satisfaction with Life: A cross-country comparison

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I use retrospective data on lifetime smoking behavior from the Swiss Household Panel, German Socio-Economic Panel, British Household Panel Study, and the Panel Study of Income Dynamics to describe the statistical association between attained years of education, lifetime smoking behavior, self-reported health and satisfaction with life. With the retrospective smoking data I construct measures of smoking behavior in every year of life from birth until the survey year the smoking data were collected. I predict smoking in each year of life using time series data on cigarette taxes or price in each country, allowing for heterogeneous responses for people with different levels of (attained) education. I then model how self-reported health and satisfaction with life systematically vary with measures of each person's smoking history (whether ever smoked, currently smoke, years smoked), controlling for observed differenced in education and other demographic characteristics. The paper tests the proposition that, controlling for unobserved factors that induce people to smoke, smokers are more likely to report worse health and be less satisfied with life than are observationally similar non-smokers. Because the retrospective smoking data are available for everyone who answered the survey(s) that asked those questions – including both current and former smokers – the sample size available for analysis is large. Further, because all four panel studies sample the general population in each country, the time period included for analysis spans most of the 20th and all of the 21st centuries. The principal advantage of this long sample period is that it affords the chance to exploit more of the temporal variation in taxes (which do not change frequently). As a consequence, the effect of taxes on decisions to smoke is more precisely estimated. Study results directly test a hypothesis that is commonly invoked in public health but never formally tested – that smoking causes people to be unhappy.

The analysis first models the probability that a person smokes using temporal variation in taxes, especially during the years a person was most at risk to start smoking. In economically developed countries the age smokers start is concentrated in a very narrow chronological window that ranges from 13 to 27. Surprisingly, of the people who will ever smoke, between 80 and 94 percent began during these ages. And most of them began between the ages of 16 and 20. I exploit this stylized fact to predict the current smoking status of individuals in two ways. First, I directly model the probability a given person started to smoke, restricting the years a person is "at-risk" to the years that person was age 13-27. I separately predict the probability a person currently smokes, identifying that decision using the current price of cigarettes.

In a second stage I then include the predicted probability of starting to smoke in ordered probit models that relate self-reported health and satisfaction with life to the probability of having started to smoke in any given year, a person's current smoking status, educational attainment and other demographics. I also estimate a simple model that only includes the predicted probability of being a current smoker. There, the first-stage model uses both the average price of cigarettes from when a person was 16-20 to account for the probability of starting to smoke and the current price of cigarettes to control for a smoker's decision to continue to smoke (not quit).

Results, which are similar across specifications and countries, are generally in line with expectations but there were some surprises. In particular, respondents to the Swiss Household Panel report high satisfaction if they started to smoke but, conditional on having started, a smoker is much more likely to report being less satisfied with life. Self-reported health is unambiguously worse for people who the model predicts will start and continue to smoke.

Does type of healthcare regime affect well-being? A comparison between Switzerland and Australia

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Introduction

Although Switzerland and Australia are similar in terms of their economic development and standard of living their institutional settings differ markedly. For example, the funding of the healthcare system in Switzerland is based on compulsory private health insurance whereas in Australia, there is a universal healthcare system, Medicare, funded by a levy on taxpayers. Medicare provides the same cover to all Australian residents regardless of their income, however, those with the capacity to pay for extra services can subscribe to one of many private health insurance companies.

Previous research indicates that levels of wellbeing vary according to level of education, marital status, economic position and health status. Highly educated adults report higher [lower] levels of wellbeing; married adults report higher levels of wellbeing than single adults, those with high incomes report higher levels of wellbeing than those with low incomes and those with self-reported chronic illnesses report lower levels of wellbeing than relatively healthy individuals.

In this paper, we examine variation in levels of wellbeing in Switzerland and Australia to determine whether residents in these two wealthy nations experience similar levels of wellbeing. We pay particular attention to the levels of subjective wellbeing reported by vulnerable groups including those with chronic health issues; those experiencing economic precariousness; single parents and the unemployed. Through our analysis we are able to respond to two main research questions: 1) what is the association between measures of objective wellbeing and measures of subjective wellbeing? 2) Does the association between objective and subjective measures of wellbeing differ between Switzerland and Australia?

Data and Method

The Swiss data come from the Swiss Household Panel (SHP). This survey allows observing social changes, in particular changing living conditions and representations of the Swiss society. Data collection started in 1999, but this paper we only use data from wave 15 (2013). This includes 4'242 households and 10'575 individuals. However, the sample is restricted to those aged between 18 and 74 years old (n=7'827).

The Australian data come from the Household, Income and Labour Dynamics in Australia (HILDA) survey. HILDA is a panel survey that collects data from the same respondents each year. Using the data from wave 12 (collected in 2012 n=17476), the sample is restricted to those aged between 18 and 74 years (n=15321).

We conduct analyses of two measures of subjective wellbeing: satisfaction with health; satisfaction with life; and four measures of objective wellbeing: long term health problem; single parent; unemployed; and economic precariousness. We include seven control variables: sex; age; migrant status; education; income; social capital (club membership); marital status; (or family type). Our measures of objective wellbeing are coded as closely as possible in both datasets.

Before answering our research questions, we conduct descriptive analyses of the association between subjective and objective measures of wellbeing. To answer our first research question, we construct a series of models and undertake ordinary least squares (OLS) regressions to estimate the partial effects of each of the predictor variables on levels of satisfaction with health. In Model 1, we include the indicator variable for having a long term health problem and the control variables. In Model 2 we include our measure of economic precariousness and in Model 3, we include being a single parent. In the final model, we add in being unemployed. We then repeat the process replacing satisfaction with health with satisfaction with life.

Results

In the first part of our descriptive analyses, we examine the association between our objective measures of wellbeing and our control variables. The results show that 20% of Australian males reported having a long term health problem; 2% were single parents; 8% experienced economic precariousness; 4% were unemployed. Among the Swiss, 36% of Swiss males reported having long term health problem; 3% were single; 43% experienced financial precariousness and 2% were unemployed.

Next, we examine the association between objective and subjective measures of wellbeing. Each of the objective measures of wellbeing has an effect on levels of satisfaction with health. As expected, Australians who reported

having a long term health problem were significantly less satisfied with their health compared to those who did not report having a long term health problem. Same results occurred in the Swiss population. Australians who experienced economic precariousness were significantly less happy with their health compared to those who did not report having a long term health problem. Swiss results are similar, but the difference is smaller. On average, Australian single parents were slightly less satisfied with their health compared to other Australians. On the Swiss side, it appears that single parents seem to be slightly happier with their health, but the difference is not statistically significant. Unemployed Australians were less satisfied than other Australians with their health. Swiss unemployed people are less satisfied with their health as they report a lower level of health satisfaction, however the difference is not significant.

All four objective measures of wellbeing have an significant negative effect on levels of overall satisfaction with life. Australians who reported having a long term health problem were significantly less happy with their lives compared to those who did not report having a long term health problem. In Switzerland, the biggest difference in term of self-reported life satisfaction appears between those who are unemployed and the others.
For Australians, even if unemployed people report a lower mean level of life satisfaction compare to other Australians, it is not the largest difference in term of objective wellbeing.

We then run four regressions for our two dependant variables (satisfaction with health and satisfaction with life.

Results showed that having a long term health problem has a very significant negative effect in term of health satisfaction in both countries. However, we found that this effect seems to be slightly stronger in Australia (-1.43) than in Switzerland (-1.25), meaning the level of satisafction with health decreases by 1.43 for Australians living with a long term health problem compare to people who do not have such problems. In both countries, people encountering economic precariousness at low or high levels, have a lower level of satisfaction with their health, with a slight stronger effect for people having high level of financial precariousness. For Switzerland, we observed an unexpected result showing that being a single parent has a positive effect on the satisfaction with health. No significant results were observed for Australia. About our last predictors of objective wellbeing, being unemployed, we observed no significant results in both countries.

About the satisfaction with life, when ww used the long term health problem predictor, we observed in both countries a negative effect for people living with this compare to healthy people in terms of satisfaction with their lives. The negative effect was again stronger for the Australians (-0.27) than for the Swiss (-0.19), meaning their satisfaction with life was minus 0.27 and minus 0.19 respectively, compare to the level of satisfaction for healthy people. Economic precariousness has also a negative effect on the level of life satisfaction, with a stronger effect when it comes to high level of precariousness (compare to low level), for both countries. Unemployement has, as expected, a negative effect on life satisfaction for both Switzerland and Australia with a deacrease of 0.55 points and 0.36 points respectively in the level of satisfaction compare to people who are not unemployed. Again, as for the satisfaction with health, we observed no significant results for the single parent predictor for Australia, but we observed a significant negative effect for single parent in terms of level of satisfaction with life in Switzerland.

Among all regressions (for both dependent variables), we observed that being aged between 45 and 64 years old has a negative effect on the evaluation of both level of satisfaction. We also found that being lonely and feeling down have a strong negative effect for both level of satisfaction (health and life). It is also true for people being separated. On the contrary, being married, young, having energy or high level of vitality and having a large family increase, on average, the level of satisfaction with life and with health.

Health and Happiness

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Della Bella Sara, University of Applied Sciences and Arts of Southern Switzerland and Università della Svizzera Italiana, Lugano
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A number of issues can be raised when it comes to the analysis of the relationship between happiness and health. Several studies have shown that health is strongly associated with individual happiness (Angner et al 2013; Dolan et al 2008; Graham et al 2004; Graham 2008; Yang 2008). However, much work is necessary in order to

determine whether this relationship is a truly causal one and to unravel the temporal dynamics of the effect of health on SWB.

In this work we aimed, first of all, at providing an accurate estimate of the effect of self-assessed health on SWB by using the Swiss Household Panel dataset and panel data models that enable us to get rid of unobserved heterogeneity. The latter represents the main obstacle in models that try to estimate causal effects (Cameron and Trivedi 2009).As a second objective, we were interested in clarifying: a) whether people were able to fully adjust to past health circumstances as well as to past life events and b) whether SWB was autoregressive. In other terms, we investigated the existence of habituation in SWB.

A group of papers have used survey data to measure habituation through the lagged effects of life events (e.g., Lucas et al., 2003; Diener et al., 2006; Di Tella et al. 2007; Clark et al., 2008). Following Bottan and Perez-Truglia (2010) we proposed an additional channel for adaptation: current happiness may depend directly on past happiness, which means to assess whether happiness is autoregressive. This is what Bottan and Perez-Truglia referred to as the "general habituation" channel. They argued that people who currently experience moments of happiness (or of unhappiness) will be prone to feelings of unhappiness (happiness) in the future, regardless of the reason behind the original increase (decrease) in their level of happiness.

In this case, a positive and significant value of the coefficient of lagged health would suggest the existence of an inertia phenomenon, whereas a negative value would mean that general habituation does exist. The existence of specific habituation channels, on the other hand, can be tested by looking at the lagged effects of other covariates.

In this work we examined both general and specific habituation channels. More precisely, we applied a FE model in order to investigate specific habituation channels and a GMM model in order to understand whether life satisfaction (our indicator of SWB) is autoregressive.

For our analysis we use nine waves (from 2004 to 2013) of the Swiss Household Panel. Our dependent variable is represented by satisfaction with life in general, measured on a scale ranging from 0 (not at all satisfied) to 10 (completely satisfied). Despite its ordinal nature, following Ferre-i-Carbonell and Frijters (2004) we consider satisfaction with life as a cardinal variable in order to ease the interpretation of the estimated parameters. As far as the main independent variable, we need a measure of health that is able to accurately capture the individual true health status and has limited semantic overlapping with SWB. Since health is a latent, multidimensional construct, we use factor analysis to derive a composite index starting from 14 health indicators that cover different health dimensions.

The FE model told us that current life satisfaction mainly depends on the present value of health, though past health conditions exert a small but significant and negative effect, suggesting that an inertia phenomenon does exist. As far as other covariates are concerned, looking e.g. at the lags of being married and being a widow, our results suggested habituation; the lagged coefficient related to the experience of conflicts with or among related person suggested that inertia exists.

As far as the general habituation channel is concerned, the GMM model supports this hypothesis. In line with Piper (2013) and Bottan and Perez-Truglia (2010), we found that the coefficient of the lagged life satisfaction is positive and statistically significant, suggesting an inertia effect of past life satisfaction on the present one.

The GMM model provides another very interesting result: the effect of current health status on life satisfaction remained robust and significant even after controlling for past life satisfaction (that synthesizes the entire history of the model, cf. Piper 2013; Greene 2012). Beyond health, the only covariate that remains significant in the GMM model is the experience of conflict with or among related persons (-0,853).

In conclusion our models confirm the strong association between health and SWB revealed by previous studies. Both the FE and the GMM model proved that current health is a strong predictor of SWB. Since both models are able, albeit in different ways and degrees, to get rid of unobserved heterogeneity, we could even say that health is causally related to SWB.

Decreasing well-being in Switzerland in the early 2000's: a matter of health and economic hardship, of crisis or of a refreshment sample?

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Pascale Gazareth, University of Neuchâtel

Background

Traditional income-based economic welfare indicators to assess happiness do not seem satisfactory any more. Nowadays, subjective measures of well-being are frequently presented as substitutes for traditional welfare measures (Deaton, 2008). It is also recognized that individual evaluations about their lives provide relevant information for policy decisions (Diener and Seligman, 2004) and information about their quality of life (Stiglitz et al., 2009).

Subjective well-being (SWB) indicators are useful tools to evaluate progress over time, both at the individual and the societal level. This is why they are measured more and more often in surveys allowing comparison between countries - like the European Social Survey - or over time - like the Swiss Household Panel (SHP) in Switzerland. The socio-economic and the health dimensions were largely investigated in relation with SWB (e.g. Dolan, Peasgood and White, 2008), but few did it in a longitudinal perspective. The aim of the presentation is to discuss the impact of socio-economic and health conditions on SWB over time in Switzerland.

Data

To evaluate SWB over time, SHP data were used. SHP is conducted on a yearly basis since 1999. In 1999, a sample of 5074 households were randomly selected (SHP I), which represents 12931 household members (from whom 7799 members complete an individual interview). They are interviewed each year. In 2004, a second sample of 2538 households (6569 household members and 4413 individual interviews) was added (SHP II).

Measures

SWB were measured through a global single question ("In general, how satisfied are you with your life?"). As this question was only introduced in 2000, our analyses run from that year. In order to analyze the impact of socio-economic and health aspects, three indicators in each dimension were constructed. Concerning the socio-economic dimension, a relative indicator of income classes using the equivalent gross income was first constructed. The neutral modality corresponds to the middle class defined by the Swiss Federal Statistical Office with earnings between 70% and 150% of the median equivalent gross income. Two defavorable groups were defined: being poor (less than 50% of median equivalent gross income, threshold defined by the OCDE) and being at poverty risk (earnings between 50 and 70% of the median equivalent gross income). The favorable group corresponds to the upper class with at least 150% of the median equivalent gross income. Secondly, a measure of financial precariousness was defined with no financial precariousness when saving money and having no arrears in payments, low financial precariousness when eatting into its assets and savings or when experiencing sometimes arrears in payments (only one of both situations), and high financial precariousness when experiencing both problems. Thirdly, a measure of material deprivation was computed with the Proportional Deprivation Index of Halleröd (1995) based on a list of 9 goods and services.

Concerning the health dimension, we first defined a measure of health status using the question "How do you feel right now?" with answer categories "well" and "very well" as good health and bad health corresponding to "so, so", "not very well" or "not well at all". Secondly, the change in health status was measured with the question "Since (month-year), has your health improved or worsened, if 0 means "greatly worsened", 5 means no change" and 10 "greatly improved". Health deterioration was defined by modalities 0 to 4, no change in health by 5 and health improvement by 6 to 10. And thirdly, a measure of health impediment was define through the question "Please tell me to what extent, generally, your health is an impediment in your everyday activities (in your housework, your work or leisure activities), 0 means "not at all" and 10 "a great deal". No health impediment corresponds to 0, low impediment to 1 to 4 and great impediment to 5 to 10. Finaly, in order to take into account the wider economic and societal aspects, the economic crisis of 2003 that affected mainly the labor market was modelized through time.
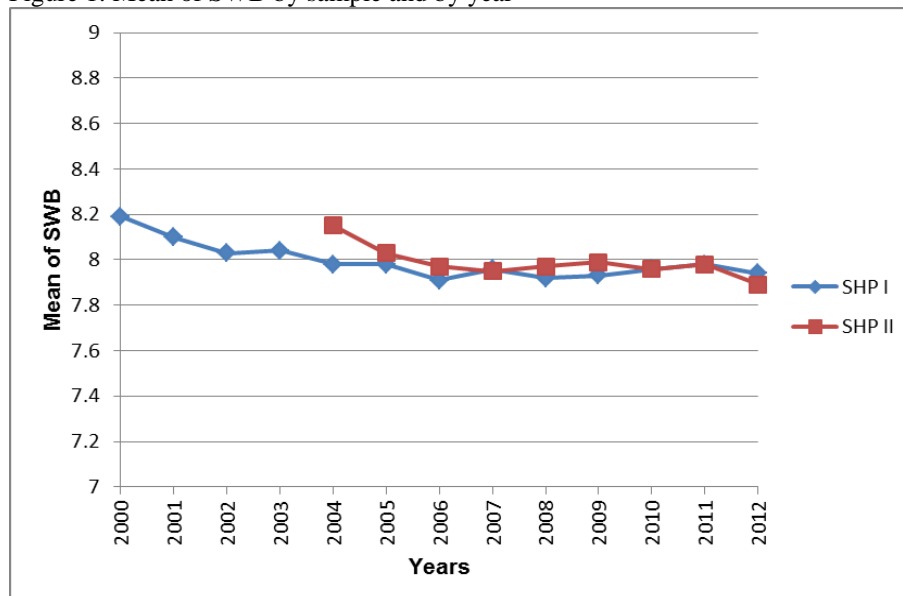
Statistical analysis

Multilevel models with participants as random effect are used to analyze SWB between 2000 and 2012 and to capture the longitudinal nature of the data.

Results

First results reveal a decrease in SWB over the period for both samples (SHP I and SHP II) (figure 1). Decrease in SWB in time can be mainly explained by an increase between 2000 and 2012 in percentage of people with health deterioration (from 9.2% to 13.8%) and with healh impediment (low and high: from 39.2% to 57.2%).

Mean level of SWB was negatively affected by defavorable economic and health situations: material deprivation, financial precariousness, risk of poverty and poverty, bad health, health deterioration and health impediment (independently of the years or sample).

Figure 1: Mean of SWB by sample and by year

High deprivation, risk of poverty, high financial precariousness and high health impediment had a greater negative impact on SWB in 2004 compared to previous years. This result can be explained by two phenomenons: the macro-economic recession of 2003 (decrease in GDP and social fear for unemployment) or the refreshment sample introduced in 2004 (SHP II). Considering only the first sample (SHP I), the interaction between economic indicators and time were still significant which discard the refreshment explanation. Concerning the significant interaction between high health impediment and time, it was not anymore significant, which appeared to be an artefact of refreshment.

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Family deconstruction and life satisfaction: the swiss case

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Aim of our study

Previous studies show that higher life satisfaction (LS) is associated with good relationship with partner, greater occupational success, better health and even delayed mortality (Diener & Chan, 2011; Lyubomirsky, King, & Diener, 2005; Oishi, Diener, & Lucas, 2007). But is life satisfaction also associated with specific life events?

In this paper we aim to expand the current knowledge on the relationship between LS and family events in the Swiss context.

On the basis of our knowledge, the majority of the studies on the association between family events and LS conducted over the past few decades have focused on marriage, birth of children and divorce, ignoring several events associated with the decomposition of a family (such as separation, widowhood and moving out of children). The existing litterature supports the theoretical predictions regarding the positive association between being in a relationship and LS. One of the most important studies in the European context on this relationship

was conducted by Kohler et al. (2005). Using an unique dataset from Denmark, they found that men and woman in a partnership were happier than those who were single. The US research has consistently showed that people who lack a partner (regardless of whether thay are single, widowed, or separated) report the lowest levels of LS.

Despite the increased number of research on this topic a lot remained to be understood, in particular taking into consideration different forms of deconstruction of the family in a longitudinal perspective (Vignoli et al., 2014). In the current study we examine four forms of family deconstruction: 1) from living together to union dissolution (due to divorce, separation or widowhood); 2) from family with children to single parent; 3) from family with children to alone parent (without children in the family), 4) from household with children to household without children. In studying this relationship we pay specific attention on the difference between genders.

To answer our research question we use 13 waves of Swiss Household Panel (2001 – 2013) and we capture the family events wave by wave. In the SHP, life satisfaction is assessed with the item "In general, how satisfied are you with your life if 0 means "not at all satisfied" and 10 means "completely satisfied"?".

From a statistical point of view, we adopt a multilevel approach in order to acknowledge that the LS of an individual can be correlated over time.

Main findings

The following table shows the net impact of the studied events on life satisfaction, both for women and men, as well as the number of cases. Each time, we used a multilevel mixed model for longitudinal data, controlling for the following variables; age, wave indicator, level of education, working time (% of a full time job), household income, satisfaction with health status, evaluation of health impediment, satisfaction with financial situation, satisfaction with personal relationships, satisfaction with free time, satisfaction with leisure activities, participation in a club or group. In the last model (children leaving parental nest), satisfaction with living together was also added.

Table 1 – net impact of some steps of family deconstruction - MLM

	women	sig.	men	sig.
End of relationship				
end of relationship	-.669	.000	-.721	.000
end * age lower than 30 years	.572	.000	.387	.044
end * 30-44 years	.035	.766	-.001	.995
end * 45-64 years	-.106	.353	-.046	.788
end * 65 years and older	.000		.000	
Number of ends of a relationship	*697*		*416*	
Family to lone parent				
end of relationship	-.585	.000	-1.258	.000
Number of ends of a relationship	*128*		*21*	
Family to lone person				
end of relationship	.134	.696	-.961	.000
Number of ends of a relationship	*9*		*61*	
Children leaving parental nest				
children leaving family nest	.088	.712	-.034	.896
last children leaving family nest	.291	.449	-1.118	.009
children leaving family nest * satisfaction with living together	-.008	.781	-.003	.908
last children leaving family nest* satisfaction with living together	-.033	.451	.141	.003
Number of children leaving family nest	*1197*		*974*	
Number of last children leaving family nest	*505*		*397*	

Our preliminary results show that all the transitions considered have a negative impact on the life satisfaction, both for men and for women. However important differences between the transitions could be underlined.

Firstly, the end of the relationship (caused by dovorce, separation or widowhood) has a strong negative impact on women' and men' LS (-.669 for women and -.721 for men). Focusing on the coefficients of the interaction between the age of individuals and the mentioned event, it is possible to underline that younger individuals suffer less from the relationship breakup compared with older people. This conclusion affects both men and women.

Regarding the second transition we could firstly draw our attention on the number of cases. Following the individuals for the 13 waves of the SHP, we found 128 situations where the mother lives alone with the children (after the end of a relationship), while only 21 fathers experience the same situation. These results could be justified by the fact that the mothers have more chances to obtain the custody of their children after a separation (or divorce) than the fathers. The few cases impose us to read these coefficients cautiously. However, we could suggest that the life satisfaction tends to decrease when mothers and fathers loose their partner and they have to take care of their children.

The number of cases strongly influences also the third transitions. Only 9 women and 61 men live alone, without their partner, neither their children. Unfortunately these numbers do not allow us to reach any clear conclusion on the effect of the aforementioned event on LS, but the statistically significant coefficient of men suggests a negative association.

In the last transition we considered the children who move out from their parental nest. In the multivariate analysis we propose two different variables to distinguish the leaving of the last children and the departure of all the other children. The coefficient indicate that the moving out of the last children negatively affect the LS of the father (-1.118), but any important effect could be noticed on mothers. The negative impact of the men can become weaker due to the interaction with the satisfaction with the relationship with the partner. In other words, when the satisfaction with the relationship with the partner is good the negative effect of the moving out of the last children slightly decreases.

Discussion

The first results allow us to conclude that there are different family events whose relationship with the LS is still unexplored, in particular in the Swiss context and with longitudinal approach.

As we showed before, existing research on family and well-being has generally focused on the traditional event, and has largely ignored the increasing diversity in family forms and relations.

However, in recent decades, the family life course has become less and less standardized in Switzerland as well as all over Europe, resulting in an increase in previously rare forms of family life, such as lone parenthood. Our paper contributes to this ongoing debate, investigating the extent of the relationship between diverse forms of family decontruction and LS in Switzerland.
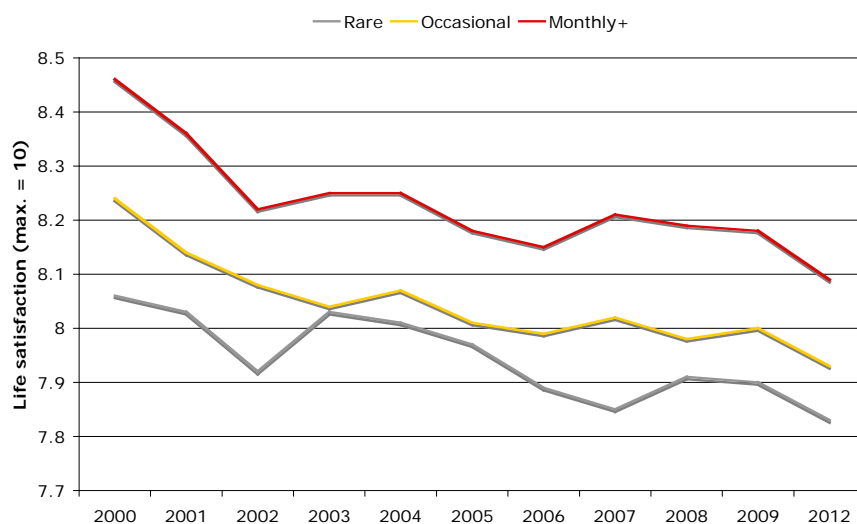
If people become more religious, do they become happier?

Marion Burkimsher, independent researcher affiliated to the University of Lausanne

Previous research has generally found that religious people tend to be happier than non-religious individuals. What has not been investigated is whether initially less religious people become happier if they become more religious – or vice versa.

The longitudinal data of the Swiss Household Panel allows us to investigate this question. Each year until 2009, and again in 2012, respondents were asked about their frequency of attendance at religious services, frequency of personal prayer and religious affiliation. In addition, from 2000 onwards, respondents were asked to gauge, on a scale 0-10, their level of satisfaction with life.

The initial results confirm that, in Switzerland, there are, indeed significant differentials in happiness between those who attend religious services rarely and those who attend regularly (see Figure 1).

Occasional attendance is between once a year and once a month
Rare attendance is "never" or less frequently than once a year

Figure 1 : Trends from 2000-2012 in satisfaction with life by frequency of attendance at religious services

Over the period 2000-2012, the difference in life satisfaction between those who regularly attend and those who never attend averaged 0.3. Also conspicuous on the graph is that all groups became less satisfied over the period 2000-2012.
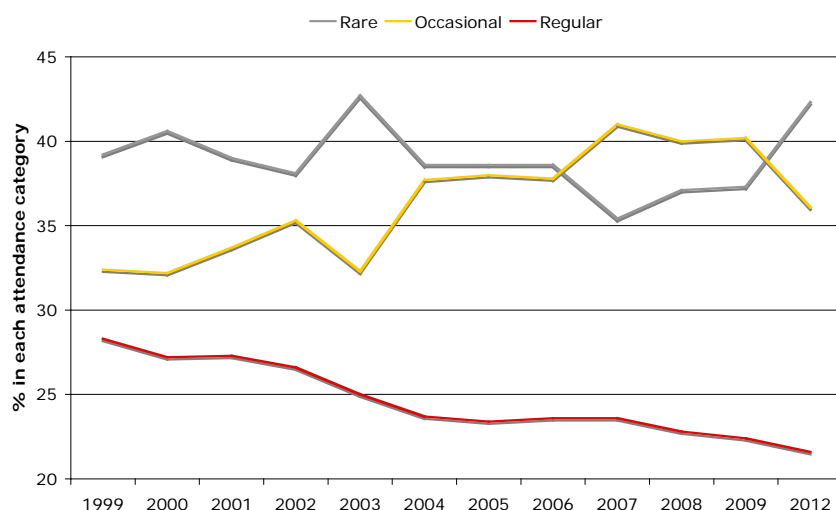
Data issues

In the source files there are seven frequencies of religious attendance coded. These were simplified to three groups : regular (=monthly or more frequently, 6-9 of original coding) ; occasional (between yearly and monthly, codes 3-5) ; and rare (less than once a year, codes 1 and 2). Two problems became apparent on an initial analysis : many individuals have missing waves and, despite many researchers considering that religious attendance is a stable variable, it is, in fact, quite unstable. Of all respondents for whom several data waves are available, more than half (61%) fell into different categories of attendance at different waves.

Religiosity is correlated with age, with younger teens and older people being more religious. These are also the groups who are more satisfied with life. We might, therefore, expect that people become happier as they get older. However, we did not find this to happen when cohorts were followed through the SHP waves. Following similar trends to those in Figure 1, there was a general decline in life satisfaction for all cohorts between 2000 and around 2006 and stability from then until 2009. Between 2009 and 2012 there was again a marked drop for the younger cohorts, presumably as they were impacted most by the recession.

By several different measures, Switzerland is secularising. Over the period 1999-2012, the proportion of respondents regularly attending religious services declined from 28% to 22% (see Figure 2).

Initially it was thought that sequence analysis would be a good tool to analyse changing religiosity and associate it with change in happiness. However, the large number of missing waves for many (most) individuals precluded this. SEM has the same problem: there needs to be a period of stability in one state before a definitive change to a new state, and we found that the majority of individuals flipped between at least attendance categories in a rather random fashion.

From looking over the data we could see that it was young people (teens and 20s) who were more likely to drop in attendance frequency, and also some older people, whereas the ones more likely to start attending were in the middle age brackets (30s and 40s mostly). We suspect that the reason for this is that they take their child(ren) to church to go through first communion and catechism (Catholics) or confirmation (Protestants).

Figure 2 : Trends in proportion of respondents in each category of attendance at religious services

Analysis and results

The method chosen to investigate the research question was binary logistic regression analysis, testing firstly for relative likelihood of 'becoming happier' over two time periods : 2000-2006 and 2006-2012. Becoming happier was defined as a positive increase in level of life satisfaction comparing (only) the level reported in the SHP waves of 2006 compared to 2000 and 2012 compared to 2006. We then categorised individuals by their frequency of attendance at religious services in year 1 (2000 or 2006) and year 2 (2006 or 2012), viz:

1. Regular attender in both years
2. Occasional attender both years
3. Rare attender both years
4. Stopped attending regularly between years 1 and 2 (regular to occasional or rare)
5. Dropped from occasional to rare attender
6. Changed from rare to occasional attender
7. Started becoming a regular attender (rare or occasional to regular)

Age group in year 1 and gender were included as control variables. In the regression analysis the reference categories were female; aged in their 40s; and type 2 attender (occasional both years).

The consistent result across both periods (2000-2006 and 2006-2012) was that individuals who started attending religious services regularly (type 7) were significantly (at the 5% level) more likely to report a higher level of life satisfaction at year 2 than they had had in year 1; by a factor of 1.5 in the period 2000-2006 and 1.4 between 2006 and 2012. Age also had a significant effect, although the results were not consistent. Gender was not significant in whether a person became happier.

A second set of regression analyses were run to test whether a decline in religious attendance was associated with people becoming sadder. We looked at the relative likelihood of becoming sadder by 2 points or more. As there had been a general decline in satisfaction for all subgroups across the period 2000-2012, then we were seeking to test for those who had become markedly more sad than average. Again we controlled for age and gender.

Age was found to be the most important factor affecting whether someone was likely to become sadder: teenagers moving into their 20s and older people over 60 were more likely to be affected. Growing up is clearly a traumatic experience, as is getting old and the associated loss of health and/or partner. Gender had a slight effect : men are less likely to become significantly sadder than women (at least in the 2006-2012 period). In the period 2000-2006 dropping out of regular church attendance was associated with a 1.5 times higher likelihood of becoming sadder (significant at 5% level), even with the control variables of age and gender. In the period 2006-2012 none of the religious attendance categories were significantly associated with getting sadder.

Conclusion

This analysis has shown that change in frequency of attendance at religious services is associated with a change in level of life satisfaction. There could be several reasons for this. Greater religiosity is associated with lower levels of separation and divorce and lower frequency of singleness and childlessness. These are likely to be the underlying explanation for the differentials shown in Figure 1. As for the increase in life satisfaction associated with becoming a regular attender, then could this come from finding a 'purpose in life', becoming part of a community of support, a social network, or placing one's life's struggles in the context of a wider world view or eternal perspective? As for becoming sadder when dropping out, might this stem from failing health,

widowhood, disillusionment, a loss of faith in people or the divine, conflicting time pressures, or simply from removing to a new locality? The results found in this study might form the basis of further qualitative investigation.

Workshop 3A – Life course analysis - room 2208

Do negative life events deter social trust? The case of separation and divorce

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One may conceive trust as being a stable feature of one's life (Uslaner, 2002) or as changing through exposure to contextual influences (Bekkers, 2011). Following the second line of thought, the existing literature discusses the impact of negative life events on social trust (Hardin, 2006). Breaking up from marriage or a romantic relationship is often seen as such a negative event. It is argued that experiencing divorce leads to a more negative view of society, which in turn leads to lower levels of trust in others (Alessina and La Ferrara, 2002; Rahn et al., 2003). However, the exact mechanisms remain insufficiently explored (Lindström, 2012). This paper sketches a more comprehensive framework to explain the effects of separation or divorce on social trust. It builds onto existing theory to derive seven hypotheses:

- Negative life events deter social trust. If marital disruption is a negative experience, *divorce should cause decreasing trust* (H1).
- *The direct effect of divorce and separation on social trust is similar* (H2).
- *It is not the divorce (or separation) per se that has a negative effect on social trust, but the ending of an important relationship* (H3).
- In the cases of both separation and divorce, the need to discuss what happens remains strong, I expect *emotional support to reduce the negative effect of couple dissolution.* (H4)
- *Practical support from family increases the negative effect of separation on social trust.* (H5)
- Since divorce occurs later, the divorcee has already had time to readjust to a situation similar to the one in which she or he used to be before marriage. *Practical support from the family to boost the negative effect of divorce is not required as much as in the case of separation.* (H6)
- *Both the emotional and the practical support from friends should buffer the negative impact of disrupting the relation, while the relatives should play a similar role, at least with respect to emotional support.* (H7)

Testing is done by using panel data provided by the Swiss Household Panel. The Swiss Household Panel (SHP) has at least three qualities that make it an optimal dataset for this study. First, it is a panel survey, collected every year, and since 2002 to 2013 it includes a measurement of social trust. Second, it includes measurements of marital status and social support (the later ones are missing in 2011 and 2012). Third, it includes a measurement of splitting from an important relationship in the previous year. Fixed effects models are used.

The findings partially confirmed the initial hypotheses. Unexpectedly, they revealed that separation or divorce do not mangle outright the initial social trust; that is, uncoupling, by itself, does not harm the extent to which one is likely to believe that most people can be trusted. What hinders social trust is the breaking up of an important relationship, meaning that there are partners in the couple for which the dissolution of the relationship is likely to reduce faith in others. The impact is not powerful enough to clog the social trust; it only slightly reduces it, but the impact is similar to that of joining associations or adding new friends to a social network.

Social networks apparently fail to create a buffer, but give a weak boosting effect through emotional support. More precisely, emotional support from relatives increases trust after separation, while friends play the same role after divorce; however, the effects are not very strong. They add to an adverse influence, with practical support from relatives deterring trust, in the case of separation.

However, if divorce and separation are the one referred as important relationship, small increases in emotional support from relatives (in the case of separation) and friends (in the case of divorce) are enough to keep trust unchanged.

At least three lessons can be derived from the findings. The first refers to the divorce seen as a negative life event. From the viewpoint of its impact on social trust, it turns out that couple dissolution is not that negative. In fact, as mentioned, we found no direct effect of separation or divorce on faith in others. However, in certain conditions, the dissolution of a relevant relation tends to harm social trust. Nevertheless, further investigation is needed into how the situation changes when one distinguishes between the initiator of the

separation and the other spouse/partner, and when one considers the reasons for the uncoupling. The database that I have used does not include such information. Deepening the research in this direction would be a productive way to understand the intimate mechanisms and conditions that make divorce harmful for social trust.

The second important lesson refers to the theories about social trust itself. The findings indicate that social trust is quite resilient in front of such a radical change to a personal life as couple dissolution. This would rather support the socialization assumption on the social trust formation. On the other hand, there is some change, negative—when it comes to disrupting relations that are seen as important, most likely relevant for self-expansion; positive—when considering the buffering effect of the emotional support provided by friends and relatives. Even though it is small, this supports the idea that social trust is exposed to life experiences. Questions that go beyond the scope of this paper, but are derived from its conclusions refer to the endurance of the small negative effect: How long does it last? Is it permanent or not? Does it change after other life events, such as remarriage or recoupling, eventually with the same partner? This is another direction for further research.

The third lesson points to the use of marital status as a predictor in equations that explain social trust. It was found that behind being "divorced" or "separated" lie very different reasons that mingle with each other and mask the effects of negative and positive life events. Personality might also influence how divorce reflects on one's values and attitudes. Therefore, caution is needed when interpreting the effect of marital status on faith in others.

Family structure and home-leaving: A life course perspective

Florence Rossignon, University of Lausanne, NCCR LIVES

Conceptual framework

The recent and rapid increase in divorces and remarriages had led to a growing complexity of the households' composition (Goldscheider & Goldscheider, 1998). In parallel, a new family structure has emerged: the lone parenthood. As a result, a growing number of children do no longer grow up with two biological parents. Conforming to the aforementioned researchers, those increasingly common family patterns are likely to affect the ways in which the parents invest in their children and, thus, the parents-children relations. Hence, the aim of this study is to examine whether these changing family structures are likely to affect the propensity of young adults to leave the parental home.

Methods

The empirical analysis is based on the Cohort study, a panel survey that started in autumn 2013. The sample was composed of 1687 respondents, Swiss or from a foreign background. Various criteria had to be fulfilled in order to be eligible, such as being a Swiss resident and being aged 15-24 on January 1st 2013. Also, they had to have begun attending a Swiss school before the age of 10. Regarding the people of foreign origin, only those whose parents were born in a foreign country and who arrived in Switzerland after the age of 18 were taken into account. What is more, wether naturalized or not, there has been an overrepresentation of the second-generation immigrants and a particular attention was paid to offsprings of low- or middle-skilled migrants, who mainly hailed from Southern Europe and from the Balkan Peninsula. Analyses were based on a life history calendar which took the form of a vertical grid where the columns were divided into life domains and the rows into years. As regards my analyses, there has been a focus on the trajectories of cohabitation that described at each age the composition of the respondent's household. Two longitudinal statistical methods were used as complementary approaches. First, the sequence and cluster analysis were conducted to identify groups of typical family trajectories over the life course. Second, the event history analysis was used to analyse the home-leaving process and to estimate whether these family trajectories are likely to influence the departure from the parental home.

Results

According to Martinson and Wu (1992), a significant number of studies of childhood family structure are based on "snapshots", which only focus on a particular age, most often age 14. In my case, the Cohort study collected very detailed life history records of the composition of the respondents' household at each age. Thanks to this information, four groups of typical family trajectories were constructed: the biparental family, from biparental family to lone-parent family, from non-standard family structure to bi-parental family and transition from toward extended/step-parent family (Cf. Figure 1). We can see that growing up with two parents and, sometimes, siblings is the most frequent family structure. Indeed, it concerns 78% of the respondents.
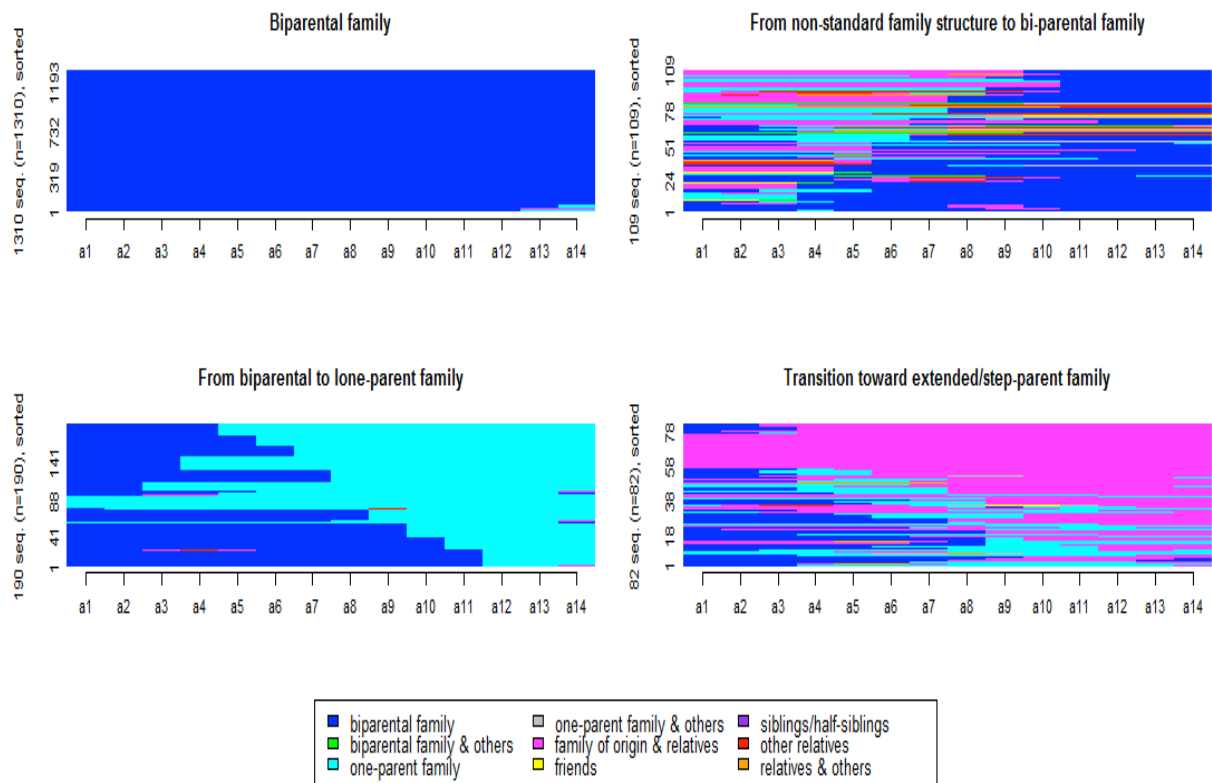
Figure1. Clusters of family structure

Further, analyses showed that individuals from single-parent households are more likely to leave their parental home than those who grew up in a bi-parental family. Also, young adults from stepfamilies are more likely to found an independent household than those from intact households, although this effect becomes only significant when the sex of the respondent is taken into account. What is more, the women who spent some of their childhood in a stepfamily have a lower likelihood to leave the parental home than their male counterparts. The same observation can be made for those who grew up in a lone-parent family. Hence, it appears that young girls may have better adjustment capacity than men. According to Rossi (1990), this can be explained by the fact that women consider having good relationships more often than men because they often perceive themselves as future kin keepers. Furthermore, the fact that the members of the third family cluster ("from non-standard family structure to biparental family") have the same probability to leave the parental home than those who grew up in biparental household could come from the fact that both groups reach the same destination state. Thereby, one could assume that this shift cancels out the push-effect of the non-standard family structure.

As a conclusion, as leaving home too early might have negative consequences on later life opportunities, these findings draw attention to the fact that the family structure is a significant determinant of an optimal entry toward a stable and successful work and family trajectory.

Does it take a village to raise a child? Buffering effect of family support during parenthood in Switzerland

Małgorzata Mikucka, Université Catholique de Louvain
Ester Rizzi, Université Catholique de Louvain

Background

Although in contemporary developed societies parenting is largely a choice, having children comes with a price. The financial and time demands brought by parenthood suggest that it may be considered a difficult life stage (Evenson and Simon, 2005; Umberson et al., 2010; Stanca, 2012). The literature demonstrated that the effect of parenthood on subjective well-being differs across individuals (Galatzer-Levy et al. 2011, Myrskylä and Margolis, 2012), which suggests that for some parents raising children is more difficult that for others.

Theoretical approaches postulate that social support, from family or other sources, may be a resource to alleviate the consequences of difficult life events ('buffering mechanism': Cohen, 1985; Thoits, 1982). Families provide extensive help to parents of young children (Hank and Buber, 2009), and family support is activated in response

to critical, difficult events (Eggebeen and Davey, 1998). However, the role of family support for parental life satisfaction remains underexplored (Kalmijn, 2012).

This paper attempts to partly fill this gap by investigating if family support acts as a buffer during the period of parenthood. Specifically, we focus on two related aspects of buffering mechanism.

1. Do the contacts with and the support received from relatives increase after people become parents? How do they change at various stages of parenthood?
2. Does life satisfaction of parents who stay in frequent contact or receive high support from relatives increase more than life satisfaction of parents who stay in rare contact or receive less support?

Data

We are using data from the Swiss Household Panel (SHP, waves 2-12), which aims to observe social change, in particular the dynamics of changing living conditions in the population of Switzerland.

The main variables of interest for our analysis include:

- Life satisfaction, measured on a 0-10 scale;
- Family support is approximated with three measures referring to relatives living outside of respondent's household, with whom the respondent is on good terms and enjoys a close relationship. We include:
  - Frequency of contact (including telephone contacts);
  - Availability of practical support (i.e. concrete help, such as shopping or taking to the doctor, or useful advice) [0 – *not at all*, 10 – *a great deal*];
  - Availability of emotional support (e.g availability in case of need and showing understanding) [0 – *not at all*, 10 – *a great deal*].

Control variables include: age, marital status and its changes, satisfaction with own health, household income, own unemployment, and changes of support received from partner, neighbors, and close friends. Analysis is stratified by parity. In the sample 421 women and 415 men experienced the birth of their 1st child, 367 and 366 – of the 2nd child, and 147 and 154 – of the 3rd child.
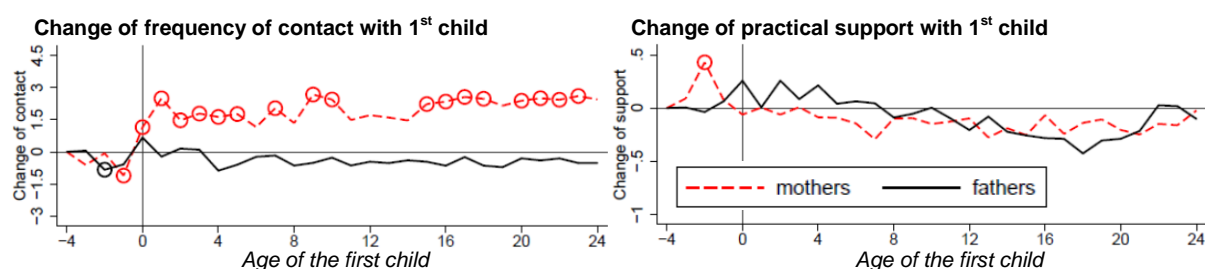
Statistical method

To investigate the dynamics of support from relativeas and the dynamics of life satisfaction during parenthood we used fixed effects regression for panel data. This type of analysis explicitly focuses on change and it controls for the effects of the time-invariant personal characteristics (Allison, 2009).

Results

To answer the question `How does the support from relatives change during parenthood?' we regress contact with and the support from relatives on the age of the children. We find that for mothers in Switzerland the frequency of contact with non-resident relatives increases after the first birth, but the birth is not associated with the increase of support from relatives (see Fig. 1: selected results for the first child and women). For men, no significant changes are observed in contact or support. The effect of the first birth on frequency of contact is far stronger than the effect of the second and third birth (not shown). We conclude that although the network of relatives becomes activated upon childbirth, the higher frequency of contact is not accompanied by increasing practical nor emotional support.
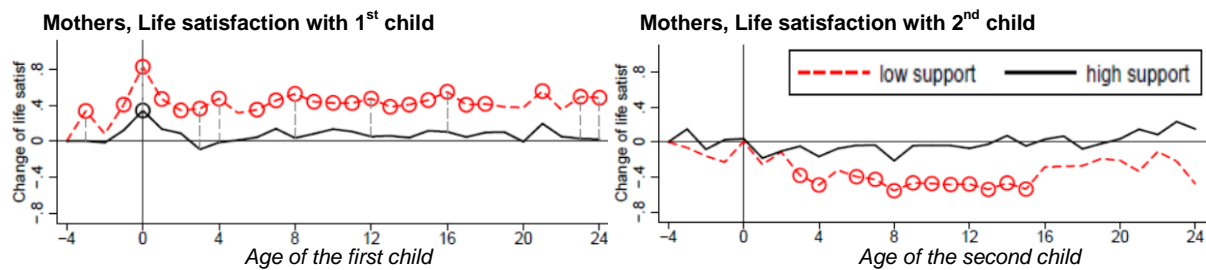
To investigate the effect of contact and support on parental satisfaction we divide parents into the `low contact/support' and `high contact/support' groups; then we estimate the trajectories of life satisfaction for each of these groups (see Fig.2 for emotional support in case of mothers of the first and second child). Our results show that after the birth of the second child the life satisfaction of women who receive low practical support declines, whereas life satisfaction of women with high support from realtives remains stable.

However, contrary to the buffering hypothesis, the first-time mothers who stay in more frequent contact with their relatives or receive more support from them experience less positive trajectories of life satisfaction.

Fig.1. Predicted change of frequency of contact with relatives and practical support received from relatives.
Note: The reference category: the period 4 or more years before the birth. The circles mark effects significantly different from the reference category. Fixed effects models for panel data with clustered standard errors.

Fig.2. Predicted change of life satisfaction of mothers receiving high vs. low emotional support from their relatives.
Note: The reference category: the period 4 or more years before the birth. The circles mark effects significantly different from the reference category. Grey lines mark the statistically significant difference between high and low-support group. Fixed effects models for panel data with clustered standard errors.

As staying in frequent contact or receiving high support from relatives may result from an extraordinarily difficult situation (such as sickess of the child or the parent) we additionally investigate which time-invariant characteristics of parents increase the probability of receiving high support and staying in frequent contact with the relatives. (see Tab. 1). We find that the higher educated and younger parents receive overall more support than the lower educated and older parents. Moreover, the wealthier parents stay in more frequent contact with relatives and receive more practical support. This suggests that high contact and support are not signs of a crisis but rather another dimension of social priviledge.

Conclusion

Our results provide some support to the hypothesis that contact with and support from relatives improves the experience of parenthood in Switzerland. However, some contradictory results appear for the first child. They suggest that parents in Switzerland tend to be prepared for the arrival of the first child and do not need support from relatives. However, relatives' support play more positive role at higher parity births.

Tab.1. Logistic regression of frequent contact with and high emotional support from relatives on time-invariant individual predictors (between-persons model).

	Frequent contact	High emotional support
primary education	*reference category*	
secondary education	1.05	1.15
tertiary eduation	1.36 *	1.25 +
household income	1.19 *	1.07
gender (woman)	2.32 ***	1.91 ***
born bofore 1950	0.35 ***	0.36 ***
born 1950-59	0.42 ***	0.45 ***
born 1960-69	0.75 ***	0.79 ***
born after 1969	*reference category*	
citizenship, ethnicity	Yes	Yes
age at 1st birth	1.00	1.01
Pseudo R^2	0.078	0.058
Observations	2336	2336

*+ p < .10; * p < .05; *** p < .001;*

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Housework division in a life course perspective in Switzerland, Eastern and Western Germany

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Participation of women in the labour market has strongly increased in European countries during recent decades. Consequently women's working hours have been increased while they have reduced their contributions to housework (Bianchi et al. 2000, Evertsson and Nermo 2004). Although men slightly increased their contribution women still do the bigger part of the housework in all European countries (Schempp et al. 2015).
In addition to this difference, gender inequality in housework division is not constant over the life course. Most researchers found that inequality in housework division increases due to events such as moving together with the partner or the arrival of children (South and Spitze 1994, Henchoz and Wernli 2013, Neilson and Stanfors 2014). The aim of this study is to understand how housework changes during transition into a cohabiting partnership and the arrival of children in 1) Switzerland, 2) Eastern and 3) Western Germany.

We choose these three societies because they share many demographic, cultural, political and economic characteristics, but have adopted different family policy regimes after the Second World War (Zabel – Heintz-Martin 2013). In Eastern Germany women were encouraged to have full time jobs while in Western Germany the male breadwinner model was strongly supported. This has still some consequences on differences with respect to the division of housework. For example there are more childcare facilities in Eastern Germany than in Western Germany and especially in Switzerland. Furthermore women still work longer in Eastern Germany than in Western Germany and in Switzerland (OECD 2015). These differences can be crucial because they can influence mothers` employment (Zabel – Heintz-Martin 2013). As for parental leave policies, Germany is more generous than Switzerland. In Switzerland, maternity leave amounts to 14 weeks and mothers are paid 80% of their wages in the form of a daily allowance, but no more than CHF 196 per day. After this period employers are not obliged to keep the mother's job. In Germany, maternity leave is also 14 weeks but with a 100% compensation. It can be followed by parental leave and it may be taken until the child reaches the age of three. During this period employer is legally obliged to keep the mother's job.

The division of domestic work between women and men is explained by many different theoretical approaches. Some derive from economic considerations such as resource bargaining and efficiency theory. They suppose that the decisions within the couple are based on rational considerations. While efficiency (Becker 1981) states that the aim of the individuals is to maximize the household joint utility by specializing on the sphere where the partners have a comparative advantage. Since typically men have a higher wage and a greater engagement in the labour market it makes them specialized in paid work and women in unpaid work where housework activity represents a considerable proportion (Neilson and Standfors 2014). The resource bargaining theory states that housework is an unpleasant task and the partners aim to maximize their individual utilities (not the household joint utility) by bargaining for the division of housework. The spouse with the higher earning potential has the resources to bargain a lower share of housework while the economically less powerful partner is expected to do more (Brines 1993).

Based on these theoretical considerations we expect that *after the transition to cohabitating relationship and the arrival of the first child the partner who has higher incomes will do less housework regardless of gender (H1).*
We suppose that the absolute income is less important for Eastern Germany than for the other two societies because more women work full time in Eastern Germany than in Western Germany or in Switzerland so their absolute income is not much lower than their counterparts (H2).

The other approach regarding the division of domestic work derives from gender theories. At the country level we can observe that there are different norms regarding gender equality in the given society. At the individual level (West and Zimmermann 1987) individuals perform gender through their daily behaviours such as domestic labour. If there is a gender atypical situation such as women having a higher income they try to spend more time on housework in order to affirm their gender identities (Berk 1985). This theory was supported by several empirical researches (Brines 1994, Greenstein 1996). Both found that men's time spent on housework increased as the share of income from women increased, up to the point where women contributed equally. After that point men reduce their housework if the women's share continues to increase their income.

Based on these theoretical considerations we expect that *men reduce their housework after the transition to cohabitating relationship and the arrival of the first child regardless of their relative incomes (H3).*
We suppose that due to the lack of parental leave and available childcare services in Switzerland women are more likely to increase their contribution to housework after the arrival of the first child than in Germany (H4).

Using data from the SHP and the German SOEP is interesting because they contain information on all household members and allow for controlling unobserved characteristics. We restrict our analysis to those who are living alone and between 18 and 45 in order to analyse the effect of the transition to cohabitation. As for transition to the arrival of the first child we consider those who are in couple and between 18 and 49.

Our preliminary results show that men decrease their contribution to housework after the transition to cohabiting relationship in all three societies regardless of their relative income. We must reject our first hypothesis and we can confirm our third hypothesis. However the relative income matters in East and Western Germany: those who earn more decrease their hours spent on housework relatively more. We do not find evidence for our second hypothesis: the absolute income does not have any effects. We can confirm our fourth hypothesis because women increase their housework activities after the arrival of the first child only in Switzerland but not in Germany. It seems that the gender approach is dominant for transitions into a cohabiting partnership but the economic approach is dominant after the arrival of the first child in Germany while the gender approach is still valid for Switzerland. It seems that the division of housework is not only negotiated by two partners, but also shaped by contextual factors. We can state that the social policy can influence the household division and should give more support for parents in Switzerland.

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Patterns of retirement transition in Switzerland

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Our aim is to investigate processes of retirement in Switzerland in a longitudinal perspective. We are especially interested to analyse these processes by distinguishing types of professional carrers during the second phase of the adulthood, for example if people were mainly employed full time or not, if they contributed to a second pillar or not. We used data collected in the *The Survey of Health, Ageing and Retirement* in Europe (SHARE) which corresponds to the third wave SHARELIFE. The Swiss sampling of SHARELIFE counts 1296 respondents. We selected individuals who were above 60 years at the end of the data collection (2009). The selected sample includes 833 respondents. The analysis of trajectories is based on a range of a maximum of 26 years of state sequences starting from age 45 and ending to the age reached by persons at the moment of the survey, but with a maximum of 70 years old. First, we used techniques of optimal matching (OMA) in order to compare dissimilarities between two sequences (Gauthier, J.-A., E. D. Widmer, P. Bucher & C. Notredame, 2009). We then applied a cluster analysis (Ward method) for partition the sequences into homogenous groups or clusters. Based on average silhouette index=0.69 we selected a partition into four clusters as the best compromised solution. We related the clusters with the patterns of retirement transition in Switzerland. We used the R package TraMineR for analyzing the sequence data as well as for producing plots of cluster showed in this paper

(Gabadinho, A., Ritschard, G., Müller, N.S. & Studer, M., 2011). Second, we developed a multiple correspondence analysis (MCA) in order to capture the systemic relation between the patterns of retirement transition and socio-demographic characteristics of individuals. This analysis was realized with the R package FactomineR (Husson, Lê & Pagès, 2009). In this abstract, we describe each of the four clusters obtained with the sequences analysis and we present results of the MCA.

The first pattern of retirement transition is linked to the professional trajectory "Full time with LPP contributions". This trajectory concerns 269 individuals or 32 % of the sample. The duration of this state consists of 18 years and corresponds to 92% of the trajectory. Individuals who developed this trajectory did not experience unemployment or disability during their career. However, several of them anticipated their retirement, the earliest by a respondent at the age of 57 years. These trajectories present a very standardized pattern of professional carrier and transition to seniority.

The second pattern is linked to the professional trajectory "Full time without LPP contributions". This trajectory concerns 218 individus or 26% of the sample. The duration of this state consists of 18 years and corresponds to 80% of the trajectory. The process of the transition to seniority starts from the age of 45 years and only one third of individuals of this group left the labor market before the AVS age, sometimes progressively through partial time employement, sometimes through professional inactivity. These trajectories are however less standardised than the trajectories belonging to first pattern.

The third pattern is linked to the professional trajectory "Partial time with or without LPP contributions". This cluster concerns 153 individuals or 19% of the sample. The duration in this state consists of 16 years and corresponds to 81% of the trajectory. The transition from partial time job to professional inactivity due to unemployment/disability passed before 60 years old. However, the transition from partial time job to retirement, sometimes with spells of professional inactivity passed after 60 years. Approximately one third of individuals continue to work after the AVS age. The legal age AVS seems to have less impact on the standardisation of the trajectories related to this pattern.

The fourth pattern is linked to the trajectory of the professional inactivity or to be "At home". This trajectory concerns 193 individuals or 23% of the sample. The duration in the state of professional inactivity consists of 19 years and corresponds to 79% of the trajectory. Only one half of individuals exits to retirement, while the other half continues to declare to be professionally inactive after the legal age AVS. The legal AVS age has no meaning for a large amount of individuals who developed this trajectory. Before the age of 60 years old however, there is the transition from professional inactivity to partial time job or full time job with a contribution to a pension fund or not.

According of the results of MCA the first axe draws an opposition between the patterns of full time activity with or without LPP contributions, and the patterns of partial time activity and professional inactivity. This opposition of the patterns corresponds to the differences between men and women trajectories and more broadly to gendered life course in Switzerland (Widmer E.D. & Ritschard, 2009, Widmer E. D., Levy, R., Hammer, R., Pollien, A., & Gauthier, J.-A., 2003; Levy, 2013). Men are involved in the trajectory characterized by a transition to retirement from a full time job without or with LPP contributions, while women are involved in the trajectory characterized by a transition to retirement from a professional inactivity or partial time. The second axe marks an opposition between the pattern of full time activity with LPP contributions and the pattern of full time activity without LPP contribution.

This opposition is strongly correlated with the birth cohort of respondents. The individuals born before 1929 are related to the pattern of full time without LPP contributions while the individuals born between 1940 and 1949 are related to the pattern of full time with LPP contributions. The second axe reproduces also the opposition between self-employed who did not contribute to LPP during their career and employed who contrbuted to the LPP. The level of education influences is also related to the type of trajectory. A low level of education is more often associated with the cluster of full time activity without LPP contributions, while a high level of education is more associated with the pattern of full time activity with LPP contributions. The third axe marks the significance to civil status. Single, widowed and divorced women are related to the pattern of full time activity with or without contributions, while married women are strongly related to the patterns of professional inactivity or partial time job.

Thus, our study confirms the different patterns of retirement transition in Switzerland. These patterns are linked to professional trajectories developed by individuals. The trajectories characterised by full time employement with or without LPP contributions, partial time employement or inactivity determine the retirement transitions. The patterns of retirement transitions in Switzerland remain influenced by gender.

Leaving the parental home, social and financial inequality in Switzerland

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Youth sociologists usually note different stages of transition to adulthood, which are often understood as access to autonomy and financial independence (Galland, 2009; Harnett, 2000). However, synchronization and irreversibility of these stages in the course of contemporary life have been questioned and some scholars have insisted on distinguishing autonomy (freedom in the way to manage and decide his/her life: conjugality, schedule, way of life) from financial independence (ability to fund his/her needs, Hamel 1999; Singly, 2000). We focus on a particular stage of the passage to adulthood – leaving parental home, which is often described as a way to gain autonomy – and we examine the impact of this emancipation process on living conditions of youths.

Our previous longitudinal analysis (Wernli & Henchoz, in press) based on the waves 1 to 14 from the Swiss Household Panel (1999–2012) showed that, for a number of young people aged 18 to 29, access to autonomy through leaving their parents' household induced a loss of material well-being but a stable financial management capability and a stable or, for youth from low-income households, a higher level of financial satisfaction. According to our results, we deduced that, for most of young people, financial satisfaction is more linked to the ability to meet their financial responsibilities than linked to the standard of living. We suggested that the higher financial satisfaction of young people from modest social class observed can be explained by the fact that residential emancipation is correlated with the access to a real personal financial independence : With their residential emancipation, they can benefit from all their earning, manage it as they want, and, especially for women, decide their own personal schedule.

In this second step of the analysis, based on the waves 1 to 15 from the Swiss Household Panel, we expand the analysis of these aspects in order to take into account the social diversity of the economic impacts of leaving the parental home in Switzerland. Some objective and subjective indicators of financial situation, as well as debt and material conditions, are used as dependent variables. We develop a typology of the impact of this emancipation process on young adults living conditions that we link with their personal, educational and professional trajectory.

The tool used to develop our typology is a two-step clustering method (SPSS TwoStep Cluster) capable of handling both categorical and continuous variables. As a distance measure, the clustering algorithm is based on the log-likelihood criterion. The number of clusters to be formed is based on the Schwarz Bayesian Criterion (BIC). The first step, calculates BIC for each number of clusters within a specified range and uses it to find the initial estimate for the number of clusters. The second step refines the initial estimate by finding the greatest change in distance between the two closest clusters in each hierarchical clustering stage.

Based on arrears of payments of bills, payments of monthly premiums linked to a loan, a debt or a leasing (no mortgage), satisfaction with the financial situation, manageability of financial situation and yearly household equivalence income, the clustering method proposed a typology in 3 groups of young adults (18-29 years) living without their parents (6342 observations, concerning 2459 different persons).

Table 1 – descriptive statistics of the 3 groups of young adults living without their parents

groups	%	satisfaction with financial situation - 0-10	manageability of household finances - 0-10	household equivalence yearly income	arrears of payments - %	payments of monthly premiums - %
serene	69%	6.89	7.53	45636	0%	0%
consumers	16%	6.63	7.14	48856	0%	100%
at-risk	14%	5.20	5.34	41581	98%	38%
	100%	6.60	7.15	45568	14%	22%

The "serene" young adults show a relatively high satisfaction and manageability of household finances, with no arrears and no debt. About 70% of young adults living without their parents are in this group. The rest is almost equally divided between the "consumers" and the "at-risk". The "consumers" young people are somewhat less satisfied and with a lower manageability of their finances. They are all indebted but show no arrears of payments (table 1). Finally, the "at-risk" young adults are clearly less satisfied with their financial situation, manage with difficulty with their income, have almost all arrears of payments and a large portion of them are indebted.

A next step was to determine parameters associated to the belonging to each of these 3 groups. We used a logistic regression model for repeated measures with a random intercept, in order to deal with the correlation of residual among observations of a single individual. In each of our analysis, "serene" young adults were defined as the baseline category in contrast to the "consumers", respectively to the "at-risk" categories.

The table 2 shows that many parameters are associated to the "consumers" and the "at-risk" categories.

Table 2 – belonging to "consumers" and "at-risk" categories – logistic regression with random intercept

	consumers		at-risk	
	exp(B)	sig.	exp(B)	sig.
age in years	1.066	0.002	0.935	0.003
man	1.197	0.282	1.332	0.076
swiss nationality	0.437	0.004	0.441	0.003
latin region	4.492	0.000	2.872	0.000
agglomeration	0.601	0.000	1.553	0.001
level of education - 0-10	0.874	0.000	0.868	0.000
currently in education	0.818	0.093	0.766	0.026
worktime - % of a full time job	1.004	0.008	1.001	0.412
number of kids	0.684	0.000	1.586	0.000
living in a couple	2.200	0.000	0.848	0.189
financial difficulties in the parental household	1.179	0.493	2.147	0.000
maximal parental level of education - 0-10	0.934	0.029	0.963	0.209
at least one parents with foreign nationality	1.195	0.438	1.176	0.452
living with father at the age of 15	0.670	0.095	0.448	0.000
living with mother at the age of 15	0.547	0.162	0.594	0.189
% of correct classification	93.80%		94.30%	
ICC	0.707		0.694	

Young adults from consumers and at-risk categories are relatively more present in the latin regions of Switzerland. They have also a lower level of education as well as a migration background. However, they differ in several properties.

The "consumers" are slightly older, show a highter rate of employment, as well as a higher probability of living in a (married or unmarried) couple, of having no kids and of living in a rural area.

On the contrary, the "at-risk" young adults are slightly younger than the "serene" ones and have a lower probability of being currently in education. They also show a higher propensity to have children. The fact they have lived without their father at the time of their adolescence, which tends to indicate that they grew up in households with higher poverty risk (Güggisber, Müller, Christin, 2012), and, which is congruent, they come from parental households which already faced financial difficulties, suggest a trend to generational perpetuation of financial difficulties particularly worrying,

As shown above, leaving parental home is a transition that is experienced in different manners. Not all youth are equal in terms of access to financial independence and financial satisfaction. We also showed in our preliminary analysis that some sociodemographic, educational and parental parameters are clearly associated to the belonging of each category of young adults.

Workshop 3B – Education & the labour market I - room 2224

Explaining the transition to upper-secondary education in Switzerland: The role of tracking, SES and informal competences

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Introduction and theoretical considerations

Over the past decades, the effect of social background on young people's educational transitions has been widely studied in sociology (see, Kloosterman et al., 2009; Breen et al. 2009; Becker and Zangger 2013). Often drawing on Boudon's (1974) concept of primary and secondary effects, previous studies have shown that in all Western countries young people's socio-economic background plays an important direct and indirect role in explaining track allocation to upper-secondary education and subsequent educational attainment (for Switzerland see e.g., Becker 2010; Combet 2013). The parents' socio-economic status is particularly relevant in countries such as Switzerland, which feature a highly stratified educational system coupled with early tracking (Shavit and Blossfeld 1993; Pfeffer 2008). In Switzerland, for example, lower-secondary education is subdivided into several tracks characterized by different academic requirements. In upper-secondary education, young people are allocated to one of the following tracks: vocational education and training programs (VET) of different intellectual requirements, to specialized schools or to baccalaureate schools.

Previous research has mainly focused on the significance of SES and school performance for the decision to either enter VET or general education at the upper-secondary level. The role of informal competencies has been largely neglected. Furthermore, VET has been treated as a homogenous educational track – despite the fact that VET programs vary greatly in intellectual requirements. Against this background, we investigate the interplay of SES, tracking, and informal competences in explaining access to two different VET levels, to specialized schools or to baccalaureate schools in Switzerland.

Theoretically, we work on the assumption that apart from cognitive skills, informal competences – such as the willingness to exert effort, persistence or academic self-efficacy - play an essential role in explaining performance and attainment at school and in the labour market (Bowles and Gintis 1976; Farkas 1990; Haase et al. 2008). Two mechanisms are likely to be at work: on the one hand, informal competences may influence the search behaviour of young people for an apprenticeship position as well as the studying behaviour of those who intend to enter general education. On the other hand, a positive assessment of informal competencies by potential employers and teachers will facilitate securing an apprenticeship or the teachers' support (e.g., positive recommendations, motivation and encouragement).

Data, Variables and Method

Our analyses are based on the Swiss longitudinal study COCON.It includes a sample of youth born in 1990/91, which is representative of the German and French speaking part of Switzerland. The data was collected in 2006, 2007, 2009 and 2012 when the respondents were 15, 16, 18 and 21 years old. We ran multinomial regression models (based on weighted data) and make use of the KHB method (see Karlsen and Anders 2011; Kohler et al. 2011) in order to decompose the effects of interest. The dependent variable captures the first transition into upper-secondary school and distinguishes between VET with low or medium intellectual requirements (VET-), VET with high requirements (VET+), specialised schools and baccalaureate schools. The models include measures for SES, lower-secondary track, school grades, basic cognitive competences, informal competencies (volition, persistence, willingness to exert effort, self-efficacy), gender, migration background and system characteristics (i.e., cantonal proportion of baccalaureates, cantonal entry regulations to baccalaureate schools)

Preliminary results

The preliminary findings imply that track allocation to lower-secondary schooling sets the course for future educational opportunities. Young people from lower-secondary tracks with high requirements have a significantly higher probability of entering VET+, specialised or baccalaureate schools.

Track allocation to lower-secondary schooling thus determines selection into upper-secondary educational tracks and leads to unequal opportunities for entering tertiary-level education. Social background plays a direct and indirect role, which is mediated by performance and track placement (amounting to about 30-40% of the total effect). This highlights that social inequalities in educational opportunities are still fairly strong. Informal competences affect access to the four tracks differently. Competences such as the willingness to exert effort, persistence or oberve rules facilitate entry into VET+. High levels of self-efficacy increase the probability of entering baccalaureate schools. Informal competences do not seem to matter for specialised schools.

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The impact of education systems on quantitative and qualitative dimensions of the youth labour market situation

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Introduction

Countries in Europe and around the world struggle with the so-called 'youth paradox' phenomenon as the situation for young people on the labour market is difficult despite high educational levels. However, comparing youth unemployment among OECD members shows that some countries seem to be better off than others. In order to explain this variation across countries, this paper analyses how the education system affects the labour market situation of the 15-24 years old. We thereby hypothesise that countries with dual (combined school- and work-based) vocational education and training (VET) are more successful in integrating young people into the labour market than countries with school-based VET, which in turn are more successful than countries focusing on general education.

Theoretical framework

Education systems are responsible for the provision of human capital according to the Human Capital Theory (Becker, 1964). In order to be able to fulfil this function, education systems need to know the demands of the labour market and to have the ability to signal the acquired human capital to employers (Breen, 2005).

Hence, in countries which provide their students with specific vocational skills and where an institutional link between vocational training and employers exists, the education system can be expected to successfully prepare young people for their integration into to the labour market. A number of empirical studies analyse the effect of the education system on the youth labour market on the individual level (micro perspective). In general, they show that a vocational orientation increases employment but not necessarily income or occupation level (Ianelli & Raffe, 2007). This highlights the importance of distinguishing different outcome variables for the youth labour market situation to get a comprehensive picture.

Additionally, some studies analyse cross-national variation in vocational effects based on differences in national education systems (e.g. De Lange et. al., 2014; Levels et al., 2014; Hanushek et al., 2011). They find evidence for the impact of institutional differences in the education system on individual labour market outcomes which varies between outcome variables and level of education

However, studies from a macro perspective, which are necessary to test our hypotheses (Raffe, 2014), are rare. Taken together, macro studies find that in countries with more vocationally oriented education systems, youth unemployment tends to be lower compared to education systems that offer more general education (e.g. Bol & Van de Werfhorst, 2013; Breen, 2005; Breen & Buchmann, 2002).

Methodology

We test our hypotheses in a longitudinal panel consisting of aggregate panel data from up to 30 OECD countries with yearly data between 2001 and 2011.

We use different dependent variables to measure the quantitative and qualitative dimensions of the youth labour market situation. We thereby rely on the KOF Youth Labour Market Index (KOF YLMI) which offers a comprehensive insight into youth labour market situations (Renold et. al, 2014) and provides cross-national data on various measures of the labour market situation of the 15-24 years old.

Our main explanatory variables aim at describing the vocational orientation of a country's upper secondary education system. Hence, they refer to the share of students enrolled in school-based VET programmes and dual VET programmes with the share of students in general programmes as the baseline category (OECD, 2014). The youth labour force share, GDP per capita, GDP growth, employment protection legislation, trade union density, and globalisation control for observable factors varying across country and time.

We start by estimating simple conditional correlations via OLS, where lagging the education orientation shares accounts for reverse causality. Furthermore, we address unobserved heterogeneity across countries in four ways. Firstly, we control for the corresponding adult labour market outcome, secondly we include the lagged dependent variable, thirdly we use random effects estimations and fourthly we estimate fixed effects regressions.

Preliminary findings

As hypothesised, countries with a higher share of students enrolled in school-based VET, compared to those with general education, tend to have significantly lower unemployment, shares of young people not in education, employment or training (NEET), and long-term unemployment. Additionally, school-based VET has a tendency for less relaxed unemployment, involuntary part-time work and a lower KOF YLMI value, whereby these results are not significant. Surprisingly, school-based VET significantly worsens skills mismatch and increases temporary work, atypical working hours, in-work at-risk of poverty cases, and relative unemployment.

Comparing dual VET with general education, we find significantly lower unemployment, relaxed unemployment, NEET shares, long-term unemployment, and less in-work at-risk of poverty cases, as hypothesised. In addition, dual VET tends to lower atypical working hours and lessen involuntary part-time work, but not significantly. To our surprise, we find slightly significant results for dual VET increasing temporary work and a not significant negative impact on skills mismatch, formal education, relative unemployment and the KOF YLMI.

We thereby find with regard to atypical working hours and in-work at-risk of poverty, that dual VET is significantly better than school-based VET.

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Horizontal skills mismatch and vocational education

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Background

Recent studies (Robst 2007, Nordin et al. 2010) have shown that horizontal skills mismatch, defined as a mismatch between the type of skills acquired by students and the skills required for their job, can lead to high wage penalties. Robst 2007 finds wage penalties of 10%, Nordin et al. 2010 find wage penalties of 20% for mismatched men and 12% for mismatched women. We investigate the argument in the literature (Nordin et al. 2010) that the more specific an education system is, the higher are the wage penalties due to horizontal mismatch. Switzerland is an ideal case to test this hypothesis because it relies heavily on vocational education and training, which is likely to include occupation-specific and firm-specific components.

Contribution

Our contribution to the scant literature is threefold. First, we extend the scope of analysis from university students to the entire workforce with a special focus on the comparison between vocational and general education. Second, we use objective as well as subjective information to measure mismatch and show that these measures capture different aspects of horizontal mismatch. Third, using longitudinal data in fixed effect regression, we are able to eliminate estimation bias due to unobserved time-invariant heterogeneity, such as individual differences in ability, motivation or, more generally, personality. These are major confounding factors for estimating the wage effects of mismatch, a problem that has received a lot of attention in the literature on vertical mismatch, i.e. on over- and under-education (e.g., Bauer 2002).

Data Set and Operalisation

The data stems from the longitudinal Swiss Household Panel in the years 1999 to 2012 with more than 36'000 person-year observations and contains subjective and objective measures of mismatch. Subjective mismatch assesses whether the total set of skills of a certain worker matches with the skills needed at the current job. Individuals who identified a mismatch could decide whether the mismatch is on a vertical level (too much or too few qualifications) or if it is on a horizontal level (no relation between own qualification and qualifications needed). Objective mismatch asks whether the human capital from the highest degree enables the worker to perform the tasks at his or her current job. This is done by comparing learned and current occupation codes based on the 2-digit ISCO classification level.

Our full sample consists of almost 8'000 individuals who are between 20 and 60 years old, employed more than 50% and reveal full information about the key variables such as wages, mismatch and occupation. Within that full sample, a smaller bio subsample is constructed. In this bio subsample, individuals must give retrospective information about their previous education and work history. Only within the bio subsample, it is possible to analyze the objective mismatch.

A short description of the samples shows the following: almost 80% of individuals feel adequately qualified, 3% are subjectively horizontally mismatched as they see no relation between their own set of qualification and the qualifications needed at the current job. 15% feel overqualified and 2% feel underqualified. In the bio subsample, the share of objectively horizontally mismatched individuals is 47%. Men are a little bit more often mismatched than women (49% to 44%).

Estimation Strategy

Mincerian wage regressions are performed for both genders separately. The dependent variable is the log of annual gross wage. We are aware that OLS estimates are biased due to the mismatched being a potentially selected group: they might differ in terms of motivation and ability or else. Nevertheless, OLS estimates are needed to perform an international comparison.

The set of controls include a variety of personal and occupational and firm characteristics. In a next step, fixed effects regressions are calculated. Fixed effects regression eliminates time-invariant individual unobservables, and is our preferred method. Three different models are estimated, where we include the set of subjective and objective mismatch variables either separately or combined.

Results

OLS results show that the wage penalties of being subjectively horizontally mismatched are substantial (11% for women and 8% for men), and larger than the penalties of being objectively horizontally mismatched (3.8% for women and 3.1% for men). Compared to international results, the findings for the subjective horizontal mismatch are very similar. However, the penalty for being objectively horizontally mismatched is much lower in Switzerland than in Sweden.

Controlling for time-invariant heterogeneity in fixed effects regressions, the wage penalty for self-reported horizontal mismatch decreases to 3.2% for women. For men, it is not significant. The wage penalty for overqualified men (1.7%) is lower than for women (2.2%). If we compare learned and current occupation as an indicator of horizontal mismatch, results differ when eliminating the bias: Not working in a learned occupation does not lead to significant wage effects for both genders.

We further compare the penalties for three different education groups. Individuals are assigned according to their highest educational degree: apprenticeship traininig, tertiary B education (e.g., technical college) and tertiary A education (e.g., university degree). Overall, the wage penalties found are similar for workers with general and vocational education background. One exception is worth mentioning. Vocationally educated women experience a wage penalty due to being subjectively horizontally mismatched.

Conclusion

The analysis of horizontal mismatch in Switzerland shows that there are substantial wage penalties due to being subjectively horizontally mismatched. The effect for being objectively mismatched is much lower. When eliminating time-invariant individual heterogeneity, effects become much lower, suggesting that mismatched individuals are a selected group. The sub-analysis within three different educational groups shows that horizontal mismatch is harmful for vocationally educated women, but not for men. Overall, these results do not suggest that vocationally educated individuals are hindered in their mobility compared to general educated workers.

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How far does the apple fall from TREE? A cohort comparison of TREE and DAB data on social selectivity at the transition to upper secondary education in German-speaking Switzerland

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In spite of the educational expansion taken place in the last decades, there is still social selectivity for transitions after the compulsory school. For describing the intergenerational reproduction of education, TREE data has been extensively used in the last 15 years to analyse the transition from lower to upper secondary education in Switzerland for juveniles born 1985. In particular, because no comparable data sets are available. However, these data provide no information necessary for revealing the change of social inequality of educational opportunity as well as the social mechanisms responsible for social selectivity of this transition. In the presentation, therefore, data of the two first waves of TREE as well as panel data of the DAB panel study are used for a cohort comparison on social selectivity at the transition to upper secondary education in German-speaking Switzerland. The DAB panel study is focusing on the decision process (and the mechanisms working behind) of about 3.500 pupils born around 1997 who left lower secondary education in summer 2013. The DAB data was collected in the middle of 8th grade (Jan./Feb. 2012), at the beginning (Sep./Oct.2012) and end (Mai/Jun. 2013) of 9th grade, as well as 15 months after completion of the last year of lower secondary education (Oct./Nov. 2014).

Although DAB only covers German-speaking Switzerland, this data set is the most actual on this educational transition for this language region and comparable with TREE regarding the sample size. In contrast to TREE, the DAB data provide explanation of the social structure of the transition after the compulsory schooling.

The transition from lower to upper secondary education in highly stratified educational systems – as in the Swiss educational system – is strongly associated with inequality in educational opportunity (IEO) Several studies using TREE Data have shown that this transition is selective concerning social origin (see Sacchi et al. 2011; Combet 2013; Müller and Wolter 2014), gender (see Hupka 2003; Stalder, Meyer, and Hupka-Brunner 2011) and migration background (see Meyer 2003; Imdorf 2005; Seibert, Hupka-Brunner, and Imdorf 2009; Beck et al. 2010). The aim of the presentation is to answer the question whether the impact of social origin, gender and migration background changed at this transition between the TREE and the DAB-cohort. Our analyses focus on the educational track attended right after leaving compulsory school on the one hand and on the educational situation of young adults around one and a half years later on the other hand.

1) Situation after leaving compulsory school:

A significant share of the pupils of both cohorts (23% TREE, 17% DAB) do not start a certifying upper secondary education (vocational education and training (VET), vocational baccalaureate or baccalaureate schools) after 9th grade, but instead take up an interim year (bridge school year, vocational preparation school, internship, etc.) or do not start any education. We therefore differentiate in a first step of the analyses between starting a certifying upper secondary education vs. not starting a certifying upper secondary education. When in logit regression the attended school track at lower secondary education is accounted for, the chances to start a certifying upper secondary track directly after 9th grade are significantly higher for pupils of the school type with advanced requirements (or gymnmasium preparation school) compared to students of the school type with basic requirements. As for the TREE cohort, young females of the DAB cohort have a significantly higher risk to start an interim year instead of a certifying track compared to their male counterparts. We find no significant effects of the migration background on the educational outcomes, when controlling for social origin and school performance (e.g. marks in german and maths). The effects of social origin on starting a certifying upper secondary educational track directly after 9th grade are relatively small. TREE data show that students whose parents have no post-compulsory education (ISCED 1 & 2) have significantly lower chances to start a certifying post-compulsory education after leaving school. This effect even remains significant when controlled for grades in maths and german. We can still observe this negative effect for the DAB cohort, but the effect is not significant.

2) Situation 15 months after leaving compulsory school:

The second part of the analyses focuses on the educational track attended by the juveniles in the two cohorts 15 months (DAB) and around one and a half years (TREE) after leaving compulsory school, respectively. The results show that 15 months after leaving compulsory school a large majority of both cohorts has started a certifying education (TREE: 92%; DAB: 96%) such as vocational education and training (VET), vocational baccalaureate or baccalaureate schools. These three educational outcomes are analysed in a multinomial regression excluding students who attended a school type with basic requirements, since they are not eligible to start a baccalaureate school or vocational baccalaureate. Differences between the two cohorts are observed concerning the chances to attend vocational baccalaureate. Where in the TREE cohort young females had significantly lower chances to start a vocational baccalaureate school, we find no significant effect for the DAB cohort. For both cohorts there are significant gender differences in the attainment of baccalaureat schools and VET. Women are less likely to attend VET, but are more likely to attend baccaulaureate schools than men. Regarding social origin effects, we observe significantly lower chances for students from parents with no post-compulsary education (ISCED 1 & 2) to attend baccalaureate schools in the TREE-cohort. This effect is still negative for the DAB-cohort, but not significant anymore. Finally we find rather small effects of migration background on the attended upper secondary educational track when controlled for social origin, school performance and school type.

To sum up, relatively little has changed in the past decade concerning social selectivity at the transition from lower to upper secondary education in German-speaking Switzerland. Gender inequality of the enrolment in vocational baccalaureate has decreased in the past decade to some extent and we observe a modest decrease of social selectivity of the enrolment in baccalaureate schools for students from parents with no post-compulsory education. The strongest effect – which is not a novelty – is the impact of the social selective transition into one of the school types and the enrolment there until the end of compulsory school. The interplay of class structure and the institutional structure of the educational system contributes to social selectivity in the transition to upper secondary education.

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The role of training firms in explaining transitions to higher education

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Introduction

Many studies highlight the role of firm characteristics and work rewards in explaining work satisfaction and career trajectories. Whether such structural aspects also matter for young people in firm-based vocational education and training (VET) has rarely been investigated. We attempt to fill this gap by analyzing whether structural characteristics of the training firm influence educational choices of VET learners after completion of upper-secondary VET. This question is of particular relevance for countries with a large VET sector, such as Switzerland, where the majority of young people enter upper-secondary VET.

Theoretical background and research question

Theories of labour market segmentation posit that the labour market is divided into segments, which differ regarding aspects such as product markets, average firm size or qualification level of the staff (Sengenberger, 1987). These structural differences result in varying working conditions (e.g., task quality), opportunities for further training, mobility and wages for the staff (Baron & Bielby, 1980; Tolbert, Horan & Beck, 1980). Applied to the Swiss healthcare labour market, two main segments may be identified, which we term primary and secondary segment. Firms and organisations belonging to the primary segment are generally equipped with higher financial and staff resources and better career opportunities compared to firms belonging to the secondary segment. This in turn may affect work satisfaction and career decisions at the individual level (Kalleberg, 1979). In health care, the primary segment mainly consists of acute care organisations, also termed hospitals. Long-term organisations (mostly nursing homes) are usually found in the secondary segment (Stevens, 2011, Jaccard et al., 2009). Previous research pertaining to healthcare confirms the relationship between working conditions and work satisfaction (i.e., Rafferty et al., 2007). More precisely, high task quality (such as challenging, autonomous tasks) and a low workload have been described to increase individual work satisfaction.

Furthermore, these aspects have also been shown to decrease quits of the occupational field (Roulin et al., 2014; Decker et al., 2009). Whether structural characteristics (i.e., a training firm in the primary or secondary segment) also affect the decision for further training has, to our knowledge, never been addressed. A work environment with a high share of tertiary educated staff and good opportunities for advancement may motivate trainees to

enter higher education. Furthermore, high work satisfaction may motivate young people to remain in their field of training (Hayes, 2012). We thus hypothesize that young people who trained in the primary segment (in organisations with higher resources and better educated staff) are more likely to pursue a tertiary-level education than those training in the secondary segment. Furthermore, we assume that higher work task satisfaction leads to lower turnover (quits of the occupational field), all other factors equal.

Method

Our analyses are based on a longitudinal sample of health care trainees in all parts of Switzerland (n=1065) who were surveyed in the last year of their apprenticeship (2010), and one year after completion (2012). The dependent variable "career decision one year after training" distinguishes four categories (work in the training field; tertiary B education; tertiary A education; quits of the occupational field). Structural characteristics of the training firm are captured by the segment (primary segment = acute hospitals, secondary segment = nursing homes) and by firm size. Work task satisfaction is measured with a 6-item index of task quality based on Prümper, Hartmannsgruber & Frese, 1995, and Wosnitza & Eugster, 2001). Stress perception is captured with5 items (see Bartholomeyczik, Beckmann & Bernhard, 2007). Career choices were analysed using descriptive statistics and multinomial logistic regressions.

Results and discussion

Descriptive and multivariate analyses confirm the hypothesized effect of the training firm (net of other determinants): Young people who trained in a firm belonging to the primary segment were more likely to choose a tertiary education, compared to former apprentices who trained in the secondary segment. Those from the primary segment also report higher work task satisfaction and lower stress perception compared to young people who trained in the secondary nursing home segment. High work task satisfaction and low stress perception are, in turn, associated with a higher chance of entering tertiary B education. Furthermore, high work task satisfaction lowers the probability to quit the occupational field. In sum, structural characteristics of the training firm and the concomitant individual work satisfaction matter for former upper-secondary VET trainees' transitions to tertiary-level education. Work environments characterized by a high level of staff qualification, more prevalent in the primary segment (hospitals) are associated with high work task satisfaction and low stress perception, supporting former trainees to pursue a tertiary degree and to remain in the occupational field. Hence, the training allocation to the primary or secondary segment affects subsequent career choices. These findings also imply that in countries with a large share of vocational education and training, the structure of the labour market matters not only for workers' careers but also for young people's educational attainment. Future research should thus pay more attention to structural characteristics of training firms and their significance for higher education.

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Workshop 3C – Politics and attitudes - room 2230

Accounting for the Highs and Lows: an Investigation into Individual-Level Variation in Political Interest

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This paper sets out to determine what causes individual-level variation in political interest in two European democracies. By using a number of panel data regression analyses that test data from the British Household Panel Survey and the German Socio-Economic Panel, I offer a number of findings that build on the literature. The most important finding is also the broadest – variation in political interest is not solely the result of measurement bias. Events in people's lives do affect their level of interest in politics. The variables that this paper uses to explain variance in political interest measures change in skills and resources. Only one of these skills and resources variables was consistently found to affect political interest - assessing one's own financial circumstances as 'very difficult' or very concerning raised respondents' political interest. An individual's political interest is increased when provoked by financial grievances in both of the countries that were tested in this paper.

However, the finding that a very difficult self-assessed financial situation increases self-assessed political interest is nuanced, and perhaps more theoretically important, when the effect is examined at different levels of political interest. On the one hand, a very 'difficult' or 'concerning' financial situation has a positive effect on political interest for those who define their political interest as high or, to a lesser extent, somewhere in the middle. On the other hand, such an assessment has a negative effect on political interest for respondents who declare themselves to be 'not at all' or 'not very' interested in politics in the UK and, also, in Germany for the over-35s. These findings point to three lessons for the literature. First, and most specifically, the effects of skills and resources may affect different types of citizens in different ways. While those with an already low level of political interest turn away from politics when they undergo financial difficulties, those citizens with already high levels of political interest are aggrieved and thus mobilised into having a greater interest in politics by financial hardship. Second, the effects at high and low levels of variance in political interest are sometimes opposite and, in this case, may cancel each other out, leading to the appearance of a weaker effect or no effect at all when political interest is tested singularly at all levels. Third, as has already been diagnosed in the literature, variation in political interest is determined in different ways across the life course. This study showed that, although financial hardship sparks a greater political interest in the low-level variance amongst under-36 year olds in Germany, the same situation causes older low-level Germans to become less interested in politics.

A number of previous scholars have argued that the determinants of individual-level variation in political interest vary across countries. The effects of age, negative in the UK and positive in Germany, support this argument. Having a university degree also gave an opposite effect in both countries and both countries saw a reversal in direction of effect when only over-35s were tested. On the other hand, household income was consistently shown to have little or no effect on political interest in Germany and the UK and the effects of financial difficulty were highly similar in both countries, in direction and in the increase in magnitude at higher levels of political interest variance. It may simply be the case that some determinants of political interest travel better than other.

In terms of skills and resources as an approach to greater understanding of individual-level political interest, this paper provides only the most elementary of beginnings. Besides income's lack of effect, education had unpredictable and, in the case of Germany, counter-intuitive effects. Why a university degree would increase political interest in the UK but would have a negative effect and decline in a similar fashion in Germany is hard to explain. The more robust findings regarding financial situation suggest that, other psychological or subjective variables, rather than monetary or objective ones may better explain the purely psychological political interest.

Overall, variance in political interest at all ages is not random nor entirely the result of measurement biases. Though previous studies have argued that the longest-lasting formative variables of political interest come earliest in the life course, changes in an individual's political interest can still be predicted by phenomena that happen throughout life. How experiences and changes affect an individual's political interest are not necessarily the same for those who, at other times in their lives, tend to have higher or lower political interest. Nor are these effects the same for those in different countries. However, at times they are alike with convincing symmetry between both countries and levels of interest. Finally, if this exploratory and highly parsimonious study is anything to go by, subjective variables may better account for political interest than the objective ones that have generally be used before in other studies, both within and between individuals. Political interest is one of the most important predictive variables for political behaviour and further investigating its variance within individuals across time holds great promise for the literature.

Immigration, Cultural Distance and Natives' Attitudes Towards Immigrants: Evidence from Swiss Voting Results

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In this paper, we combine outcomes of 27 national votes about immigration policies in Switzerland between 1970 and 2010 with data from the Swiss census to estimate the causal effect of local immigrant shares on natives' attitudes towards immigration. We focus on understanding how this relationship is affected by the level of dissimilarity in cultural values and beliefs between natives and immigrants. Moreover, to take the potential endogeneity of locational decisions into account, we instrument the immigrant share within a community with the immigrant share of the local labor market a community belongs to.

We find that it is not so much the overall immigrant share, but mainly the presence of immigrants with a different cultural background that affects the voting behavior of Swiss citizens. Specifically, the local share of culturally different immigrants turns out to be a significant and sizable determinant of the share of anti-immigration votes while, in contrast, the presence of culturally similar immigrants does not seem to affect natives' voting behavior at all. Our preferred estimates imply that a one percentage point increase in the local share of culturally different immigrants results in a 1.15 percentage point increase in anti-immigration votes in an average national vote about immigration. This estimate implies an approximate elasticity of natives' anti-immigration attitudes with respect to the share of culturally different immigrants of about 0.14. This finding turns out to be robust to a variety of robustness checks, including the use of alternative instruments and the use of alternative classifications of immigrants. Moreover, an additional analysis of voter turnout and the potential of participation bias suggests that our main results are only weakly, if at all, influenced by participation bias, strengthening the external validity of our estimates. Finally, analyzing vote shares in favor of the right-wing Swiss People's Party at national elections over the same time period reveals that the share of right-wing votes is even more elastic with respect to the share of culturally different immigrants than natives' attitudes to immigration (with an estimated elasticity of about 0.31).

We think that the most plausible explanation for the large positive effect of culturally different immigrants on natives' anti-immigration attitudes, and the share of culturally similar immigrants being mostly insignifiant at the same time, relates to cultural concerns among native residents. More specifically, part of the native population appears to perceive culturally different immigrants as threatening their national identity, i.e. their culture, their language, religion, and their way of life in general. However, since cultural values and beliefs are not the only difference between the two groups of immigrants, we cannot rule out that other mechanisms (such as differential labor-market impacts of the two groups of immigrants) are also important. The paper presents, for this reason, some additional evidence which appears very much in line with our argument that the differential impact of the two groups of immigrants on natives' attitudes to immigration is, to a large extent, driven by concerns about compositional amenities derived from, for example, the cultural composition of childrens' peers at school.

The political significance of neighbors. Using spatial econometrics to untangle contextual influences on political participation

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Background

How does the residential context affect the form and amount of political participation? What is the role of others, especially in local networks? Does localized social capital matter in such processes? The aim of this contribution is twofold. First, it tries to give an answer to these questions for the case of Switzerland and to elaborate the relevant social mechanisms. Second, an adequate methodological framework is presented to test these mechanisms. To start with, we develop an actor based model of both, political participation and contextual influences (Abowitz 1990). Thereby, contextual influences upon the benefits, costs, and the likelihood of participation in form of processes of information diffusion seem especially important. Hence, we further specify the rather broad mechanisms in the literature such as 'social interaction', 'status-inconsistency', and 'cross-pressures' (Putnam 1966; Huckfeldt 1979; Bühlmann 2006). Moreover, methodological advancement – especially in the field of spatial econometrics (Elhorst 2014) – allow us to adequately estimate such social interaction effects. In doing so, further insight from the work on the role of social capital (Putnam 2000) in general and of social networks (McClurg 2003) in particular for various forms of political participation can be incorporated and tested within a consistent framework.

Method

Past research on contextual effects mostly ignored potential solutions such as Instrumental Variables (Angrist et al. 1996) to the problem of the unobserved selection into contexts and the endogenous nature of compositional effects (Manski 1993). In the present contribution, we propose an alternative strategy that not only allows us to address these problems but also to untangle different sources of contextual influences (i.e., structural and compositional effects – Books & Prysby 1991). For this reason, the residuals of initial regression models are examined for potential spatial dependence according to the suggested connectivity of observational units (the matrix W_i in equation 1 and 2; in the present case, the social space of the common exposure according to the

$$Y_i(error) = \beta X_i + \lambda W_i \varepsilon + \varepsilon_i \tag{1}$$

Swiss Federal Statistic Office's community typology). The respective statistics – Moran's I and the Robust Lagrange Multiplier Test (RLM) – do not only inform about the extent of mutual influences but also allow the identification of the pattern of interdependence. While the dependence due to the exposure to common unmeasured exogenous shocks or spatially autocorrelated determinants of the dependent variable are captured in the spatial error model (equation 1), the spatial lag equation (2) explicitly models the interaction of observations

$$Y_i(lag) = \rho W_i Y + \beta X_i + \varepsilon_i \tag{2}$$

regarding the dependent variable (social spillovers – e.g., according to a diffusion or contagion process; Elhorst 2014: 8ff.). Hence, these models (which can be further extended to allow indirect spatially autocorrelated effects among independent variables – $W_i X$) enable the differentiation of structural (Spatial error) and compositional effects (Spatial lag). With regard to our research question, we are thus able to adequately untangle various sources and processes of contextual effects upon different forms of political behavior.

Results

In what follows, the summarized results with data from the World Value Survey 2007 are outlined exemplarily and in brevity (Although less persistent, the same pattern emerges with data from the SHP 2010 and SELECTS 2011). As demonstrated in Table 1, there are some pronounced differences of contextual influences between parliamentary (i.e., voting) and non-parliamentary forms of participation (i.e., a scale measuring the participation in demonstrations, boycotts, strikes, etc.). Community attachment and trust in neighbors as suggested proxies in the literature (Books & Prysby 1991: 54) are only marginally significant – especially in the case of non-parliamentary participation. The role of other information sources – friends but also institutionalized forms of social capital (memberships in civic associations) – is especially pronounced for non-parliamentary forms of participation. However, it should be noted that for computational reasons in the spatial models, we had to estimate a linear probability instead of a more adequate probit or logit model in the parliamentary case. Nevertheless, it also becomes clear that these measures of social interaction and local information sources account for only a part of the initial spatial dependence. While the interdependence seems to be mainly due to unmeasured factors and common exposure to other contextual dimensions of the community typology in the parliamentary case (e.g., higher 'pressure' to participate in rural communes to fulfill community standards), there is strong evidence for spillover effects others than local sources of information in the non-parliamentary case (i.e., one participates more often due to the higher participation of others in one's context – highly significant, positive ρ and RLM-coefficients).

Table 1: Results WVS 2007

| | Parliamentary Participation (Voting) | | | | Non-parliamentary Participation | | | |
| | OLS | | Spatial Error | | OLS | | Spatial Lag | |
	Base	Mediation	Base	Mediation	Base	Mediation	Base	Mediation
Information source: Friends & colleagues	0.010 (0.05)	0.009 (0.05)	0.023 (0.05)	0.022 (0.05)	0.730*** (0.15)	0.737*** (0.17)	0.804*** (0.16)	0.808*** (0.16)
No. active memberships	0.035*** (0.01)	0.031*** (0.01)	0.036*** (0.01)	0.031** (0.01)	0.135*** (0.04)	0.141*** (0.03)	0.141*** (0.03)	0.147*** (0.03)
No. passive memberships	0.015+ (0.01)	0.012 (0.01)	0.016* (0.01)	0.013+ (0.01)	0.087** (0.03)	0.090*** (0.03)	0.089*** (0.03)	0.092*** (0.03)
Interest in politics	0.085*** (0.02)	0.083*** (0.02)	0.092*** (0.02)	0.091*** (0.02)	0.274*** (0.05)	0.285*** (0.06)	0.314*** (0.05)	0.324*** (0.05)
Trust in neighbors (Reference: Trust completely)								
no trust at all		-0.089 (0.12)		-0.092 (0.10)		-0.675+ (0.38)		-0.720* (0.33)
not very much		-0.086 (0.05)		-0.082+ (0.05)		-0.172 (0.15)		-0.186 (0.16)
somewhat		-0.048 (0.03)		-0.046 (0.03)		-0.193+ (0.12)		-0.197+ (0.11)
Community member (Reference: Strongly agree)								
strongly disagree		-0.131* (0.06)		-0.140* (0.06)		0.362 (0.22)		0.307 (0.19)
disagree		-0.073+ (0.04)		-0.083* (0.04)		0.240+ (0.13)		0.233+ (0.13)
agree		0.002 (0.03)		-0.005 (0.03)		0.044 (0.10)		0.027 (0.10)
N	923	923	923	923	1002	1002	1002	1002
Log-Likelihood	-410.583	-403.227	-407.101	-399.190	-1711.457	-1705.734	-1695.219	-1689.370
RLM: Spatial lag	1.297	2.317			12.466***	11.128***		
RLM: Spatial error	3.972*	6.407*			2.509	4.067*		
Lambda / Rho			0.449** (0.15)	0.471*** (0.14)			0.619*** (0.09)	0.620*** (0.09)

Source: World Value Survey 2007, own calculations. Dependent Variable: Parliamentary & Non-parliamentary Participation. Additionally controlled for highest education, household's economic situation, age, gender, marital status, and political self-positioning (Constant not shown). Standard errors in parentheses. $^+ p < 0.10$, $^* p < 0.05$, $^{**} p < 0.01$, $^{***} p < 0.001$

So far, the results support the hypothesis of contextual influences via local sources of information and interaction. However, the significant spatial autocorrelation after accounting for this mechanism suggests additional processes to be at work. Although in line with previous research using the same methodological approach (Tam Cho & Rudolph 2008), we need to pay further attention to other potential mechanisms. As a starting point, additional insight on the underlying diffusion processes might be gained from a more detailed inspection of the local equilibria, i.e. by computing marginal and conditional effects for the interdependent units.

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Off to a Bad Start: Unemployment and Political Interest during the 'Impressionable Years'

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Abstract

This paper analyzes the effect of unemployment experience on political interest. The existing literature has argued that unemployment experience has a negative effect on the propensity to be involved politically because unemployment deprives workers of important resources: exposure to political discussions and recruitment, income, and a site to 'practice' civic skills (cf. Brady et al. 1995). Focusing on political interest, we challenge the resource literature from two sides. Theoretically, we argue that the resource approach neglects life cycle stages. Socialization studies show that some of the resources provided by workplaces matter only during the 'impressionable years,' but not later on in life. Ignoring life cycle stages therefore risks underestimating political behavior effects of unemployment on young workers and overestimating them for those past the impressionable years. Our second criticism is methodological. Existing literature on unemployment effects is largely based on cross-sectional survey data, which makes it impossible to eliminate unobserved heterogeneity due to selection into unemployment. We find that only unemployment during the impressionable years reduces political interest, which can be explained by the crucial role the work site plays for political socialization during the 'impressionable years.' Moreover, we find that unemployment experiences early in the employment career have scar-effects, thus also reducing political interest in the long term.

Data and Method

For our analysis we use data from the German Socioeconomic Panel (SOEP) covering the waves from 1984 to 2013. We are primarily interested in people who entered the labor market and experienced unemployment in some of the subsequent years. Using all available SOEP waves, we follow respondents on a yearly basis from their first observation in employment onwards. Our methodological approach needs to take the development of political interest over the life cycle into account. On average, political interest follows a pattern of limited growth with strong increases in political interest at a young age and decelerating growth as people become older. We compare individual changes in political interest before and after unemployment (this aligns with the idea of two-way fixed effects models). We prefer a comparison of two waves to multiple-wave approaches because the measures of unemployment as well as the political interest variable show very low levels of temporal variance (Prior 2010). Yet, for example, multiple-waves fixed effects models usually assume that yearly shocks directly translate into a potential effect. However, this is an unlikely expectation given the resilience of political interest. Two-wave models allow us to flexibly set time gaps, allowing us to treat the time it takes for an effect to materialize as an empirical question.

To assess the effect of unemployment over different age groups, we use propensity score matching (PSM), which provides a number of advantages in a panel data setting. In a two-wave setting with strong autocorrelation, linear fixed-effects approaches face a number of issues such as Nickell bias and inconsistency through autoregression. The less parametric PSM approach allows us to circumvent some of these issues. PSM approaches are also advantageous because they perform better in case of rare treatments (i.e. unemployment), they align closely to experimental thinking, and allow researchers to balance on pre-treatment levels of the dependent and independent variables (cf., Aassve et al. 2007; Lechner 2013). Our main interest lies in the effect of unemployment on political interest, which is described by the average treatment effect on the treated (ATT).

$$(1) \quad ATT = E(Y_{1i} - Y_{0i}|D_i = 1) = E(Y_{1i}|D_i = 1) - E(Y_{0i}|D_i = 1).$$

However, $E(Y_{0i}|D_i = 1)$ can be identified only by imposing assumptions on the selection process. Most importantly, we have to assume conditional mean independence under the condition that treatment and control group are balanced on a propensity score:

$$(2) \quad ATT = E_{p(X_i)}[E\{Y_{1i}|D_i = 1, p(X_i)\} - E\{Y_{0i}|D_i = 0, p(X_i)\}].$$

In a panel data setting we can strengthen balancing by including pre-treatment co-variates in the estimaiton of the propensity score. Moreover, we can account for individual-fixed confounders by first-differencing the outcome, applying so-called diff-in-diff PSM (Lechner 2013).

Results

Table 1 presents diff-in-diff PSM estimates for the effect of unemployment on changes in political interest over different age groups. The effects are evaluated two years after the first observation in employment (t2) with possible unemployment experiences in t1 or t2. We see that the negative effect of unemployment only appears among young respondents. It is particularly strong among respondents that we could identify as labor market entrans in t0 (first labor market experience in life).

Table 1: Diff-in-Diff Propensity Score Matching Estimates (difference in political interest between t0 and t2)

	All Respondents		**Age<=35**		**Age<=30**	
	ATT	Std. error	ATT	Std. error	ATT	Std. error
Unemployment	-0.017	0.027	-0.047	0.033	-0.079**	0.036
Observations	18275		8856		6893	

	Age<=25		**Labor market entrants**			
	ATT	Std. error	ATT	Std. error		
Unemployment	-0.101*	0.052	-0.119**	0.058		
Observations	4739		2719			

**p<0.05; *p<0.1

Note: 5 nearest neighbors matching; standard errors bootstrapped using 50 iterations; balanced on: political interest t0, hh income t0, migrant background, gender, age, education, party identification, year dummies

Table 2 presents estimates of the effect of early unemployment (under the age of 31) on political interest at least ten years after the experience was made. Respondents experiencing unemployment in young age also show substantially lower levels of interest in the long term.

Table 2: Propensity Score Matching Estimates for Scaring Effects

	Respondents aged>=40 (in 2011)	
	ATT	Std. error
Unemployed aged<=30	-0.125***	0.047
Observations	6372	

***p<0.01; **p<0.05; *p<0.1

Note: 5 nearest neighbors matching; standard errors bootstrapped using 50 iterations; balanced on: unemployment aged>30, years in education, gender, age, east dummy, hh income, Erikson-Goldthorpe classes, church attendance, union membership, migrant background, unemployment worries, hh with kids, married dummy

Implications and Further Steps

We have studied changes in political interest following experiences of unemployment in a nationally representative sample of the German population. Our results strongly confirm the argument that unemployment effects are conditioned by socialization stages. From middle age onwards, unemployment no longer depresses political interest. However, unemployment has the potential to impede the building up of interest among young workers. From a normative perspective, a discomforting finding is that early unemployment produces scarring effects on political involvement. Given the scope of youth unemployment in many democracies, the possibility of persistently lowering political interest certainly is alarming and warrants more research.

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Being or becoming an activist? Assessing the link between worldviews, intentions and protest

Gian-Andrea Monsch, Fors

My research focuses on activists' worldviews and how they are related to protest participation. In this paper, I put an emphasis on the causal links between activists' relation to politics and society, their protest intention and protest membership. Do specific social and political worldviews spur protest participation? Are specific worldviews thus necessary conditions to become an activist? Or, in contrast, do social interactions during protest activities shape activists' mind? Are particular worldviews an effect of protest participation?

Whereas research on activism has demonstrated the importance of worldviews, the causal relation of these links remains unclear. Moreover, there is evidence for both causal links.On the one hand, some scholars (e.g. Gamson 1982, Klandermans 1997) argue that specific frames, i.e. worldviews, are necessary conditions for protest. In order to be motivated to participate in protest activities, activists need to perceive a situation as unjust (injustice frame), realize an opportunity to change the existing situation (agency frame) and identify with the groups involved in a political struggle (identity frame). On the other hand, scholars (McAdam 1982, Munson 2008) have pointed to the possibility that these action frames only develop once individuals have started participation. Thereby, worldviews become important to sustain participation. Consequently, I investigate here if individuals have an "activists' mind" before they start participation or if they only become an activist after they became a member of contentious organizations.

The role and the construction of the activists' mind is thus a hot topic in the social movement literature. However, in line with my previous research (Passy & Monsch 2014, forthcoming), I suggest going one step further. First, I argue that a focus on collective action frames faces two severe limits. On the one hand, they are collective frames meaning that an individual passively aligns herself to these frames on a collective level. While the literature has thus revealed what types of perception have to be incorporated by activists, they say nothing about how individuals come to align themselves with these frames. Second, activists' mind has far more to offer then only three types of frames. Every individual possesses a far richer and often contradictory pool of worldviews, which is capable to orient our action. We thus have to go beyond Gamson's triplet of injustice, agency and identity and look at broader worldviews. Based on my previous research, I suggest concentrating on individual's relation to society and politics.

I seek answers to these raised questions by the use of longitudinal survey data from the Swiss Household Panel from 2002 to 2008. The main advantage to use panel data is their longitudinal design as this gives a rather rare opportunity to analyze change over time. While there are a few exceptions, the bulk of empirical work within the filed of protest participation is based on single case studies or cross-sectional designs. Consequently, causal claims are often based on theoretical arguments rather than on empirical evidence.

My results are based on three types of analyses: 1) To analyze differences between individuals with a high level of protest intention and individuals with a low level of protest intention a simple pooled OLS regression was run. This first type of regression allows me to assess the importance of worldviews and effectively, the results show that there are large differences for worldviews between individuals with high and low protest intention respectively. 2) I ran a fixed effect and a first difference regression to look at wihin-person variations. It turns out that there is only little change in individuals' worldviews over the course of the seven years under scrutiny. 3) I am just doing a growth curve model in order to analyze more closely the specific causal links between worldviews, intentions and protest membership.

With this article, I try to shed some light on the process linking worldviews, protest intention and membership. I found evidence that specific worldviews, i.e. individuals' relation to society and politics, spur the construction of protest intention but at the same time, protest participation also shapes activists' worldviews. I found thus supportive empirical evidence for both arguments. I show that individual's social and political worldviews, e.g. their opinions about the amount of social expenses or the level of trust in the Federal government, differentiate levels of protest intention. And these factors remain significant even if other important factors like social networks come into play. Thus, we have a strong argument for the importance of worldviews. In contrast, worldviews only slightly change through protest participation or, more exactly, due to a change towards a higher level of protest intention. While there certainly is some form of movement socialization, especially for individual's relation of politics, becoming an activist clearly implies to construct specific worldviews before protest takes off. Consequently, my preliminary answer to the introductory questions – being or becoming an activist – would be that we have to assume both processes exist. Being and becoming an activist is the main message. Hence, specific worldviews are required to start protest participation and at the same time, these worldviews are susceptible to get reinforced during participation.

Workshop 4A – Survey methodology - room 2208

Modeling cooperation in an address-register-based telephone/face-to-face survey

Oliver Lipps, FORS

Abstract

Aim of this paper is to better understand effects on cooperation from the actors involved in surveys where the primary survey mode is the landline, and face-to-face for households with no telephone. The actors are the households contacted to complete the survey, and the interviewers trying to obtain cooperation. We will use household socio-demography and their fieldwork status, and effects from interviewer performance at the current survey. In addition, we analyze if these effects vary by survey mode used. We conclude with recommendations to improve fieldwork.

Actors: Households and Interviewers

Though household socio-demography is generally lacking a causal relationship with survey cooperation, most of these variables have been shown to correlate with household survey cooperation. We will make use of such variables available from the sampling frame where sample members were drawn from. In addition, we will use characteristics of the prior contacts on households in the case of later contacts.

Many interviewer characteristics were examined to analyze cooperation in previous research. While most papers reported weak effects at best, we were able to test a number of them based on the telephone part of the survey used in this paper. Effects were insignificant once we control for sample member socio-demography, fieldwork progress and interviewer performance. Interviewer experience appears to be effective during training and on the job. Some of the existing models neglect the burden which interviewers face as an important factor for interviewer performance. Previous research found evidence of adverse effects on cooperation from negative previous contact performance (refusals), without compensation by positive previous performance (interviews). To summarize the role of interviewers, focusing on effects from prior interviewer performance and experiences collected during the current survey so far seems a promising avenue.

Date and modeling

We use data from the 2013 refreshment sample of the SHP, which was drawn by the Swiss Federal Statistical Office (SFSO) from a frame of individuals residing in Switzerland and based on population registers. The frame does not include telephone numbers. They need to be separately searched and matched to the sample. The SFSO matched the sample against their register of telephone numbers. Members with a publicly listed number were contacted from a telephone center, while households without a telephone number were approached by a face-to-face interviewer. We use socio-demographic variables from the register, telephone number matching information, and CATI process ("para") data. All information is available for both telephone and face-to-face contacts.

As dependent variable of household cooperation, we use the SHP grid completion dummy, using all contacts until a final disposition is recorded. This means, all contacts done on a household would be assigned a "1" if the household finally participates, "0" if not. In the telephone subsample, where contacts are randomized to interviewers, this measure interprets each contact of the interviewers involved in working the household as one partial contribution to the household cooperation. We distinguish the models by first and later contacts and model separately the effects of 1.) household socio-demography, and 2.) fieldwork characteristics in terms of number and outcomes of contacts, interviewer performance and workload. In addition, we interact the variables with the survey mode. We use cross-classified multilevel models.

Results and fieldwork recommendations

In both first and later contact models, there is a very high interviewer variance which can however be explained almost entirely by household and fieldwork characteristics, and interviewer performance and interviewer contact experience until the contact considered.

Some household groups are more or less difficult to convince in both first and later contacts, some in the first, and some in later contacts only. Foreigners from a country which does not share one of the survey languages, or the difficult to contact cooperate less in both instances. Older households cooperate less in the first contact, households aged between 31-44 years more in later contacts only. There are a few interactions with the survey mode: In the face-to-face mode, singles are easier to convince at later contacts, foreigners from a country without the survey language in the first. The latter group cooperate no worse when approached face-to-face.

Interviewers with a high number of refusals are more likely to produce less "cooperative" contact results, in both instances.

Only at later contacts do interviewers benefit from experience, in that more interviews are positively correlated with better contact results. Interviewer's results at the prior contact (on another household) are positively correlated with the current contact result at first contacts only, and only in the face-to-face mode. Household prior contact results are important indicators for the success of the current contact: fixed appointments at the prior contact have a high probability to be followed by an interview. Such positive effects from the prior contact are even stronger in the case of the face-to-face sample. "Neutral" contact outcomes like vague appointments are better than soft refusals only in the case of the face-to-face mode.

Based on these findings we give some recommendations for fieldwork:
1.) Difficult households at the first contact such as hard to contact households, with older members, foreigners who may have problems speaking (one of) the survey language(s), or face-to-face households should be first contacted by more successful interviewers. For foreigners, the hard to contact, and face-to-face households this is emphasized by the fact that more than one contact with them has additional adverse effects on cooperation. For these households later contacts should be avoided. Foreigners with language problems could be approach via the face-to-face mode even if a telephone number was matched.
2.) The experience, which interviewers make during the survey, is important. Interviewers with more interviews may increasingly work later contacts, and interviewers with more refusals generally easier households. This seems to be even more important with increasing fieldwork duration.
3.) Interviewers should avoid vague appointments ("call later") and especially soft refusals, but instead try to fix a date for an interview, if possible. This holds in particularly for the telephone mode.

Enriching the data we already have: a methodological proposition to link yearly and monthly information in longitudinal databases

Matteo Antonini, NCCR LIVES, University of Lausanne

Background and targets of the presentation

Panel datasets are more and more present in social and economic research. Many techniques are possible to analyze these data according to the target of the study. As most of the statistical procedures, these techniques give their best when the data are « rich » i.e. when the researcher has a high sample size, a high number of variables and many points in time. While the other issues are in common with other types of database, the problem of the time points, i.e. the number of subsequent measures for the same unit, is typical of panel dataset. The causes of a low number of time points are various and are both technical (e.g. attrition) and practical (e.g. economic tradeoff). A usual solution is to collect databases with larger gaps among the interviews (e.g. years) and artificially recreate closer time points (e.g. monthly values) using retrospective calendars or other techniques. This procedure of a-posteriori reconstruction increases the exploitable time points but has limitations given by memory and rationalization effects. Consequently, the number of variables considered is necessarily limited. The usual result of this procedure is a double database: a dataset with many time points (usually months) but little information, and a dataset with few time points (usually years) but richer information. This is the case of the Swiss Household Panel (SHP) but, also, of others important panels. The main target of this presentation is to combine the information with small gaps between the measures (e.g. months) with richer information collected with larger gaps between the measures (e.g. yearly measures).

Data

The data used in this presentation come from the Swiss Household Panel and are used to create examples that make clearer the procedure. The SHP has a primary database with a vast set of yearly data. From this dataset, we consider the variable describing the type of job the individuals are doing in the week of the yearly interview. If the individuals are inactive or unemployed, the information is also reported. The secondary dataset collects monthly information about the activity status (active, inactive, unemployed).

Transferring year-based information on month based variables

The procedure we proposed can be described in few steps:
1. We create our starting sequences aligning the monthly variables about the activity status
2. We identify the dates of the yearly interviews. According to this information, we select the months of each yearly interview. We define these months as « pivot months »
3. We substitute the monthly values referred to the pivot months with the respective yearly values. We can operate this direct substitution as the yearly values refer directly to the pivot months

4. Starting from the pivot months, we recode the successive months of the sequence with the value of the pivot month until a « stopping month » is met. A stopping month is defined as a month of unemployment, inactivity or a working month where a change of job position is indicated (there is a specific variable for it). If a stopping month is not identified, the median month between the starting pivot month and the successive is defined as a stopping point

5. We perform the same operation that was done in the previous point but going backward from the starting pivot months

Results, strong points, weak points and applicability

The final sequences are month-based and collect four types of values: "inactivity", "unemployment", "job type" (coming from the yearly interviews) and "undefined active status". This last status is due to two situations. First, the yearly value is missing. Consequently, the information referring to the job type in the corresponding pivot month and the nearby months are missing. Second, all the yearly values of a sequence are defined but some groups of months are « isolated ». A group of months is isolated when it is close between two stopping months that separate it from the subsequent and the precedent pivot month. These are an example of the limitation of the procedure. As it is clear, errors can come from the procedure itself (isolated spells) or inaccuracies present in the starting data (missing or wrong information). Despite these possible limitations, the final sequences are richer then both the starting monthly and yearly sequences. On the one hand, like the old year-based sequences, they report the type of job the individuals and not simply the activity status. On the other, like the old month-based sequences, they are much more time sensitive. These qualities make them more efficient in the description and the analysis of every sequence, especially if the sequences are unstable and with frequent changes. Other strong points are the easiness and the vast applicability of the procedure, both conceptually and technically. The algorithm is based only on « if clauses » and loops, consequently is easily programmable. Also, the conceptual applicability is vast. We applied the procedure to some labor market variables. This is probably the most intuitive application, but many others are possible. The procedure can be used every time the original database includes the dates of the events. For example, residential trajectories can be combined with family status, employment trajectories with the evaluation of the occupied job position, activity status with family condition.

To conclude, we recall that we introduced a procedure that successfully combined the information present in year-based sequences with others present in month-based sequences. This procedure enriches the information we already have and opens the road for new and more precise analyzes.

The weighting scheme of the Swiss Household Panel

Erika Antal, FORS

There is always a lot of questions and mysteriousness about the weighting system of any studies, especially if the study has several possible purposes of use. As the SHP is typically a study of this type, its weighting system is quite complex and sometimes it is not easy to decide which weight should be to used, when how and why. Nevertheless, this presentation will intentionally not focus on giving a general rule that is always valid in all circumstances or can be applied without any reflection. Such as different research questions require different models and different methods, for different problems different weights are the most appropriate. I believe that knowing and understanding how something had been created, the decision for what purpose it can be used becomes easier and even quiet straightforward. These are the reasons why the presentation will focus more on the built-up of the different weights in the SHP, providing by the way a some guidelines for their applications. Evidently, the incontestable necessity and the challenges that the current weighting system faces will complete the discussion.

An alternative methodology of measurement and analysis of poverty and human development for Morocco"

Mohamed Benkassmi[1], Consultant, National Observatory of Human Development

Introduction

For decades, Morocco has used per capita household expenditure to measure poverty. Since the early nineties of the last century, government and other actors became convinced that monetary poverty alone does not allow for a comprehensive definition of poverty and that a human development factors must be taken into consideration, both for measurement of poverty and for conceiving and implementing strategies to fight against it.

We argue that a more complete approach should combine monetary and non monetary measures of poverty and that such approach is more suitable to help policy decision making through more efficient targeting and a continuous evaluation process using the ongoing household panel survey.

Key words: *poverty measurement, multidimensional poverty, household panel surveys, population targeting tools, public policy evaluation.*

Poverty measurement in Morocco

2.1 Poverty in Morocco has been measured on the basis of per capita household's consumption expenditures. Usually, reference is made to an absolute threshold for food consumption expenditures (based on need in kilocalories per day per person) and corresponding non food expenditures from the expenditures pattern of the modest categories of households. Official figures show that such monetary poverty rate has continuously decreased over time, despite a very large difference between urban and rural residence area. It moved from 15.3% in 2001 to 4.3% in 2013[2] (respectively 25.1% to 8.8% in rural area).

2.2 Also, like many other countries, Morocco has adopted the Human Development Index (HDI) of the United Nations Development Program (UNDP) as a measure of development in national reports. The HDI combines gaps in (i) GDP per capita (ii) Health and (iii) Education. HDI has also increased from 0.526 in 2000 to 0.614 by 2012, which means an important decrease in the gap[3] of human development index.

2.3 Besides, in 2010, the HDR of the UNDP has published the Multidimensional Poverty Index (MPI), lunched by the Oxford University Poverty and Human Development Initiative (OPHI), ranking 104 developing countries, including Morocco, on the MPI basis. The MPI incidence has fallen from 28.5% in 2003-2004 to 4.6% in 2013[4].

A National Initiative for Human Development (INDH) has been lunched in 2005 by His Majesty King Mohammed VI, aiming at improving human development and poverty indicators of the country. A geographical targeting method was used for the Initiative, mainly based on estimated communal monetary poverty rate. Two other national programs have been implemented to help poor people in education and health. One is a conditional cash transfer program to reduce school drop out of the rural poor children. The second is free health insurance coverage for the poor.

Debates are still focusing on the targeting methods, used in those important national programs and on a choice between monetary and non monetary or human development approaches of poverty measurements.

Besides, the existing data sources do not allow getting estimates of persistent versus transient poverty. How many poor people have managed to get out of poverty between the two surveys? How many did stay in poverty? How many fallen in poverty? However, since 2012, the Moroccan National Observatory of Human Development (ONDH) has set up, for the first time in the country, a household panel survey[5] which enables to answer those kinds of questions.

A new approach for poverty and human development measurement using panel data

In this paper, I am suggesting a new approach of measuring poverty and human development, using data from the two first waves of the Moroccan household panel survey. The approach[6] consists of a combination of a measure of household's monetary poverty (poor, vulnerable, other), in a vertical axis, with the number of dimensions (health, education, employment, housing and assets) in which the household is considered as deprived, in a horizontal axis.

The method classifies households into 4 groups: (i) Non income-poor and not deprived in any human development dimension (ii) Non income-poor, but deprived in at least one of the human development dimensions (iii) Income-poor, but not deprived in any human development dimension and (iv) Income-poor and deprived in at least one of the human development dimensions. The better-off is the first group. The last one is divided into two subgroups: *the extremely poor* are those households with *very low income* and simultaneously deprived *in at least four human development dimensions*. The *vulnerable* group comprises households with *low income* and *deprived in one or two human development dimensions*[7].

In my opinion, this is a very important contribution of the approach, as an efficient targeting tool for poverty reduction and human development policy. It has been implemented in countries like Mexico and proved very effective and easy to combine with conditional or non conditional cash transfers to poor families. Hence, at the same time, policy makers can assist poor population categories with free access to basic services, help them economically and reinforce their investment in own human capital.

Five human development dimensions (education, health, unemployment, housing, and home assets) are proposed here and measured through 12 indicators at the household level. The income axis indicates whether the household is economically poor, vulnerable or better-off. However, contrary to the usual method, the poverty line is defined here as half the median of the distribution of the per capita expenditure of households. The vulnerability threshold is set between 0.5 and 0.75 the median.

Results of our calculations indicate that, in 2012, according to this approach, about 8.9% of the population do not suffer deprivation in any dimension of human development; although a great inequality exists between urban (14.2%) and rural (0.7%) area. At the other end, 8.7% of the population experience deprivation in at least four dimensions (19.4% in rural area, against only 1.8% in urban area).

The combination with expenditures axis shows that, in 2012, an *estimated 17.6% share of the total population need to be targeted in the fight against poverty and human development deficits*. They are income poor or vulnerable and simultaneously deprived in four human development dimensions or more. *They are unfortunately concentrated in rural area, were about 84% of them live*.

The extremely poor represent 4.3% of the total population. They are income poor and suffer, at the same time, deprivation in 4 or five dimensions of human development.

Thanks to the household panel survey, it is easy, not only to have annual[8] update of all those figures, but also, and most importantly, identify people who manage to get out of poverty, those who fall in poverty and those who stay in the same situation from year to year. The exercises have been tried in the present paper for the two available survey waves.

According to our provisional results, on the monetary axis, about 20% of Moroccans live with a per capita household expenditure below half the median[9], in 2012. This share is only 10% in urban area and more than 35% in rural area. By 2013, the proportion of poor decreased to 12% (3.4% in urban, against 24.5% in rural). The proportion of vulnerable people stayed more stable (22% in 2012 and 20% in 2013).

On the human development axis, the household panel survey shows that 11% of Moroccans do not suffer deprivation in any of the five human development dimensions, in 2013, instead of 9% in 2012, whereas only 7% experience deprivation in 4 or 5 dimensions, instead of 9% in 2012.

Transitions in and out of poverty, which are available for the first time in Morocco, only through the household panel survey, show the following results:

- On the monetary poverty level, three out of ten of the poor in 2012 have stayed poor in 2013, which means that 7 poor out of 10 would have managed to get out of poverty between the two survey waves. About 15% of vulnerable people in 2012 became poor in 2013. Almost 5% of the non poor and non vulnerable in 2012 would have fallen into poverty in 2013, according to these provisional results.

- On the human development level, nearly 38% of those who were severely deprived (4 or 5 dimensions), stayed in their deprivation status in 2013 too[10]. Some other 44% are still deprived in 3 dimensions and 14% in 2 dimensions. There are also about 14%, among those who were deprived in 3 dimensions in 2012, who became severely deprived in 2013.

- The extremely poor represent 4.3% in 2012 and 2.7% in 2013 of the total population. However, a*mong the extremely poor in 2012, near a fifth stay in extreme poverty in 2013.*It is the most needy population category of the country, according to this methodology. Subsequent waves of the panel survey will add more results and deepen the analysis of the different characteristics of this population category.

Conclusion

This paper gives an overview of the potential of this methodology as a tool for integrated (multi-sectoral) decision making and evaluating progress in the fight against poverty and in the human development policy for Morocco. The ONDH, which also enjoys independence as a public organism for evaluation, could play an important role in building a national poverty and human development strategy for the country.

Problems caused by sample attrition of the household panel survey can be overcome through the upcoming extension of the sample size and the more detailed analysis can be developed accordingly.

[1]*All the results presented in this paper are not official and should not be cited. Also, ONDH does not necessarily agree with the contents; the presenter is the only responsible for errors in calculations, including the sample weights used.*
[2]*This is a relatively very low rate, especially in urban areas.*
[3]*Defined as: GapHDI =1-HDI.*
[4]*HDR 2010 indicates 28.5% in 2003/4, HDR 2011 indicates 10.6% in 2007 and estimation based on household panel survey data indicates 5.0% in 2012 and 4.6% in 2013.*
[5]*The survey sample was 8000 households, representative at the national, urban and rural level, and is expected to be extended to 16000 households in the 4th panel survey wave, for a regional representativeness.*
[6]*The approach is adapted to Morocco from that of the Mexican National Centre for Evaluation (CONEVAL). See:* www.coneval.gob.mx
[7]*Thresholds are subject to compromises.*
[8]*Or, at least, every 2 years, because ONDH is considering the possibility of adopting a bi- annual survey, when the sample becomes 16000 households.*
[9]*When poverty refers, as usual, to needs in food and non food, one fifth of the poor in 2012 have stayed poor in 2013, which means that 4 poor out of 5 have managed to get out of poverty between the two survey waves. At the other end, about 3.5% of the non poor in 2012 fall in poverty by 2013.*
[10]*These are about one million people.*

Workshop 4B – Education & the labour market II - room 2224

The impact of immigration on wages. Cross-occupational evidence from Switzerland

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Theoretical background

Our paper provides an econometric investigation of the effects of immigration to Switzerland on the wages of native workers. Similar to previous studies on the subject, the empirical identification of the wage effects of immigration is based on the variation in immigrant shares across units of the labour market. The fundamental challenge to this approach is the appropriate definition of these units. Unlike earlier research where labour market segments were most commonly defined by geographical regions or formal labour market qualifications (*skill cells*), this paper mainly focuses on occupational groups.

Econometric model and variables

Our regression model is inspired by the one proposed by Cohen-Goldner and Paserman (2011) and can formally be stated as follows:

$$y_{ijt} = \beta_0 + \beta_1 IMM_{jt} + z'_{jt}\beta_2 + x'_{ijt}\beta_3 + \alpha_i + \epsilon_{ijt}.$$

where y_{ijt} is the log hourly wage for individual i in labour market segment j observed in year t, IMM_{jt} is the ratio of immigrants in segment j at time t to total employment in the cell j in year t, z'_{jt} and x'_{ijt} are vectors of macro and individual characteristics, α_i is an individual-specific fixed effect, and ϵ_{ijt} is the error term.

The vector z'_{jt} controls for segment-specific variations in labour demand. The vector x'_{ijt} includes a set of individual characteristics including years of schooling, work experience, marital status and a dummy indicating whether the individual has children or not. The parameter β_1 of IMM is the main coefficient of interest reflecting the effect of an increase in the share of immigrants in a particular labour market segment on the wages of native workers belonging to that same labour market segment.

Data and results

Bouchiba-Schaer (2013) provides a full description of the data, variables and methods. In this first study, data from the Swiss Household Panel covering the time period from 2002 to 2011 was used and panel econometric methods (fixed effects regression models with robust inferences) were applied. We complete the analysis by taking into account a weighting scheme (transversal) provided by the panel and adding the 2012 wave of data. For the occupational segmentation, the workers are classified into cells according to their actual occupation. We distinguish sixteen distinct, broadly defined occupational groups based on the International Standard Classification of Occupations (ISCO). We estimate separate regressions for men and women and test several different specifications (with interaction terms for the economic sector or the region) of our reference model, including additional estimations based on a segmentation of the labour market into education-experience cells. We find that an increase in the fraction of foreign-born workers has a small but statistically significant negative effect on average wages. When allowing for differential effects by occupational groups, the largest negative effects are found in sales and low skilled service occupations for females, among craftsmen in building for males as well as for unskilled workers in elementary occupations for both males and females. On the other hand, workers in high skill occupations tend to benefit from immigration, suggesting that there is more scope for complementarities towards the top of the occupational ladder.

We further find descriptive evidence of incongruent occupational distributions of immigrants and natives with similar formal qualifications, suggesting that immigrants and natives with comparable formal human capital characteristics are imperfect substitutes in the labour market. Indeed, our estimates for wage effects within skill cells based on formal education and experience instead of occupations turn out to be significantly smaller and statistically poorly determined, suggesting that the traditional skill cell approach may underestimate the impact of immigration on wages.

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Malleable Minds: The Causal Effect of Union Membership on Job and Political Attitudes

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Research Question(s)

A series of recent developments in the labor market threaten the trade unions' bargaining role in the Western world. The Swiss system of industrial relations is no exception in this regard. As a response, since the '90s, Swiss unions show an increased involvement in the political and social sphere, stepping outside their function of economic regulators. This evolution serves as a way of preserving their economic role in the political arena and as a strategy to attract new union members through channels other than the professional domain.

The objective is to analyze unions' activity from a specific angle. To what extent are unions capable of influencing the attitudes of their members? If any, is the impact restricted to the work domain or does it extend to political and social attitudes? Using the data of the Swiss Household Panel, the analysis considers the effect of union membership on various dimensions of job satisfaction, job security, individual political involvement, political orientation, political satisfaction and a set of "other-regarding" attitudes. The wage-earners in Switzerland between 1999 and 2011 compose the population of interest.

Methodological Elements

The goal is to estimate the causal effect of union membership on a series of job and political attitudes. Three main issues need to be taken into account.

First, for all dependent variables, union membership presents a problem of time-fixed endogeneity. The issue can be partially addressed by estimating the impact through a pooled OLS model and by including a set of control variables that capture the correlation between union membership and error term. However, this strategy is in general not sufficient to rule out the presence of a selection effect. In fact, since the outcome variables are represented by attitudes, it is very likely that they are correlated with some unobserved heterogeneity, especially in the form of "innate predispositions", between union members and non-members. By exploiting the panel structure of the data, it is possible to transform the original data through first-differencing and to get rid of all time-fixed heterogeneity. The comparison between the pooled OLS estimates and those obtained through OLS on differenced data shows to what extent this kind of heterogeneity leads to a bias in the results.

A second problem is related to the potential time-varying endogeneity of the union membership variable. The job satisfaction dimensions are in particular concerned with an issue of time-varying reverse causality, a decrease in job satisfaction representing one of the main reasons motivating the union membership choice. The problem is solved by instrumenting the union membership variable and applying a 2SLS estimation on differenced data.

A third aspect to consider is the likely heterogeneous effect of union membership on the attitudes included in the analysis. There are good reasons to believe that the attitudinal effect of becoming a union member may vary according to the profile of the union member and, by thinking on the fragmentation of the Swiss union landscape, also according to the sector of activity. Hence, besides an analysis of the main effect on the overall population of union members, the impact is re-estimated on various segments of the population. By taking advantage of the longitudinal nature of the data, it is also possible to examine the impact by episode and by duration of union membership. Aside from being informative on the particular effect in different sub-populations, this analysis reveals itself very useful to shed light on the causal mechanisms linking union membership and the attitudes under examination.

Main Effects

The comparison between pooled OLS and OLS on differenced data estimates shows that, for almost all dependent variables, the selection effect related to the presence of time-fixed unobserved heterogeneity represents a serious source of bias. Partialling out the effect of this kind of heterogeneity in the OLS estimation on differenced data reveals that the estimates either become insignificant or decrease in magnitude. Instrumenting leads to significant changes only in job satisfaction dimensions. In these dimensions, becoming a union member leads to a positive impact on the satisfaction with work conditions, reduces the self-evaluated risk of unemployment while it does not significantly modify the satisfaction with work atmosphere and income. Furthermore, union membership significantly increases the level of interest in politics and the feeling of political influence. This attitudinal effect is however not transposed into a behavioral one: the voting choice and the political position are not significantly influenced. While there is no effect on the overall satisfaction with democracy, becoming a union member leads to a significant decrease in the trust in the Federal government.

Finally, among the other-regarding attitudes, only a small and barely significant effect towards a positive opinion on the increase of social expenses is observed.

Effects across Different Segments of Union Members

The analysis by episode and duration of membership shows that the timing of the effects cited above is characterized by some important differences across attitudes: while the impact is immediate for work conditions, the decrease in the trust in the Federal Government develops significantly only since the second year of union membership and the other effects show up only for longer durations or for episodes of union membership after the first one.

It also appears that the impact of union membership is almost always more pronounced on individuals declaring themselves as active members, part-time workers and women. The results delineate a clear dichotomy between public and private sector workers, the effect of union membership being significantly more marked on the former. The analysis by economic activity reveals striking differences across sectors.

The absence of differences across some sub-populations is also interpreted as informative. For example, the effect does not vary significantly across age or firm size.

Finally, the main effects and the variations observed across different sub-populations are exploited to infer the underlying causal mechanisms and to provide a general understanding of the attitudinal effect of union membership in Switzerland.

Further training: a means of reducing perceived job insecurity?

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Background

In times of economic crises and high unemployment the investigation of job insecurity has become an important task. In recent years there has been extensive research on the antecedents and consequences of job insecurity. Findings consistently show that insecure jobs impact on the employees' work attitudes and reduce their physical and mental well-being.

However, existing research mainly focused on individual and work-related factors that may determine the employee's level of job insecurity. Little is known about the influence of the family context on the perception of job insecurity. Furthermore, research has somewhat neglected to focus on the strategies employees adopt to cope with insecure jobs. In this study we will investigate whether participation in further training can be a successful strategy to reduce perceived job insecurity.

Theoretical argumentation and hypotheses

According to the human capital approach, investments in training are supposed to increase wages and improve the individual's employability. In line with this approach we consider participation in further training as a possible strategy to improve job security. Yet, participation in further training is known to depend on a series of individual and work-related factors, e.g. employees with a high initial level of education are particularly likely to participate as well as employees working in the public sector or for large firms.

In our study we also take into account family characteristics, assuming that they can be a resource but also a constraint for participation in further training. On the one hand we hypothesize that employees with a partner are more likely to participate in further training since they may benefit from their partner's support through encouragements, assistance or redistribution of household chores. On the other hand we assume employees with young children to be less flexible and to have less time available to invest in further training. Furthermore, employees who experience economic hardship are believed to refrain from participation due to high tuition fees and additional arising expenses. Finally we hypothesize that employees who participate in further training report lower levels of job insecurity compared to employees who do not participate.

Method and data

Only a few studies have looked at the impact of further training on the perception of job insecurity. The findings show that employees who participate in further training indeed tend to report lower levels of perceived job insecurity. However, there are methodological limitations which need more attention. The main issue we face is the risk of a selection bias as employees self-select into further training.

We will try to overcome this problem by applying a propensity score matching procedure which simulates an experimental design. By accounting for an employee's probability of participation in further training, individuals are assigned to a treatment and a control group. The aim is to create two groups that are as similar to each other as possible with the main difference that one group experiences the treatment (participation in further training) and the other group does not. The question which is then asked is what would have happened to those who did not receive treatment, if they received treatment (and vice versa).

The analyses are based on two consecutive waves of the first and second sample of the Swiss Household Panel.