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1 Compensation and other forms of accumulation in intergenerational social inequality

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Practically all modern political movements accept the ideal of equal opportunity in the context of intergenerational social inequality. That principle, also known as meritocracy, argues that adult status should not be determined by the socioeconomic status of the family you are born into. Rather, your own skills and motivation should decide the position in which you end up. This is not only good for equality but also for the efficiency of a society as this guarantees that the most suitable persons work in each task.

In a society where skills are spread approximately evenly across children born into the families with different socioeconomic backgrounds, equality of opportunity is strongest when the inheritance of socioeconomic status is weakest (and there is the most intergenerational social mobility). Many countries have moved in this direction; the conclusion of existing research is that socioeconomic inheritance has weakened in most of the developed countries over the period after World War II (Ganzeboom et al. 1991; Treiman and Ganzeboom 2000; Hout and DiPrete 2006; for an exception, the US, see Beller and Hout 2006). Yet parental background continues to play an important role in socioeconomic attainment in all societies. Parents with more resources are often able to guarantee their children a better off position everywhere.

It is often argued that perfect equality of opportunity is impossible to achieve. Even if this is the case, it should be possible to find out which societies and what policies have the biggest effects on social mobility. There have been successful attempts to rank countries according to the strength of the association between parent and child statuses (Erikson and Goldthorpe 1992; Aaberge et al. 2002; Breen 2004). Despite the merits of these studies, conclusions about the mechanisms that strengthen or weaken the association have nonetheless remained uncertain. The evidence suggests that some educational systems may produce more openness than others; on the other hand, very different educational systems seem to produce about the same amount of intergenerational inheritance (Breen and Luijkx 2004; Breen and Jonsson 2005). Earlier studies suggested that a strong welfare state could promote social mobility (Erikson and Goldthorpe 1992). However, more recent research has shown that societies with fairly different welfare state systems may reach similar levels of equality of opportunity (Breen and Luijkx 2004; Yaish and Andersen 2012).

All in all, drawing conclusions of what promotes equality of opportunity based on existing research is rather difficult. The long period of increasing equality of opportunity may well have been a side-effect of the historically long period of strong growth. Now that period may have come to an end, and it is very hard to predict the direction in which mobility will develop in the near future. It is even harder to conclude what the role of different policies in the change towards greater openness has been (Breen and Luijkx 2004).

A similar problem of identification of the mechanisms promoting or hindering social equality exists at the individual level. For instance, one could expect that early life course events that are followed by considerably weakened or even cancelled parental resources would lead to a weaker adult attainment of the children. One such event is parental death occurring during childhood or youth, which effectively terminates the possibilities of the deceased parent to invest more in their children. A similar example is parental separation: although the influence of the non-coresidential parent is rarely cancelled altogether, the amount of contact and thereby also access to the resources of that parent become more limited. However, the evidence on the negative long-term effects of these events is mixed. While many reviews conclude that parental divorce leads to negative child outcomes (e.g., McLanahan and Sandefur 1994; Amato 2000), in both cases of parental death and divorce the effect appears to a large extent to be related to negative selection, if found at all (Biblarz and Gottainer 2000; Corak 2001; Lang and Zagorsky 2001; Björklund et al. 2007; Steele et al. 2009).

Why is this the case? We argue that previous studies have ignored compensation effects: relying on other resources, if available, can effectively compensate for having a lower level of another resource. We further argue that compensation is a general mechanism influencing all socioeconomic inheritance. Our assumption is that whenever the loss of a parental resource takes place or the lack of one is realised, some attempts to replace the missing type of capital are likely to occur. These attempts may come from the children, the parents themselves, or other persons nearby, such as grandparents, other extended or new family members, or even neighbours. In these cases compensation is likely to happen as interpersonal compensation, in which the resources that are lost from one source/person are replaced by those of another source/person. However, compensation may also take place as type compensation, in which lost resources of one type are replaced by resources of another type.

The idea of compensation also extends to the analysis of the importance of institutional contexts. We expect that country differences in intergenerational social inequality should be much more contrasted if differences in compensation were taken into account. It is not surprising that there have been problems in identifying the direct effect of policies on social mobility: although many policies are often assumed to have an impact, they are seldom implemented in order to have such an impact on society as a whole. However, many policies (in fact most of them in the context of the welfare state) have been designed to compensate for the losses associated with different social risks during the life course. The different types of (Western) welfare states are characterized by differences in the level and target of state-directed compensation for realized social risks. While doing so, they may also have an influence on the intergenerational transfer of different resources (Esping-Andersen 2015). We therefore assume that social institutions may have a weak direct impact on socioeconomic inheritance but a strong impact on the compensation required after the loss of parental resources. Thus in order to make conclusions about the effectiveness of different welfare institutions on reducing intergenerational social inequalities one should concentrate on the differences between the groups these compensatory mechanisms are aimed at, rather than looking at societies as wholes.

The aim of this volume is to advance the theoretical and empirical case for compensation as a general mechanism influencing social inequality across generations. The volume brings together research on different aspects and types of compensation and covers a number of countries representing different kinds of institutional configurations. In this chapter we introduce the theoretical framework for compensation and discuss how the study of compensation may give us further insights into general processes of socioeconomic inheritance. We then go further into the different types of compensation and illustrate the kinds of cases in which compensatory processes should be at work. We also discuss how institutions are expected to influence compensation. Finally, we summarize the findings of the empirical chapters that follow and evaluate the extent to which the findings support a general theory of compensation.

Mechanisms of intergenerational social inequality at the individual level

The general conclusion from decades of research on socioeconomic inheritance suggests that parental resources correlate positively with children's adult educational and socioeconomic outcomes (e.g., Ganzeboom et al. 1991; Solon 1999; Hout and DiPrete 2006; Breen and Jonsson 2005). The literature suggests that the positive effects of parental resources are based on either investments that parents are able to make in their children or parental endowments that their children can benefit from (Becker and Tomes 1976; Coleman 1988; Rosenzweig 1990; Musick and Mare 2006; Esping-Andersen 2015). Endowments may include almost anything that parents have and that are potentially advantageous, from genes to social networks and economic assets, while investments largely consist of money and time spent with children. In other words, endowments benefit children simply by existing, whereas investments assume active parental involvement aiming at positive intergenerational outcomes.

The utility of the distinction between endowments and investments is, however, reduced by the fact that it is often hard to differentiate them empirically from each other. For example, high parental education tends to give children access to better-quality information and social networks (endowments), which are likely to improve their abilities to make ambitious educational decisions and enter higher-status employment. Parental education also tends to make the parents better able to help their children with school work and, more generally, to engage in the kind of interaction with their children that will later help the children in school and possibly also in the labour market (investments).

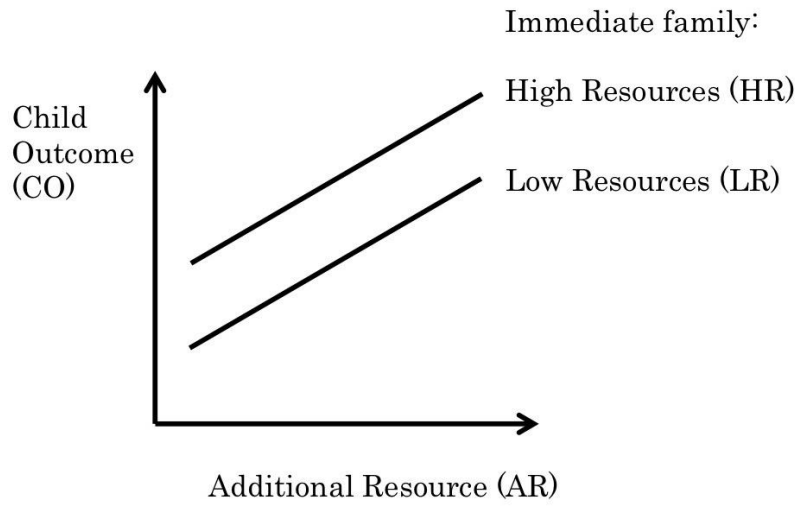
We argue that compensation comes into play when parental resources are lost, reduced, or missing in the first place. Examining processes where compensation is likely to be relevant may be a way of distinguishing between, and evaluating the relative importance of, different mechanisms of intergenerational inheritance. As an example, in the case of parental death at least some of the endowments of the deceased parent may continue to play a role in the life of the child but continued investments will not be possible. On the other hand, the remaining parent will be less able to change their endowments but may change their investment behaviour in response.

Both conceptually and empirically, compensation needs to be distinguished from other processes of resource transfer, which lead to the *accumulation* and *multiplication* of advantages and

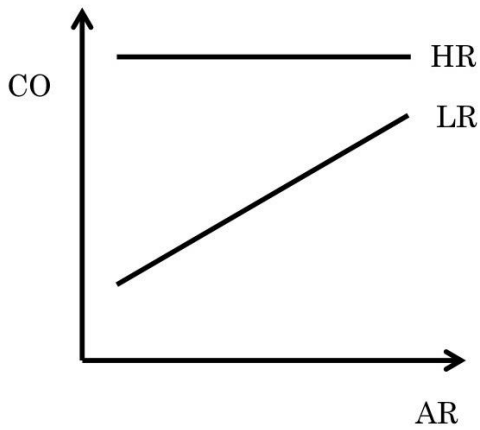
disadvantages. The different processes are illustrated in Figure 1.1, where child outcomes (such as educational or status attainment) are plotted against additional resources available to the children or their families (such as extended family resources or societal investments) for two types of families: those who already have high resources and those who have low resources.

Let us consider the different processes using a wealthy aunt as an example of an additional resource. One could assume that having a wealthy aunt is equally advantageous to all children; not only those lacking parental resources but also to those who have plenty. This would be an example of the accumulation of advantages, shown in Panel A (Figure 1.1), where the effects of parental resources and the aunt's additional resources are independent from each other.

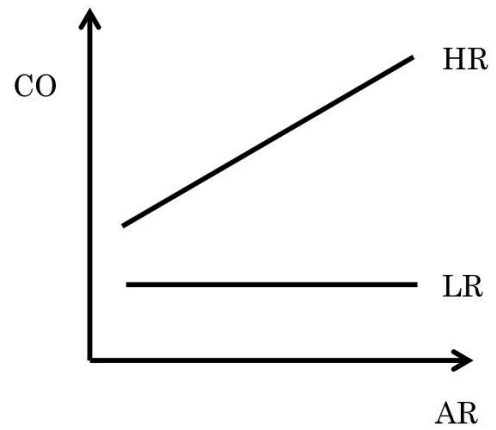
A: ACCUMULATION



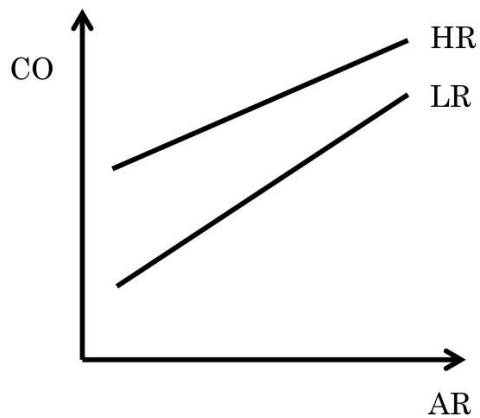
B: COMPENSATION



C: MULTIPLICATION



D: COMPENSATORY ACCUMULATION



E: MULTIPLICATIVE ACCUMULATION

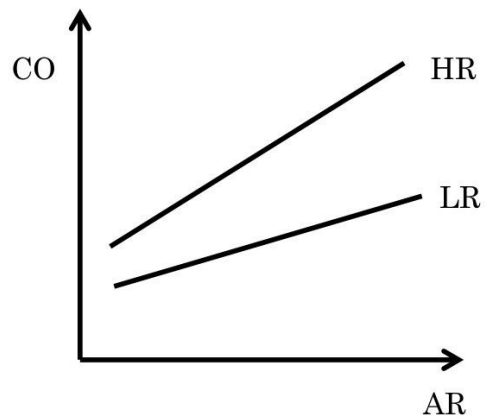


Figure 1.1 Competing hypotheses of accumulation, compensation and multiplication in how additional resources affect child outcomes depending on parental resources

However, if compensation takes place, those who have high immediate family economic resources do not benefit more from a wealthy aunt; rather she is beneficial only to those with low parental economic resources (Panel B). Wealthy aunts thus narrow the attainment gap between low-resource and high-resource children. This could occur either because the children with plenty of immediate family resources do not need the resources of the aunt or because of ceiling effects: they cannot benefit more from having additional resources available.

On the other hand, it can also be the case that the wealth of the aunt does not help children at all when parental resources are very low. In this case, the aunt's wealth has an influence as a multiplier of the immediate family resources by being more advantageous the more parents are able to provide resources for the benefit of their children (Panel C). Wealthy aunts thus increase the attainment gap between low-resource and high-resource children. In previous literature this type of multiplication process has sometimes been referred to as a Matthew effect (Merton 1968).

It seems reasonable to expect that in real life accumulation is often combined with either compensation or multiplier effects. For instance, it is likely that the wealthy aunt benefits all children, even those who also have wealthy parents. Yet we can assume that her wealth is more advantageous for those with lower immediate family resources. This would be an example of compensatory accumulation (Panel D). In a similar manner, multiplication can be combined with accumulation as well: it is hard to imagine a case where the wealthy aunt would not be at all helpful to those with hardly any parental resources. It could still be the case that her resources are more beneficial to those with more immediate family resources. This would be an example of multiplicative accumulation (Panel E). This example comes close to social-multiplier effects mentioned in the previous literature (Dickens and Flynn 2001).

When compensation and when multiplication?

Given these different possibilities for resource transfer, are there theoretical reasons for expecting compensation to happen in some instances and multiplication to happen in others? We argue that compensation (or compensatory accumulation) is likely to happen when we consider children's attainment at the lower end of the socioeconomic spectrum. On the other hand, multiplication (or multiplicative accumulation) is likely to take place at the top end of the socioeconomic spectrum.

Consider for example the income distribution, which is often positively skewed: the same amount of additional income improves one's relative position more at the bottom than at the top. Because of this, compensation at the bottom requires fewer additional resources. In the case of education, something similar occurs because of the increasing level of education: it is increasingly more difficult to drop out from education very early on and those at risk may need only a small push in order to continue. In other words, when we consider the avoidance of very low level outcomes, it may be relatively easy for additional resources to compensate for the lacking resources of children from low resource families.

At the other end of the income distribution – and again because of the positive skew – the absolute income of those at the top of the distribution is often multiple times higher than the median income,

providing also multiple times higher economic advantages. Thus moving to the top is likely to require more resources in absolute terms and it may be particularly important that the immediate family is already placed well in order to take full advantage of any additional resources available. The same may apply to education: when the probability of achieving higher education is low, additional resources may only be useful if the immediate family is able to channel their use. In other words, in order to achieve very high level outcomes, additional resources also need the assistance of the immediate family in order to be effective (cf. Coleman 1988) and thus they end up multiplying the advantages of children from high resource families.

The examples above suggest that the only requirement for either compensation or multiplication to occur is inequality according to family resources. But it may be that these mechanisms are more influential in some situations compared to others. The differences may be especially contrasted in situations where resources are suddenly lost (or reduced) as compared with situations where they are structurally low. It may be that the events leading to the loss of resources trigger compensatory behaviour, either because a sudden loss is easier to observe than persistent disadvantages or because the emotional reaction to the usually unfortunate events leading to the losses produce empathic feelings and solidary behaviour. Some previous studies provide indications for this. For instance, the willingness to invest in grandchildren is especially strong in times of need (Astone et al. 1999), and the increased prevalence of three-generation households in the wake of the 2007 recession has been suggested to be a response to financial hardship (Tach 2015).

If compensation occurs only in the case of the loss of resources, it will essentially have a similar function as insurance has (cf. Pfeffer and Hällsten 2012). It may also be the case that other institutions in a society provide this kind of insurance.

Types of compensatory processes

Above we have illustrated the idea of compensation and other competing processes with the example of a wealthy aunt. More generally, we can think of the compensation coming from aunts as interpersonal compensation. Interpersonal processes may be either intrafamilial, when compensation comes from within the immediate family, or extrafamilial, when it comes from outside the immediate family, as in the example. Compensation may also take place as a resource replacement process. We first discuss the different types of interpersonal compensation before moving on to resource-type compensation. After this, we return to institutional compensation. While the discussion below focusses on compensation, similar distinctions between the processes could also be made in the case of accumulation and multiplication.

Interpersonal compensation

Beginning with interpersonal compensation within the family, the two possibilities for this are that one parent compensates for the other or that parents compensate for children. Parental death and divorce have already been mentioned as examples of when compensation may be required. In both cases, it is often the resources of the father that are lost or reduced, either because it is more likely that the father dies prematurely (Mackenbach et al. 1997) or because after divorce children are more

likely to continue living with their mother. Fathers also tend to have higher income than mothers even when both parents are working. Some empirical evidence suggests that the impact of maternal resources on adult attainment of the children, both in terms of education (Kalmijn 2015) and socioeconomic status (Erola and Jalovaara 2015), tends to increase if parents separate and children continue to coreside with the mother.

Much of the relatively scarce previous literature on compensation considers situations where parents do this for the missing resources of the children (in Figure 1.1 this would mean that immediate family resources refer to the resources – or abilities – of the child whereas the additional resources to those of the parents). For instance, Bernardi and Boado (2014) show how the less skilled children of high resource parents are still able to make their way to higher education because the resources of the parents can compensate for their missing abilities, whereas children with similar abilities but coming from poorer families are more likely to drop out of education. Further, Bernardi and Grätz (2015) show that while in general children do worse in school the younger they are within their annual birth cohort as regards to the cut-off age of entering school, high-resource parents are able to completely compensate for this disadvantage in the long run.

Traditionally, studies on intergenerational attainment have tended to consider intrafamilial processes only. The phenomenon becomes much more complex when we move on to consider extrafamilial processes. The basic idea behind extra-familial (interpersonal) compensation is that children often have access to the resources of not only their parents but also other individuals around them, such as extended family members, their parent's new spouse, and neighbours. Different persons can play very different roles in this type of compensation in ways that are not always obvious. Consider the potential importance of grandparents, aunts and uncles, for instance. While there is now a growing literature on intergenerational (im)mobility across three generations and the effect that grandparental resources have for their grandchildren (e.g., Mare 2011; Chan and Boliver 2013; Hertel and Groh-Samberg 2014; Pfeffer 2014), the role of aunts and uncles remains a neglected aspect of the literature both in social stratification research as well as family sociology (Milardo 2010, a notable exception in this regard is Jæger 2012). Grandparents have various reasons to invest in the wellbeing of their grandchildren, including sociological explanations related to intergenerational solidarity and reciprocity as well as evolutionary explanations related to inclusive fitness (Coall and Hertwig 2010; also Tanskanen et al. 2011). On the other hand, Jæger (2012) suggests that rather than having a direct effect, the grandparental effect is largely channelled through parents as well as aunts and uncles. One of the ways in which extended family members may contribute to socioeconomic attainment is by being part of the social capital available to families (Coleman 1988; Milardo 2010).

It is possible that especially interpersonal resource compensation within extended families takes place only when resources are lost suddenly, for example when parents separate. As mentioned above, children often lose access to at least some of the resources of the nonresidential parent or their access becomes only partial in these situations. On the other hand, grandparents often become more involved in a variety of ways when parents divorce (Astone et al. 1999; Hank and Buber 2009), and other family members are used more often as child care providers by single employed mothers than by partnered employed mothers (Guzman 1999). Aunts and uncles have also been

identified as important providers of emotional support for children going through parental divorce (Milardo 2010). More generally across Europe, older people have been found to have widespread feelings of duty towards their grandchildren when the latter face specific difficulties such as parental divorce but not as much when the question is of ensuring their economic security more generally (Albertini and Kohli 2013). This type of loss-specific compensation may also be a reason why we do not always observe negative child outcomes after parental separation once selection has been taken into account (Björklund et al. 2007; Steele et al. 2009). For example, coresidence with grandparents has been found to partially compensate for the educational disadvantages associated with living with a single mother rather than with two parents (Monserud and Elder 2011).

Similarly, previous studies suggest that the new partners of parents may play a decisive role in replacing the non-coresidential parent after divorce; replacement by a stepparent may also take place after parental death. Findings on the second generation effects of divorce in Finland (Erola and Jalovaara 2015) provide an example. Parental divorces occurring during the 1970s had a negative influence on child socioeconomic status in adulthood. However, this occurred mainly because children with advantageous class backgrounds lost access to the resources of one parent, typically those of the non-coresidential father. In the case of low socioeconomic background families, the negative effect was very small or non-existent; the children had very little to lose in the first place. However, in single-parent families the influence of the remaining parent (typically the mother) was strengthened. Further, when the mother repartnered the resources of the stepfather replaced the influence of the non-residential biological father altogether.

A final example of potential interpersonal compensation is that coming from neighbours. Childhood neighbourhood has been found to have a relatively weak direct impact on child socioeconomic outcomes (Duncan et al. 2001). Yet the neighbourhood appears to matter more when parents have fewer resources than others in the neighbourhood on average (Ludwig et al. 2012), thereby suggesting compensatory rather than multiplicative processes. Similarly to the examples above, the neighbourhood can have a long-term influence on children through multiple mechanisms and providing various different kinds of resources (e.g., Feinstein et al. 2008). As Sharkey and Faber (2014) conclude in their review, the question is not whether neighbourhoods matter but rather when and for whom.

Compensation between resources

Another source of variation in compensation occurs between different types of resources. Above we cited a study showing how mothers may compensate for the father's resources that children lose after divorce (Erola and Jalovaara 2015). However, this only occurs if a mother has that type of resource to begin with. This means that if compensation takes place then it is likely that it may be the human or social capital of the mother that compensates for the lost economic resources of the father. Another example of resource type compensation is the already cited study of Bernardi and Boado (2014) which shows how the high socioeconomic resources of the parents compensate for missing abilities of the children.

Another instance in which one type of parental resource, namely social capital, is lost at least temporarily is following geographical mobility, when a substantial part of parents' social networks remain in the area of origin. Their children also tend to lose their own social networks and peer groups as a consequence, and residential mobility has often been found to be detrimental to children's educational attainment (e.g., Haveman et al. 1991; Metzger et al. 2015). However, it may be that the lost social capital could be replaced by human or economic capital. Given that geographical mobility often occurs as a way of enhancing economic prospects, it is possible that the increased economic capital in particular steps in to compensate for lost social capital.

We can also extend this question of resource-type compensation to broader cases of how different parental resources work together: whether one type of resource compensates for another or if their effects are independent of each other. Parental education, social class and income are often relatively highly correlated and they sometimes influence children's attainment through similar mechanisms. Nevertheless, researchers have begun to disentangle their independent effects (Bukodi and Goldthorpe 2013; Erola et al. 2016). These analyses can be extended to questions of whether one resource takes on a stronger (compensating) role when another is low – or more generally, whether the resources have fully independent or at least partly conditional effects. For example, if parents have been unable to utilise their educational credentials fully on the labour market by working in occupations for which they are overqualified, does their education continue to have the same effect or is its effect increased in these cases? At a societal level, we can ask whether credential inflation leads to different mobility patterns over time if parents become increasingly willing to maximize the achievement of their children in social class attainment instead of education.

The influence of institutions

We can hypothesise two different ways in which institutions have an effect on intergenerational social inequality. On the one hand, they may provide resources to different types of families and thus work as an additional resource in the same way as the resources of individuals within and outside the family. On the other hand, they may influence the behaviour of these individuals by making it easier or more difficult for certain resources (either from various interpersonal sources or of different types) to compensate for others. One reason for this may be that institutions influence the motivations of people to compensate.

It may be argued that welfare states aim to influence socioeconomic inheritance through compensation, for instance, by providing benefits to families facing unemployment. On the other hand, certain universally available forms of social support may actually multiply the advantages of those born into high resource families. For example, study subsidies that are equally available to all students have at least a partially multiplicative effect because children from high-resource families are more likely to continue their studies and thus use these subsidies. Yet very few would argue that these kinds of effects are the intended consequences of the welfare state. In addition to compensation and multiplication, another process of accumulation in the institutional context is one of equalization: in this case the institution is beneficial for individuals with low parental resources but detrimental for individuals with high parental resources (Pöyliö and Kallio this volume). While

it is difficult to imagine this to be the case for any resources coming from other persons, it does make sense when we consider welfare state institutions. The most efficient equalising institutions are those that increase both the upward mobility of those at the bottom and the downward mobility of those at the top.

In addition to these direct effects of institutions, they may also have an indirect effect by influencing the ways in which other additional resources are deployed. We may assume that interpersonal and resource-type compensation occur less often in societies with a strong welfare state protecting from the risks related to the loss of resources. For example, it has been hypothesised that a strong welfare state erodes intergenerational solidarity (e.g., Coleman 1988; Beck-Gernsheim 1998). Instead of the family, compensation comes from the state, which provides both income transfers as well as services that are particularly useful for those with low or lost resources, such as universally available, low-cost day care services and entirely tuition-free education.

However, cross-national evidence supporting these assumptions is weak. Intergenerational assistance is in many cases more common in Nordic welfare states than in more familialistic Southern European ones, even if it is less intensive in nature when it takes place (Daatland and Lowenstein 2005; Albertini et al. 2007; Hank and Buber 2009). These findings are more in line with the arguments of Esping-Andersen (2004), indicating the importance of the extensiveness of the Nordic welfare state for intergenerational social inequality. Day care and educational systems are available for all families, whereas special social policies are targeted to those with specific needs, especially in the form of welfare transfers. This should reduce the importance of loss-specific compensation but would not inflate the extended family's interest in and possibilities to compensate for low resources even in more extensive welfare states.

On the other hand, in countries with less extensive social protection, loss-specific compensation by the extended family is likely to be more necessary and could be particularly observable for economic resources. Yet the lack of institutional support may even change the mechanism to another. If high-resource immediate family members are sometimes required in order to fully benefit from additional resources, as we argue above in the case of the multiplication of advantages, we may also assume that there may be cases in which welfare state institutions are necessary for interpersonal or resource-type compensation to take place. In other words, it may be that reduced welfare states lead to a level of individualism that also hinders interpersonal compensation, or where all within-family resources are so necessary that one type of resource cannot compensate for another.

Summary of chapters

Many of the processes that we have outlined above are examined in more detail in the nine empirical chapters of this volume. The first three chapters consider intrafamilial processes of resource transfer and the following three extrafamilial ones. The final three chapters examine different institutional effects.

Chapter 2 by Ellu Saar and Jelena Helemäe analyses the relative importance and exchangeability of family educational, cultural and economic resources in the context of Estonia, where the institutional structure of higher education in particular has changed a great deal over the past decades. Despite the changing institutional structure, the influence of these three resources has changed relatively little and the effect of parental education dominates. They also find that cultural resources are most beneficial for children with medium-educated parents and that there are some indications of compensatory processes for parents with low levels of education but medium or high levels of cultural resources. However, the mechanism that dominates overall is one of accumulation.

In Chapter 3, Diederik Boertien examines what happens in the relationships and resources of families before and after separation, contrasting high-resource and low-resource separated families with matched families who do not experience a separation in Britain. The particular focus of the chapter is to uncover whether families from different social backgrounds deploy different compensatory strategies to dampen the effects of parental separation. He finds that pre-separation conflict is greatest in families with high resources and that parental monitoring of children drops dramatically in the year of separation for these families. However, compensation is seen in the way that many resources and relationships return either to pre-separation levels or to match those of non-separated families in the years following separation. The results suggest that separation is a more disruptive event for children from high-resource families, which may be one reason behind previous research findings suggesting that children in these types of families suffer the most when their parents divorce.

Michael Grätz and Fabrizio Bernardi (Chapter 4) examine how parents in the UK with different levels of education respond to a disadvantage that some children naturally have, namely being younger than their classmates and thus at an educational disadvantage (termed the month of birth penalty). In previous research this penalty has been found to be larger for children from lower social origins and the results from this chapter suggest that there may be processes of both compensation and reinforcement behind this. Whereas highly educated parents tend to be more involved with the school work of relatively younger children, parents with low levels of education tend to be more involved when their children are relatively older and thus already advantaged. Therefore, compensatory processes in the form of parental involvement coexist with a type of multiplier effect, which increases inequalities particularly among children from low social origins.

Moving on to processes of extra-familial resource transmission, in Chapter 5 Hannu Lehti and Jani Erola test various hypotheses about the influence of aunts' and uncles' education on their nieces' and nephews' educational attainment in Finland. Their findings suggest that compensation takes place particularly at the low end of educational attainment, namely in terms of avoidance of school dropout. Moreover, the total size of the pool of resources provided by aunts and uncles has a stronger compensatory effect in educational attainment than the existence of at least one highly educated aunt or uncle or the proportion of highly educated aunts or uncles. Moreover, they find support for evolutionary theories in that maternal (rather than paternal) aunts and uncles are the ones who compensate for low parental education.

Irene Prix and Fabian Pfeffer (Chapter 6) extend the analysis of aunts and uncles to the influence of their wealth on educational attainment in the United States. Their findings suggest that compensatory mechanisms are in place for lower levels of educational attainment, namely high school graduation and entry into college but not for graduation with a Bachelor's degree. In the first two cases, parental education and income no longer matter when an aunt or uncle has very high wealth, meaning that aunts' and uncles' wealth can compensate for lacking parental resources. However, for university graduation the findings tend to suggest that the effect may rather be multiplicative and thus amplifying the advantages of those with high parental resources.

A further analysis of aunts' and uncles' wealth is provided in Chapter 7 by Øyvind Wiborg, who examines school grades at the end of lower secondary school in Norway. The analyses focus on different investment strategies depending on the school performance of children to see whether immediate and extended family members compensate for low performance, reinforce high performance or invest equally in children regardless of performance. The results suggest that both immediate and extended family members tend to compensate for low performance. In addition, the results of the preceding two chapters are confirmed: wealthy aunts and uncles also compensate for disadvantaged parents.

Turning to the institutional aspects of compensation, Alessandra Minello and Hans-Peter Blossfeld (Chapter 8) examine the use of adult education as a strategy for reducing inequalities in job prestige between individuals from different social origins and those entering the labour market at different levels in West Germany. They find compensatory mechanisms for men: men from lower social origins and entering lower positions in the labour market are more likely to participate in adult education and they also benefit from taking courses in terms of improved prestige. On the other hand, accumulative and multiplicative processes are found for women: it is mainly higher-origin women who are both more likely to take courses and also benefit from them disproportionately; and courses are almost equally beneficial regardless of the level of the position at labour market entry.

In Chapter 9, Olli Kangas, Joakim Palme and Markus Kainu take a social policy perspective on compensation and analyse a range of welfare state policies and institutions that influence individuals over the life course. Their particular focus is on identifying social policies that facilitate high labour market participation since this contributes not only to the sustainability of the welfare state and gender equality but also combats poverty and social exclusion, thus contributing to enhanced social mobility and the compensation of disadvantages.

Heta Pöyliö and Johanna Kallio (Chapter 10) extend the institutional aspects further by examining how family and educational policies influence the intergenerational association between parents' and children's socioeconomic status. In addition to looking at the overall influence, they also examine non-linearities by separating the effects on low, medium and high status families. Their findings suggest that the age at which compulsory schooling ends has the strongest effect and that its influence is reversed at the two ends of the socioeconomic spectrum: it has a positive effect for children from low socioeconomic backgrounds and a negative effect for children from high socioeconomic backgrounds, thus producing societal equalisation. Access to tertiary education is found to have a similar but weaker effect, whereas the length of maternity leave is found to

influence children from low socioeconomic backgrounds but not those from higher one, thus being compensatory in nature.

Conclusion

In this concluding section we review the evidence provided by the empirical chapters in terms of their support for compensation – and the competing processes of accumulation and multiplication – in the different contexts.

First of all, the chapters provide rather solid evidence that not only accumulation but also compensation as well as multiplication play important roles in intergenerational attainment. The empirical evidence for compensation was perhaps the weakest for intrafamilial compensation, in chapters for compensation between different types of resources in Estonia (Chapter 2: Saar and Helemäe) and the month of birth penalty in the UK (Chapter 4: Grätz and Bernardi). This is an interesting finding, because the previous literature has mainly considered compensation in this context (Conley and Glauber 2005; Bernardi and Boado 2014; Bernardi and Grätz 2015). It may be that the resources within the families are to such an extent fixed and correlating that it is difficult to adjust them according to changing needs. On the other hand, the findings of Chapter 3 (Boertien) suggest that this persistency may be one of the reasons why the short-term negative changes in families, for example in the case of divorce, disappear over time.

On the other hand, the chapters show consistent evidence of a surprisingly strong compensatory effect of extended family members. This is particularly so when compensation occurs in order to avoid marginalisation in the form of completing high school (Chapter 5: Lehti and Erola) or for obtaining better grades at the end of compulsory education (Chapter 7: Wiborg). While the resources of the immediate family often correlate with the resources of the extended family, it seems that a small extra push from these relatives can often be sufficient for avoiding particularly disadvantageous outcomes in life. A tentative conclusion from these findings could be that intrafamilial processes are likely to be accumulative by their nature, while compensation may be more likely to appear within extra-familial social networks. Clearly more research is needed in this regard. The chapters here cover only the potential contributions of relatives, thus excluding any other potentially influential social ties such as peers and neighbours. Further, if extra-familial networks are of key importance, it also posits a challenge for future social stratification research: if any person within a social network can be influential, how do we identify them? Moreover, does it matter whether we can identify the single influential person or is it sufficient to estimate the role of social networks more generally?

Sometimes extended family members can also help to multiply the advantages of the immediate family, as shown in the results of Chapter 6 (Prix and Pfeffer). The evidence for multiplicative effects is not as clear as in the case of compensation. Better evidence of a multiplicative process can be found in the chapter for adult education (Chapter 8: Minello and Blossfeld): advantaged women are more likely to obtain adult education and it is particularly advantageous for them in terms of career progress. The difference between men and women in this regard is likely to be a German peculiarity: given the family taxation system, the motivations of German women to advance their

careers tend to be different compared to those of German men – and also likely to those of women in many other countries. For this reason, selection into adult education may be a driver for the multiplicative effects of adult education in this context.

The chapters provide important evidence of the role of welfare state institutions in the transmission of socioeconomic inequalities across generations. The rather traditional point of view to these institutions has been that they have a role especially in compensating for the lacking resources of those in need. However, Chapters 9 (Kangas, Palme and Kainu) and 10 (Pöyliö and Kallio) show clearly that this is often not the case. Some policies may have a much smaller compensatory effect than is often expected. This appears to be the case for family policies (Chapter 10: Pöyliö and Kallio). It is more difficult to say why this is the case. One of the possible reasons may be the same as the one that explains the often observed effectively maintained inequality (Lucas 2001): individuals (parents in particular) change their behaviour in response to policy changes in order to improve the conditions of their offspring. Families who are already advantaged should be particularly well-equipped to do so, which then leads to increasing rather than diminishing social inequalities. On the other hand, welfare institutions appear to be able to not only compensate but sometimes also level out the advantages of the better-off socioeconomic groups. It is hard to imagine a similar process at the individual level or within the family.

The examples discussed in Chapter 9 (Kangas, Palme and Kainu) also indicate that welfare state policies may accumulate and multiply the existing advantages, even though they have originally been meant to equalize societies. We may even conclude that generally universal policies are not compensatory at all but accumulative by their nature. Further, social inequality tends to remain unchanged when they are accumulative, and policies need to be explicitly compensatory or equalizing in design in order to influence social inequality (or multiplicative for that matter if the intention is to increase rather than reduce differences).

In terms of social stratification research, our results show that when examining the influence of resources coming from outside the immediate family, it is important to consider the possibility that these additional resources may not be beneficial to the same extent for everyone. If we limit our analyses to average effects, we miss important ways in which additional resources can be either compensatory or multiplicative in relation to immediate family resources. Our results regarding the extended family suggest that the difference between compensation and multiplication lies in whether we consider socioeconomic outcomes at the bottom or the top end of the spectrum. However, the gendered differences related to adult education in Germany suggest that individual motivations are also likely to play a role. Therefore, future research is needed to better establish the reasons behind differential effects.

What can we therefore say about the importance of compensation for social inequality in general? The empirical evidence clearly suggests that for some individuals the resources of extended family members or the additional qualifications obtained through adult education have a strong effect, one that at least partially compensates for low (parental) resources. On the other hand, the overall impact at the societal level is nevertheless rather modest because the additional resources available tend to correlate with the initial level of resources. In other words, additional resources are often not

available for those who need them the most. This again highlights the role of welfare state policies: in order to reduce social inequality, additional resources need to be made available specifically for those in disadvantaged positions and equally so for all individuals within that group.

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