

# Chapter 8

## Between Social Structure Inertia and Changing Biographies: Trajectories of Material Deprivation in Switzerland



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### Introduction

In contemporary societies, attaining a decent standard of living which allows people to lead a socially integrated life is a key issue for human rights and social policy. However, social inequalities reduce the chances of reaching this standard of living. Social structure is actually still a strong determinant of poverty risks, which impacts durably the lower classes and are transmitted from generation to generation, whether we consider material or immaterial poverty. Despite decades of social and educational policy, structural determinants like social origin, education, or occupational position still play a major role in explaining poverty or prosperity. Social structure is, then, a powerful factor of inertia for what concerns the persistence of poverty in contemporary societies (*class hypothesis*).<sup>1</sup>

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<sup>1</sup>The theoretical framework we present in this introductory section was commonly used in previous researches on the same topic (see Section 2). Due to place restriction, we concentrate on the most important aspects for our purpose and renounce to cite the large literature related to this framework. For a more detailed presentation including corresponding literature, see Section 1.1 of Heeb and Gutjahr about the dynamics of poverty (Heeb and Gutjahr 2012).

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Yet, social structure is more porous today than it was until the end of the Second World War. According to the *individualization hypothesis* (Beck 1992), uncertain life events such as a job loss, matrimonial and other family changes, or health issues, surpass the effect of the social structure; hence, poverty is less predictable, or more precisely, democratized (middle and upper classes are also concerned) and without predetermined temporal structure (poverty occurs in various short-term or long-term episodes in discontinuous and heterogeneous biographies). Moreover, social positions are not as fixed as they were. Job opportunities and successes, as well as marriage, are well-known factors of social elevation; symmetrically, economic setbacks or divorce are factors of social downgrading.

The literature on this topic reveals that both hypotheses (class vs. individualization) are valid in Switzerland, though to a varying degree (class having a larger impact than individualization). Other hypotheses also emerged, like the cumulating (dis)advantages or the life course perspectives. They suppose a sequential view of poverty: rather than a permanent (class) position or unstructured patterns (individualization), poverty evolves in time following trajectories of reinforcement of the original social position (increasing poverty over the life course) or specific patterns related to successive life course phases (e.g.: poverty is higher at the entry into independent adulthood when young people have unstable and low paid jobs, then reduces in middle-age when they gain stable occupational and social positions, reduces again after the departure of grown-up children and with the accumulation of goods and savings, then increases after retirement when pensions replace wages, and finally when old-age dependence impacts the financial situation with high costs for care).

We are interested in changes and inertia at the bottom of the social structure during the last decades.<sup>2</sup> Based on poverty trajectories, we examine which part of the population experienced the inertia of the social structure and remained durably in low economic strata – and which part moved from its initial position or faced individualized biography patterns. We also consider the main drivers of the various observed trajectories. In other words: What characteristics or events are related to inertia or, on the contrary, to changing socio-economic trajectories, and what do they reveal of the respective forces of change and inertia in contemporary Switzerland?

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## What Do We Know About Poverty Trajectories in Switzerland?

Poverty is mostly defined in material terms and indirectly measured through income. In a longitudinal perspective, income is affected by yearly variations (e.g. irregular secondary incomes, compensation for inflation) which do not necessarily reflect real changes in the socio-economic positions (Lollivier and Verger 2005), and render the analysis of poverty trajectories more complex. In addition, income is known to be affected by measurement errors which are cumulating in longitudinal analyses (Whelan and Maître 2006). Even if these difficulties can be overcome, some scholars developed an alternative approach to poverty measurement, with a focus on 'material deprivation', which is more directly connected with the standard of living of the population and less affected by measurement errors in longitudinal analyses.<sup>3</sup>

Material deprivation as defined by Townsend in the 1970s is a direct measure of poverty based on the difficulty of households to face expenses in order to have a decent living and to be able to participate to social life. In Townsend's words material deprivation is defined as: 'the absence or inadequacy of those diets, amenities, standards, services and activities which are common or customary in society' (Townsend 1979, p. 915). This measure is considered as a complementary measure to income poverty because the correlation between both is only partial: Households facing material deprivation without income poverty or income poverty without material deprivation are many. This can be explained by non-income resources or by special needs of the households that blur the relation between income and the real socio-economic situation of the population. Thus, we focus on longitudinal analyses of material deprivation in Switzerland, and leave aside the literature devoted to the dynamics of income poverty.

Three research teams were active on this topic during the last decade in Switzerland, all using data from the Swiss Household Panel. Based on data from 1999 to 2003 and analyzing episodes of consistent poverty (combination of income poverty and material deprivation), Tillmann and Budowski (2006) highlighted that a large part of the Swiss population was durably preserved from poverty (85%), when 5% faced persistent poverty and 10% occasional poverty. They confirmed the strength of inertia forces measured by the relation between persistent poverty and determinants associated with the social class (socioprofessional position, education).

Later, Gazareth and Suter compared transitions between two five-year periods at the beginning and at the end of the interval from 1999 to 2007 (Gazareth and Suter 2010). Using a deprivation measure with three positions (no deprivation, low, high), they found smaller proportions of stability patterns in the population with 46% durably non-deprived, 20% in long-lasting low deprivation, and 5% in persistent

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<sup>3</sup>They are, however, affected by adaptive preferences (Halleröd 2006; Crettaz and Suter 2013). This topic will be further discussed below.

high deprivation. Changing patterns mostly concerned transitions from or to the intermediate position (30%), while transitions between both extreme positions were seldom observed. These findings confirm the strength of social structures' inertia but also that change is more frequent when considering deprivation in more detail; yet, it is restricted to transitions to a close position. In addition, Gazareth and Suter revealed that SHP data on deprivation are affected by selective attrition: households facing deprivation are more likely to drop out of the survey.<sup>4</sup> This necessarily affects the proportion of households measured in the various transitions, and potentially also their characteristics.

Furthermore, Crettaz and Suter (2013) highlighted that people facing long-lasting deprivation tend to adapt their aspirations to their objective possibilities. They are, then, more likely to mention personal preferences rather than financial constraints when lacking items (*adaptive preferences*). The phenomenon also affects the proportion of the population measured in the various transitions.

Finally, based on a continuous index of material deprivation and latent growth analyses, Heeb and Gutjahr concluded that four main types of trajectories appear when analyzing material deprivation from 1999 to 2008 (Heeb and Gutjahr 2012). They found that 80% of the population was durably preserved from material deprivation and 5% durably exposed to that form of poverty. This is comparable to Tillmann and Budowski and confirms the large impact of the inertia forces of the social structure. A contrario, 10% experienced a progressive reduction of the material deprivation they endured at the beginning of the period and 5% faced a progressive increase. For these 15%, poverty is a changing reality, potentially affected by singular individual events or cumulative processes. As panel data suppose a progressive aging of the sample, a part of these 'trajectories of change' could also reflect life course effects, like the improvement of the material situation of young people who entered independent adulthood at the beginning of the data collection.

Among people durably affected by material deprivation, Heeb and Gutjahr found more people with low education, more women, more individuals in lone parent households (and less in couple households), and more unemployed persons. A contrario, living in a couple, having a higher educational level, and being in employment characterize those durably preserved from poverty. Regarding an increase in material deprivation, low education, separation or divorce, and unemployment were found to be associated to a higher risk, and age (40 to 64 in comparison to 65 and more) and living in a couple with children were found to be related to a lower risk. Finally, among people experiencing a decrease in material deprivation, the following groups were over-represented:

- Unemployed, lowly educated persons, younger people (<24 and 25–39), individuals living alone, and married persons in the first wave.
- Employed persons (as opposed to students or homemakers) and widows (vs married people) in the last wave.

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<sup>4</sup>Further tests confirm that attrition impacts the data durably, not only in first waves (Gazareth and Iglesias 2017).

The researchers conclude that trajectories of poverty are clearly connected with social stratification and with life course transitions. Traditional drivers of vertical inequality like education and (un)employment distinguish the destiny of the various social groups, as gender or age do. Only divorce, and mainly lone parenthood, could be related to the deregulation theses.

Building on those previous results on Switzerland, we address these questions in new ways. First, we considered a longer period (15 years) which allows us to draw conclusions about the long-term evolution of the social structure. Second, as poverty depends on the needs and resources of households (considered as communities of people sharing goods and resources), we focused our analysis at the household level instead of at the usually considered individual level. Third, as we deal with time and change, we introduced this dimension by constructing dynamic measures of the main drivers we analyzed; this is probably our most original contribution.

## Methods

### *Data*

We used Swiss Household Panel (SHP) data from 1999 to 2013 including the first two samples (SHP I starting in 1999 and SHP II starting in 2004). Material deprivation data are collected in SHP in the household questionnaire and are measured through questions about goods or activities ('items') that the household cannot afford. Nine<sup>5</sup> items are available in every wave and can be used for longitudinal analyses: one week vacation away from home once a year, invite friends at least once a month, meal at a restaurant minimum once a month, car for private use, color TV, washing machine for exclusive use, dishwasher, computer at home, and going to the dentist if needed (knowing that dental care is not included in the obligatory health insurance in Switzerland).

### *Trajectories of Deprivation*

Trajectories shall be understood as the successive statuses a household occupies within a given period with regard to the dimension under observation (material deprivation). The number of trajectories we can theoretically observe corresponds

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<sup>5</sup>A tenth item is available on all waves but was removed from our analyses: the third pillar (private pension plan). Gazareth and Iglesias (2017) explain that this item is submitted to measurement problems, like the confusion about which saving plans should be included or not. In addition, the existence of a compulsory second pillar for employees makes that item less relevant for Switzerland.

to the number of statuses (2 – not deprived or deprived)<sup>6</sup> raised to the power  $n$  ( $n$  being the number of observations: 15 waves), or 32,768 trajectories (without taking into account possible missing informations within waves). An important matter is, then, to reduce the number of trajectories in order to have an overview of the main types of trajectories present in the data. This can be attained mostly by gathering similar sequences together.

Gathering similar sequences together is complicated. Basically, three main trajectories can be defined: the ‘never deprived’ (households never reporting any enforced lack for any item), the ‘always deprived’ (with households reporting every year at least one enforced lack), and the ‘crossing the line’, which can be separated in several subgroups based on the number of observations (waves) in deprivation (mainly deprived or mainly not deprived), and/or the direction of changes (moving into poverty or out of poverty) the successive observations underline. Manual or statistical methods can be used to gather the trajectories together. We present results based on the manual construction of seven trajectories: (1) Non-deprived (no deprivation or max. once), (2) Mainly non-deprived (2 or 3 deprivation episodes, or 3 deprivation episodes and at least 7 non-deprivation episodes), (3) Mainly deprived (analogous to mainly non-deprived), (4) Durably deprived (always deprived or max. once non-deprived), (5) Moving into deprivation (several non-deprivations episodes followed by several deprivation episodes<sup>7</sup>), and (6) Moving out of deprivation (analogous to Moving into deprivation), (7) Fluctuating (without any clear direction). Trajectories 1 to 4 refer to stable positions, and 5 to 7 to changing positions. We decided to include households facing one exception to their main status into the ‘non-deprived’ or the ‘durably deprived’ categories. Indeed, such exceptions are not relevant for defining the socio-economic position of the household on a large period.

The treatment of missing values is a critical issue for sequence analysis: missings can occur within a sequence, at the beginning or at the end of the sequence. From 1999 to 2013, the maximum length of sequences is 15 observations for SHP I, and 10 for SHP II. We had, then, to choose a compromise between few highly comparable cases (long trajectories with same length) and more but less comparable cases (use of much of the available information). We present results based on households

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<sup>6</sup>The choice of a binary index is coherent with our purpose, as we are mostly interested in changes in socio-economic positions defined as out-of-poverty versus in-poverty, and not in changes taking into account the severity of poverty. Many theoretical considerations are in favor of a more complex measurement. However, due to the very asymmetrical distribution of deprivation (the large majority of households are non-deprived), the results do not vary much if we deal with more than one deprivation status, and the possibilities to analyze a continuous measure are reduced (problems with the statistical assumptions). Yet, using a binary measure brings some limitations, like emphasizing transitions from positions around the poverty threshold.

<sup>7</sup>More precisely: One change from non-deprived to deprived with the first two observations not deprived and the last two deprived; two changes from non-deprived to deprived, with the last three observations deprived, max. Once deprived in the first three waves, and at least three time non-deprived in total; two changes from non-deprived to deprived with two episodes non-deprived within the first three observations, rest deprived; one change from deprived to non-deprived and return to deprived, with the first observation deprived, at least three episodes non-deprived, and at least the last three observations deprived.

with at least 9 observations from 1999 to 2013 ( $N = 4319$ ). This includes 53% of the initial sample and 39% of the refreshment sample.<sup>8</sup>

## *Determinants*

A rich literature provides theoretical inputs and empirical results about the determinants of poverty, and material deprivation more specifically (for details see e.g. Layte et al. 2001; Suter and Paris 2002; Figari 2012). We first present the determinants associated with our framework at the individual level as analyzed traditionally.

Determinants of material deprivation can be divided in four groups. First, determinants associated with vertical inequality (social origin, education, income, occupational position), referring to the class conception of poverty, have to be considered. They should be associated with unchanging deprivation trajectories, because poverty is seen as a permanent and transgenerational phenomenon. Second, ascriptive characteristics referring to horizontal inequality, like gender, age or ethnicity/nationality, are also essential. They shall be related to stable trajectories, as they remain unchanged over the life course for most individuals, except for age.

Third, critical life events (disruptions in the occupational trajectory, divorce, sickness) are taken into account as determinants related to the individualization hypothesis. Their influence should result in unstructured trajectories with short periods of poverty following such events. Fourth, as standard of living is related to the composition of the household and the sharing of resources and expenses between members, these attributes also have to be part of the analysis. Changes in the household structure (arrival of new members or departure of others, like grown-up children) are associated with durably changing trajectories, especially when the changes affect the main earners in the household. This last group of determinants coincides to some extent with the third one (e.g. divorce) but is also strongly connected to life-course transitions, as age can be. This consideration is important for the interpretation: the influence of some determinants is possibly multiple, which pleads for various hypotheses depending on how these factors affect deprivation trajectories.

As mentioned earlier, material deprivation refers essentially to the economic situation of the household, as most of the resources and durables are shared by all members even if they belong to one member specifically. Due to heterogeneous individual characteristics like higher and compulsory education within the same household, the relation with the deprivation status of the household is confused when analyzed at the individual level (mostly when all members, except young

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<sup>8</sup> Hence, sequences of various lengths (9 to 15 observations) are considered: observations are missing in 26% of the households at the beginning of the sequence and in 14% at the end (non-participation); 32% present gaps inside the sequence (whole or partial non-response). All in all, 62% of the sequences with at least 9 observations are incomplete. This is an important issue for the validity of the inference on the global population.



children, are interviewed like in SHP). In order to avoid this confusion, individual characteristics must be transposed at the household level. In doing so, the respective influence of the various members has to be taken into account. We assume that material deprivation is mostly related to the situation of the adult or couple who contributes mainly to the household's income (usually the parents in family households).

Consequently, for most individual attributes, we considered the situation of the 'head' of the household defined as the main earner (ME) and his or her partner, if any (whatever the marital status or sex). For some characteristics such as health-related impediment in everyday activities, we considered whether any household member was affected (because impediment of any member leads to particular expenses that affect the standard of living of the whole household).

In a similar way, we used dynamic determinants based on variables dealing with changes or events that occurred during the period. Education of the household head for example was constructed as the highest degree achieved by the head in all waves, but also as movement (no change, increase, decrease,<sup>9</sup> varying). In other instances, we used the mode value within the period, or the percentage of years in which a specific characteristic, situation or event was observed, or the occurrence of some events at least once. For every determinant, we defined a construction and thresholds that take into account theoretical considerations (expected impact of the determinant) as well as the size and distribution of the created subgroups in the sample. The resulting variables are presented in Table 8.1.

The analysis of the determinants was performed using multinomial logistic regressions. We first ran univariate models in order to test the potential influence of our determinants one-by-one. Then, we ran multivariate models to assess each determinant's strength. We used a stepwise procedure to select a model with the higher explicative capacity (pseudo R<sup>2</sup>). Further models were tested for explorative purposes.

## Results

### *Trajectories of Deprivation*

A large majority of the households (82.4%) stayed durably in the same status from 1999 to 2013 (see Table 8.2). Among those with changing trajectories, the larger groups are those who experienced fluctuating changes of status (9.7%), or who moved out of deprivation (5.6%). Only a small group faced a durable entry into poverty (2.3%). These percentages at the household level are globally consistent with those found at the individual level (Tillmann and Budowski 2006; Heeb and Gutjahr 2012). The strength of inertia forces appears clearly, as well as the good

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<sup>9</sup>As head can change, a decrease in level of education is possible, for example after divorce.



**Table 8.1** Variable construction for the main determinants of trajectories

Variable	Categories: Reference category vs. other	Level
Education of head: highest level over the whole observation period (hereafter ‘over obs.’)	Upper secondary vs. compulsory; tertiary	HEAD
Education of head: change over obs.	Unchanged vs. increase; decrease; variation	HEAD
Log of net HH income (mean value over obs. + value at first obs.); Variation of net HH income: last 3 obs. divided by first 3 obs.; Reported change in income since previous interview: mean value over obs. <sup>a</sup>	Continuous	HH
Unbalanced HH budget (i.e. HH gets into debts or eats assets) (% of obs.)	Never vs. <25%, 25–100%	HH
Homeowner (% of obs.)	Never vs. <2/3, 2/3+	HH
Retirement of HH head	Never vs. event (retirement occurred after 1st obs.); always (retired since 1st obs.)	Head
Death of a close person since previous interview; Illness or accident since previous interview (if still affecting)	Never vs. min. once	ALL
Health-related impediment in daily activities (any member) (% of obs.)	Never vs. <25%; 25–50%; >50%	ALL
Head reporting: bad health <sup>b</sup> ; deterioration of health since previous interview; chronic health condition (% of obs.)	Never vs. <25%; 25–50%; >50%	Head
HH composition: New partner of head; Separation of head; Lone parent HH	Never vs. min. once	HH
Dependent child(ren) in HH (share of obs.)	Never vs. <2/3, 2/3+	HH

Notes: Level: ME = Main Earner; Head = ME + partner if any; All = all members 15+; HH = Household characteristic (identical for all members).

<sup>a</sup>For each observation: Income improved since previous interview = 1; decreased = (–1); no change = 0.

<sup>b</sup>‘How do you feel right now?’: ‘so, so’ (average), ‘not very well’, or ‘not well at all’.

**Table 8.2** Trajectories of material deprivation, 1999–2013: min. 9 observations

Stable trajectories		Moving trajectories	
Non-deprived	61.6%	Moving into deprivation	2.3%
Mainly non-deprived	12.5%	Moving out of deprivation	5.6%
Mainly deprived	4.1%	Fluctuating	9.7%
Durably deprived	4.3%		

Source: Swiss Household Panel (SHP I and SHP II, unweighted), own calculation.

situation of the Swiss population over the period; deprivation remains low, and entries into poverty are scarce.

However, two methodological issues challenge the representativeness of our results, especially the relative size of our trajectories: non-randomized attrition and panel conditioning. Attrition is characterized by deprived households being more likely to drop out of the survey, especially during the first waves (Gazareth and

Iglesias 2017). Trajectories that deal with deprivation should, thus, be underestimated. Further analyses would be necessary to know which ones exactly, and to what extent. Conversely, the households participating in at least 9 waves are clearly more stable (and wealthy) than households in the whole Swiss population. More generally, how random the many missing observations are is a crucial issue. The effects of panel conditioning, that is, the transformation in the cognitive process when answering several times the same questions, are more difficult to anticipate (answers about the reason for lacking items are possibly concerned), but tests based on measures of subjective wellbeing confirm that SHP data are affected (Iglesias et al. 2017).

Adaptative preferences also challenge the results by affecting mainly the stated reason for lacking an item (Crettaz and Suter 2013). Some households could seem to move out of deprivation, yet are actually durably affected by deprivation and have gotten used to it. As a consequence of these limitations, the real comparative strengths of change and inertia in Swiss society are probably somewhat different. If the comparative strengths are not fully representative, it is reasonable to say that the general patterns are not affected.

## *Determinants*

Three groups of determinants, classified by the strength of their relation to deprivation trajectories, emerged from the initial one-by-one regressions.

The first group includes the three determinants with the strongest predictive power for the trajectories (pseudo R2 between 0.030 and 0.082). They are all related to the financial situation of the household: household income, unbalanced budget, and reported change in income since previous interview.

The second group (pseudo R2 between 0.011 and 0.020) is more diverse. The economic situation is still present (home ownership), but also determinants related to vertical or horizontal inequalities (HH head's highest education, main earner's sex), as well as health (any member with health-related impediment in everyday activities and head reporting bad health) and two determinants related to the structure of the household (depending child(ren) in household, lone parent household).

The last group includes determinants with a weak predictive power for trajectories (pseudo R2 between 0.05 and 0.01): Age of the main earner, all members being less than 25 at first participation, region where the household mainly lived, change in the household head's education, social origin (education of the father, financial problems during childhood), household being jobless (all non-retired members are unemployed or out-of-employment). In addition, many life events we tested show a marginal relationship (pseudo R2 < 0.05) to the trajectories: separation or (re)partnering of household head, retirement, accident or illness since previous interview, or death of a closely related person since previous interview (connected with possible inheritance). Nationality, usually influent in socio-economic phenomena, also presents a very weak relation to the deprivation trajectories.

**Table 8.3** Main determinants of trajectories of material deprivation 1999–2013: beta coefficients of multinomial logistic regression with non-deprived trajectory as reference

	Mostly non-deprived	Mostly deprived	Durably deprived	Moving out of deprivation	Fluctuating
	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$
Income (mean of log net)	-1.66***	-3.34***	-3.94***	-1.65***	-2.52***
Unbalanced budget (ref. never)					
<25% of observations	0.74***	0.92***	1.33***	0.80***	1.00***
25% and more	0.40*	1.63***	1.74***	0.77**	1.35***
Evolution of income since previous interview (mean)	-0.01***	-0.02***	-0.04***	n.s.	-0.02***
Homeowner (ref. never)					
<2/3 of observations	n.s.	-0.94***	-0.94***	n.s.	-0.36*
2/3 and more	-0.51***	-1.33***	-1.68***	-0.87***	-0.80***
Health-related impediment (ref. never)					
<25% of observations	n.s.	n.s.	n.s.	n.s.	0.45*
25–50%	n.s.	0.57*	n.s.	0.50*	0.90***
More than 50%	0.54**	1.09***	1.39***	0.75**	0.89***
Retirement (ref. never)					
occurred within period	-0.62***	-1.13***	-1.01**	-0.60*	-1.02***
yes since 1st obs.	-0.99***	-2.05***	-1.89***	-0.93**	-1.77***
Dependent child(ren) (ref. never)					
<2/3 of observations	0.61***	n.s.	1.09***	1.12***	n.s.
2/3 and more	0.54***	0.75**	1.19***	0.90***	0.73***
Constant	16.25***	33.06***	38.78***	14.98***	24.85***

Notes: P value: \* <0.05, \*\* <0.01, \*\*\* <0.001, n.s. = not significant. Households with min. 9 observations. N = 4319.

Source: Swiss Household Panel (SHP I and SHP II, unweighted), own calculation.

Table 8.3 presents our best multivariate model (pseudo R<sup>2</sup> of 0.171), which deals with seven determinants. The trajectory ‘moving into deprivation’ was excluded in this model.<sup>10</sup>

The determinants related to the economic situation of the household strongly impact on deprivation trajectories, what was expected and confirms previous results (Heeb and Gutjahr 2012). In particular, compared to remaining non-deprived all over the period, the chance of being in deprived trajectories decreases when the mean household’s income increases over the period, with larger beta coefficients for more unfavorable trajectories (from  $\beta = -1.7$  for the ‘mostly non-deprived’ trajectory to  $\beta = -3.9$  for the ‘durably deprived’). This pattern is similar

<sup>10</sup>Too many estimates in regard to the small number of households available in the sample; similar results.

for unbalanced budget: Having an unbalanced budget at least once compared to never (budget always balanced) increases the chance to be in deprived trajectories compared to remaining non-deprived all over the period. The more often the budget was unbalanced over the period, the greater the  $\beta$  coefficient – except for the ‘mostly non-deprived’ and ‘moving out of deprivation’ trajectories. In other words, and not surprisingly: deprived households have less money and have problems balancing their budget. Coherently, being a homeowner at least two third of the time compared to never, decreases the chance to be in ‘mostly non-deprived’ and ‘moving out of deprivation’ trajectories compared to remaining non-deprived all over the period; and being a homeowner at least once compared to never decreases the chance of being in ‘mostly’, ‘durably’ or ‘fluctuating’ deprived trajectories compared to remaining non-deprived all over the period. Regarding the mean reported change in income since previous interview, the chance of being in deprived trajectories compared to remaining non-deprived all over the period decreases when the mean change in income increases, except for the ‘moving out’ trajectory.

The other determinants of our final model are more interesting: Durable impairment due to a health condition, retirement, and many years with dependent child(ren). They are all related to life course and life events. Having health-related impediment more than 50% of the time compared to not having any impediment increases the chance of being in deprived trajectories compared to remaining non-deprived all over the period.<sup>11</sup> Impediment in 25 to 50% of the time compared to not having any impediment increases the chance of being in the ‘mostly deprived’, ‘fluctuating’ or ‘moving out’ trajectories compared to remaining non-deprived. However, the causality in the relation between deprivation and health cannot be observed from our analyses.

In relation to the life course hypothesis, retirement has a ‘protective’ effect: the fact that the household head or his/her partner has retired (since the beginning of the period or during the period) compared to ‘no one ever retired’ decreases the chance of being in a deprived trajectory compared to remaining non-deprived, with  $\beta$  coefficients larger when retirement lasts longer (retired at first observation).<sup>12</sup> Finally, having dependent children compared to never having dependent children increases the chance of being in a deprived trajectory compared to remaining non-deprived, especially ‘durably deprived’.

Results in Table 8.3 globally show that the chosen determinants are impacting the chance of being in deprived trajectories compared to remaining non-deprived, and that the  $\beta$  coefficient usually increases when the trajectory implies more deprivation phases. Furthermore, the impact of a factor depends on the number of years

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<sup>11</sup>The stepwise procedure confirms that the impact of impairment is not related to age.

<sup>12</sup>In the literature, retirement is usually seen as a risk of deprivation. However, in Switzerland, the retired own a large part of the wealth. Attrition and adaptive preferences could also explain this, as both contribute to hide poverty in old age.

during which it affects the household. All in all, these factors have a larger impact on trajectories with long-lasting deprivation; and the impact is larger when the unfavorable situation of the determinant lasts.

## Conclusion

'Les faits sont têtus' ('facts are stubborn', literally) is a French saying meaning that, when reality is strong enough (homogenous and stable), it always appears as it is, whatever the way you look at it. The alternative and innovating methodology we used to measure trajectories of deprivation and their determinants delivers relatively similar results to previous researches. Using trajectories dealing with a longer period of observation, based on a binary measure of deprivation, and constructed at the household level rather than at the individual level (as is usually done in mainstream research), reveals similar patterns of stable and moving trajectories to those found in previous studies. Like Tillmann and Budowski (2006), as well as Heeb and Gutjahr (2012), we found that about 80 percent of households remained in a (mostly) stable position (which was expected following the class hypothesis), with a large majority of survey participants never reporting any deprivation or only once over the 9 to 15 waves they participated in. Among those who experience change, most households display fluctuating patterns without any clear structure (which was expected following the individualization hypothesis). Trajectories related to durable transition into or out of deprivation are scarce.

This chapter therefore fills a gap, because results that rely on similar concepts and definitions always raise the same question: are their findings robust? Our clearly different approach – based on the use of household-level variables and on a different treatment of time-varying factors – leads to similar conclusions; therefore, we can be reassured that these results are quite robust.

Indeed, our results show the strength of inertia forces over the last decade. Yet, some elements mitigate this conclusion. First, we classified the mostly (non-) deprived trajectories as stable. These trajectories, representing 17 percent of the households, could also be associated to moving patterns and related to the individualization or life course hypothesis: they potentially correspond to non-definitive transitions following unpredictable life events or life course transitions, rather than to temporary deviations from a durably stable position. When keeping these 17 percent out of the stable households, the proportion of stability becomes even smaller than in Gazareth and Suter (2010), which is coherent (the longer the period, the higher the probability of change).

In addition, methodological issues affect the representativeness of panel data (which are the only data allowing such analyses of trajectories). Non-randomized attrition is the most problematic issue. It reinforces the strength of inertia because households facing deprivation are more likely to drop out (Gazareth and Iglesias

2017), including households in transitional life course phases that drop out before any change can be measured (e.g. a household headed by a young adult entering stable occupational position but dropping out before moving out of deprivation). By and large, the many missing observations challenge the results. Furthermore, adaptive preferences improve the probability of false identification of 'moving-out-of-poverty' trajectories. In conclusion, although we think that our results convincingly show that structural factors still represent powerful determinants of the poverty risk, they should not be taken as an exact quantification of this phenomenon, because of the methodological challenges mentioned above.

The analysis of the determinants of trajectories confirms the influence of factors related to unchanging vertical or horizontal inequality. The longer the households face unfavorable social conditions, the higher the risk they follow trajectories with many deprivation phases, like the mostly or durably deprived ones. This conclusion is coherent with the class hypothesis, but also with the cumulative (dis)advantages hypothesis. It pleads in favor of pursuing efforts engaged to reduce social inequalities, such as redistributive and social policy, educational support for children of the lower class, or the prevention of discrimination.

Life course transitions are clearly another driver of deprivation trajectories. Dependent children and retirement appear as the life events with the strongest impact in our analyses. Most interestingly, the 'moving out of deprivation' trajectory is more likely if a household had dependent children for only a part of the period (less than 2/3 of observations), what can be partly related to grown-up children. This emphasizes the importance of family policy and support.

Health issues, and in particular the resulting impediments in everyday activities, is the last determinant with a clear impact on deprivation trajectories. This impact, however, is related to the duration of the (bad) health condition: when occurring occasionally (in less than 25 percent of the observations), impediment has no significant impact, except for the risk of fluctuating trajectory that increases slightly, what is coherent with the individualization hypothesis. If it occurs more frequently (25–50 percent), the 'mostly deprived' and 'moving out of deprivation' trajectories are also concerned. The last result is interesting: it indicates that overcoming an impediment contributes to moving out of deprivation. Finally, if impediment characterizes most of the experience of a household (that is, it affects one/several household member/s in at least half of the observations), all trajectories containing deprivation phases are more likely, especially the 'durably deprived' one. Without further analyses, it is hard to determine the direction of the causality; it is probably circular in some cases.

In summary, our contribution confirms the importance of inertia forces in Switzerland (class and cumulative hypotheses) and the limited or mostly temporary effect of life events (individualization hypothesis). In addition, life course transitions are found to have a clear impact on changes in social positions (but probably

not much on changes in the social structure). Finally, it is noteworthy that the way in which we measure deprivation, the household composition and the changes in the situation of the household, has only a limited impact on the results, and so has the length of the observed period.

Our findings suggest that some of the claims that have been made regarding the individualization of social inequalities and the decline of social class (e.g. Beck 1992; Bauman 2000), are not confirmed empirically, and that the classical determinants of social inequalities remain powerful predictors. Sure enough, critical life events can have an impact; however, the scale of this impact is nowhere near as great as the effect of ‘classical’ poverty factors. This discrepancy between the assumed individualization of risks and what has been observed in recent years is attributable to the fact that these ‘grand theories’ of the new modernity (Goldthorpe 2002; Atkinson 2007) are not based on rigorous empirical work. Facts are, indeed, quite stubborn.

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